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Co-creating a game about sexual health with adolescent boys

Utilizing game-based learning as a creative approach in sexual health promotion and sex education

Metropolia University of Applied Sciences

Master of Health Care

Creativity and Arts in Social and Health fields

Master Thesis

May 6 2023

Abstract

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Title: Co-creating a game about sexual health with adolescent boys - Utilizing game-based learning as a creative approach in sexual health promotion and sex education
Number of Pages: 57 pages + 1 appendices
Date: May 6 2023

Degree: Master of Health Care (Nursing)
Degree Programme: Creativity and Arts in Social and Health fields
Instructor: Dr Sanna Kivijärvi

This is an empirical and qualitative study in which the methodological background is aligned with the theory of interpretivist paradigm. The aim of this study was to examine and describe in what ways game-based learning can contribute to the way adolescent boys' approach and discuss sexual health with a facilitator. Game-based learning has often been used in education and it has been shown that game-based mechanics can motivate learning. Narrative game-based learning can influence change in participants' self-efficacy, behavior, and knowledge.

The research question is: In what ways could game-based learning contribute to adolescent boys' sexual health promotion and sex education?

The data was collected utilizing game-based learning as a creative approach to support sexual health promotion and sex education for adolescent boys. Brain development can take longer for boys than girls, and boys sometimes need more guidance and support than they realise to ask for. The data was collected through one-on-one semi-structured interviews, field observations, and the creative approach of game-based learning. I collaborated with a group of 16–19-year-old boys, from a youth center in the Helsinki metropolitan area. We co-created a serious game about sexual health. The findings show that utilizing game-based learning is suitable for adolescents' sexual health promotion and sex education. Co-creating the game brought forward, what adolescent boys want to know about sexual health and supported active participation. It could be a way of empowering adolescents and supporting the development of sexual agency. The facilitator role is vital; game-based learning can be a beneficial way for providing sexual health promotion and sex education if the facilitator has the appropriate understanding, knowledge and attitude. The facilitators' self-reflection is important when working with sexual health and adolescents. Adolescent boys know what information they are lacking in sex education, and they are interested in various topics regarding sexuality.

Keywords: Adolescence, boys, game-based learning, sex education sexual health promotion, sexuality

Abstrakt

Författare: Gillan Suvisaari
Titel: Co-creating a game about sexual health with adolescent boys - Utilizing game-based learning as a creative approach in sexual health promotion and sex education.
Antal sidor: 57 sidor + 1 bilaga
Datum: 6.maj 2023

Examen: Hälsovårdare (Högre yrkeshögskola)
Utbildningsprogram: Creativity and Arts in Social and Health fields
Instruktör: MuT Sanna Kivijärvi

Detta är en empirisk och kvalitativ studie där den metodologiska bakgrunden är i linje med teorin om interpretivistisk paradigm. Syftet med denna studie var att undersöka och beskriva på vilka sätt spelbaserat lärande kan bidra till hur tonårspojkar närmar sig och diskuterar sexuell hälsa med en fasilitator. Spelbaserat lärande har ofta använts i utbildning och visat att spelbaserad mekanik kan motivera lärande. Narrativt spelbaserat lärande kan påverka förändringar i deltagarnas självförmåga, beteende och kunskap.

Forskningsfrågan för detta slutarbete är: På vilka sätt kan spelbaserat lärande bidra till tonårspojkars sexuella hälsofrämjande och sexualundervisning?

Uppgifterna samlades in med hjälp av spelbaserat lärande som ett kreativt tillvägagångssätt för att stödja sexuellt hälsofrämjande och sexualundervisning för tonårspojkar. Hjärnans utveckling kan ta längre tid för pojkar än flickor, och pojkar behöver ibland mer vägledning och stöd än de inser att de behöver. Uppgifterna samlades in genom individuella semistrukturerade intervjuer, fältobservationer och det kreativa tillvägagångssättet, spelbaserat lärande. Jag samarbetade med en grupp 16–19-åriga pojkar från en ungdomsgård i huvudstadsregionen. Vi skapade ett spel om sexuell hälsa. Resultaten visar att användning av spelbaserat lärande är lämpligt arbetsredskap för att främja ungdomars sexuella hälsa och ge sexualundervisning. Skapandet av spelet tog fram vad tonårspojkar vill veta om sexuell hälsa och stödde aktivt deltagande. Spelbaserat lärande kan vara ett sätt att stärka ungdomar och stödja utvecklingen av sexuell handlingsutrymme. Fasilitatorns roll är avgörande. Spelbaserat lärande kan vara ett fördelaktigt sätt att tillhandahålla sexuell hälsa främjande och sexualundervisning, om handledaren har rätt kunskap och attityd. Fasilitatorns självreflektion är viktig när man arbetar med sexuell hälsa och ungdomar. Tonårspojkar vet vilken information de saknar i sexualundervisning och de är intresserade av olika ämnen som rör sexualitet.

Sökord: främjande av sexuell hälsa, pojkar, spelbaserat lärande, sexualundervisning, sexualitet, tonår

Tiivistelmä

Tekijä:	Gillan Suvisaari
Otsikko:	Co-creating a game about sexual health with adolescent boys - Utilizing game-based learning as a creative approach in sexual health promotion and sex education.
Sivumäärä:	57 sivua + 1 liite
Päivämäärä:	6. toukokuuta 2023
Tutkinto:	Terveydenhoitaja (ylempi AMK)
Koulutusohjelma:	Luovuus ja taide sosiaali- ja terveysaloilla
Ohjaaja:	MuT Sanna Kivijärvi

Tämä on empiirinen ja laadullinen tutkimus, jossa metodologinen tausta on linjassa interpretivistisen tutkimusparadigman kanssa. Tämän tutkimuksen tavoitteena oli tutkia ja kuvata, millä tavoin pelipohjainen oppiminen voi vaikuttaa siihen, miten nuoret pojat lähestyvät ja keskustelevat seksuaaliterveydestä ohjaajan kanssa. Pelipohjaista oppimista on usein käytetty koulutuksessa ja osoitettu, että pelipohjainen lähestymistapa voi motivoida oppimista. Narratiivinen peliohjainen oppiminen voi vaikuttaa muutokseen osallistujien minäpystyvyydessä, käyttäytymisessä ja tietotaidoissa.

Tutkimuskysymys on: Millä tavoin pelilähtöinen oppiminen voisi edistää nuorten poikien seksuaaliterveyden edistämistä ja seksuaalikasvatusta?

Aineisto kerättiin hyödyntäen pelilähtöistä oppimista luovana lähestymistapana nuorten poikien seksuaaliterveyden edistämisen ja seksuaalikasvatuksen tukemiseksi. Pojilla aivojen kehitys voi kestää kauemmin kuin tytöillä, ja pojat tarvitsevat joskus enemmän ohjausta ja tukea kuin he ymmärtävät pyytää. Aineisto kerättiin kahdenkeskisillä puolistrukturoiduilla haastatteluilla, kenttähavainnoinnilla ja pelipohjaisen oppimisen luovalla lähestymistavalla. Tein yhteistyötä 16–19-vuotiaiden poikien kanssa pääkaupunkiseudun nuorisotalolta. Loimme yhdessä oppimispelin seksuaaliterveydestä. Tulokset osoittavat, että pelipohjaisen oppimisen hyödyntäminen soveltuu nuorten seksuaaliterveyden edistämiseen ja seksuaalikasvatukseen. Pelin yhteiskehittäminen toi esiin, mitä nuoret pojat haluavat tietää seksuaaliterveydestä ja tuki aktiivista osallistumista. Pelillisyyteen perustuva oppimisprosessi voisi olla tapa voimaannuttaa nuoria ja tukea seksuaalisen toimijuuden kehittymistä. Ohjaajan rooli on tärkeä: pelipohjainen oppiminen voi olla hyödyllinen tapa tarjota seksuaaliterveyttä edistäminen ja seksuaalikasvatus, jos ohjaajalla on oikeat tiedot ja asenne. Fasilitaattorien itsereflektio on tärkeää seksuaaliterveyden ja nuorten kanssa työskennellessä. Teini-ikäiset pojat tietävät, mitä tietoa heiltä puuttuu seksuaaliterveydestä ja he ovat kiinnostuneita erilaisista seksuaalisuuteen liittyvistä aiheista.

Asiasanat: Nuoruus, pelilähtöinen oppiminen, pojat, seksuaaliterveyden edistäminen, seksuaalikasvatus, seksuaalisuus

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1 Introduction

Can porn teach adolescent men about sex? In the recently published book *Theo* by a Finnish author Mathias Rosenlund the reader can get familiar with 16-year-old Theo, who is addicted to watching porn and realises that he is getting a feeling of emotional numbness from watching porn videos. He is too anxious about his addiction that he does not want to talk to anyone he knows about it, so he seeks help from an American stranger online. (Rosenlund, 2021) This fictional character could be based on a real young male, as many men seek sexual validation or information about sex by watching porn, while feeling too embarrassed to address their issues to anyone, especially a healthcare professional.

Sex education in school covers issues such as contraception, safe sex, and sexually transmitted diseases. It is concerning that other important factors, oftentimes are left out from the curriculum, and subsequently preventing the students from forming a healthy outlook on sex and sexuality. Excluding topics that cover emotions, orgasms, consent and pornography, sets the learners up at a disadvantage to face and understand their respective sexualities. In an opinion piece published in Finland's largest subscription newspaper, Helsingin Sanomat, the writer wishes that the sex education in Finland would be updated, from mostly scaring adolescents with unwanted pregnancies and sexually transmitted diseases, to talking about the pleasure sex can bring. (Halonen & Salonen, 2019)

Are the resources online about sex combined with the sex education in school enough for young adults to be correctly and sufficiently informed about all aspects of their sexual health? If adolescents have enough media literacy, media can be a helpful source of information. This alone, however, is not enough because support from educators and other professionals can support the improvement of sexual well-being. (Santalahti, 2018)

Discussing not only negative but also positive issues regarding sexual activity can promote adolescent boys' sexual well-being and overall health. Because focusing only on the possible negative impacts of sexual activity such as possible health outcomes can affect adolescents to take the dangers some sexual activity can have seriously. (Harden, 2014)

In this master's thesis I examine how game-based learning can contribute to improving the discussion about sexual health amongst adolescent boys. The study's participants are a group of 16-19-year-old boys. Here, the term boys refer to all adolescents who identify as male. Adolescent boys are defined by the World Health Organization (WHO) to be in the age range of 10-19 years old and these years are important for the development of their overall health, because significant psychological, cognitive, and physiological changes in them. To develop healthy sexual behaviour, adolescents need support from professionals, in forms such as sex education or health care services. (World Health Organization, 2022)

The aim in the study is to recognize if game-based learning as a creative approach can be helpful when forming a safe space for discussion about sexual health between adolescent boys and their facilitator/educator. I am creating a serious game about sexual health together with my participant group and analysing the process through the data collected from one-on-one interviews, observations and the game created.

The inspiration for my master's thesis comes from my work as a student health care nurse in a vocational institution. I noticed that there was a significant gap between adolescent boys and girls when it comes to their ability to talk about issues related to sexual health. Sexual health makes up a part of the annual health check that all adolescent students must be offered as per the governmental regulation. During these check-ups, the male students' disinclination to discuss topics related to their own sexual health, was highlighted in comparison with their female students.

Oftentimes, female students would book additional appointments exclusively dedicated to discussing their sexual health. Menstrual cycles and hormonal contraception were daily topics that were brought up in the appointments with girls and which subsequently led to discussions about other sexual health issues such as different emotions, sexual violence, and painful sexual. According to the Finnish Institute for Health and Welfare's questionnaire for adolescents in upper secondary school or vocational school about sexual health about 6 % of the students identifying as male would like to speak to someone about sex and to get more information about matters regarding sex, which shows that boys have the same need to speak about these topics. Up to 33 % of adolescents who participated in the questionnaire have experienced sexual harassment. (Finnish Institute for Health and Welfare, 2021) However, the school healthcare system today fails to provide them with necessary support to feel comfortable enough to open to the healthcare professional. Sexual harassment can lead to depression among adolescent girls and boys and especially boys can feel that their masculinity is threatened, which can lead to boys not seeking support after experiencing harassment due to the hypothesis that victims of sexual harassment are initially thought to be only girls. (Fröjd et al., 2016)

The aim of this study is to examine and describe in what ways game-based learning can contribute to the way adolescent boys' approach and discuss sexual health with a facilitator. Chapter 2 presents the conceptual framework for this master thesis. I discuss adolescent development and what sexual health is, gender-specific information about boys' and men's sexuality, sexual health promotion and sex education in Finland, and what to have in mind while providing sexual health promotion and sex education, and of discuss game-based learning and show positive results of other studies. Chapter 3 is about the implementation of my research. Chapter 4 presents the findings, and the last chapter 5 presents conclusions and discussions based on the findings of the study.

2 Conceptual framework

The conceptual framework for this study includes concepts and literature from the fields of sexual health and behaviour, adolescent psychological and physiological development, pedagogy and education and game-based learning studies. I describe different conceptual approaches using peer-reviewed articles and other literature, including policy documents. Adolescents' development and sexual health is important to discuss in this study to support the co-creation of a game that would benefit adolescent boys' sexual health as part of their development.

The material for conceptual framework has been gathered using electronic searching devices such as CINAHL, ProQuest, Google Scholar, and Juuli during 2021–2023. The search terms in English used were *sexuality, adolescents, health promotion, sexual wellbeing, game-based learning, gamification, serious games, toxic masculinity, sexual agency, self-efficacy, feminism, gender equality, sexual health, sex education, young adults, boys, men, Finland, Finnish*. The key words in Finnish used in the search were *seksuaaliterveys, seksuaalikasvatus, seksuaalisuus, nuoret*. In addition to peer reviewed journal articles (mostly articles published between the years 2013 and 2023) materials from e-books, books and organisations webpages have also been used in this study.

2.1 Adolescents' development and sexual health

In this subchapter I explain why sexual health promotion and sex education is important and how it can affect adolescents' development. By relying on pertaining research, I point out why this study it is crucial to further develop approaches professionals have when offering sexual health promotion and sex education. Professionals working together with adolescents should be aware of the different stages of adolescent development to understand the common patterns recognized in adolescent behaviour. This chapter is important for this study because it is the backbone of what I have had in mind during the co-creation of the game with the adolescent boys.

Supporting sexual health promotion in all different stages of a person's life is important for the general health, as sexual health is a significant part of human wellbeing. (Harden, 2014) To give the best support for adolescents it is essential that health care professionals and educators are aware of the development of adolescents' sexuality and the factors effecting it. (Kar et al., 2015) According to WHO (2002), sexual health refers to emotional, physical, social, and mental wellbeing related to sexuality. Sexual health is a person's sexual relationships being positive and respectful, having the right to enjoyable sexual experiences that are safe, free of violence, harassment, and discrimination. Person's sexual rights must be respected. Additionally, it is important to emphasize that sexual health is not simply the lack of disease, disability, or dysfunction, meaning that one can have good sexual health while having a disease, disability or dysfunction. (World Health Organization, 2002)

Sexual rights are human rights, and everyone is obligated to respect the sexual rights of others. Health and wellbeing are affected by how sexual rights are being implemented in people's lives. The Family Federation of Finland (Väestöliitto) divides sexual rights into seven different sections, namely, the rights to: your own sexuality; receive information about sexuality; be protected and protect yourself; receive sexual health promotion; be seen and have privacy and to impact. (Ilmonen, et al., 2019)

Hermanson and Sajaniemi state, in their publication about adolescent development, that the adolescent years are the second most important years for human brain development after the early childhood years. The ability to control impulses, risks and make reasonable decisions is commonly achieved in the age of 24–25 years. Young people under the age of 24–25 years can be prone to, for example making bad decisions to achieve a quick reward, being more vulnerable to risky behavior or be more impulsive, because of the brain still developing the ability to control impulses, risks and make reasonable decisions.

This happens during the same time as the human body develops and becomes biologically fertile and hormone levels increase and can potentially lead an adolescent to make impulsive decisions that influences their sexual wellbeing. (Hermanson & Sajaniemi, 2018) It has been shown that adolescents who have risky sexual behavior commonly have higher levels of activation in the part of the brain that is in control of the reward system. (Eckstrand, et al., 2017)

The human brain has different tasks during the adolescent years and helps adolescents form the ability to control their emotions and impulses, do risk-assessment and recognise threats. Adolescents may act without hesitation and can be vulnerable to social inclusion and exclusion. Adolescents may have more difficult time handling their reactions and emotions during a stressful event, compared to adults, due to hormonal changes during the adolescent brain developmental years. Luckily brain development is open to interference and support from for example professional education and guidance during the adolescent years. (Hermanson & Sajaniemi, 2018)

Adolescents sometimes react more strongly to excitement and rewards compared to children and adults which can lead to reckless behaviour in search of excitement and rewards. For example, could adolescents do quick decisions without thinking about the long-term effect, what could be seen as risky sexual behaviour (for example unprotected sex). Weighing options and resisting reaction before acting is part of a healthy brain functioning. Brain development can take longer for boys than girls, and boys sometimes need more guidance and support than they realise to ask for. Adolescents may have difficulties in understanding others' feelings, which can affect the cognitive function, because adolescents' cognitive functions are more vulnerable to for example a negative atmosphere. Healthy brain development generally requires external support and guidance to curb the excessive reactions as well as develop healthy behaviour systems. (Hermanson & Sajaniemi, 2018)

Psychosexual development continues throughout the whole lifespan and includes neurobiology, social and cognitive maturation. Matters regarding one's sexual identity and the ability to regulate one's behavior, in a way that does not hurt anybody and brings pleasure to oneself, is a part of psychosexual development. Children and adolescents need guidance and support during these development stages. (Halonen & Sassi, 2020)

Adolescents' sexual wellbeing can, in addition to individual and relational influence be affected by the social, cultural and political environment. For having sexual wellbeing should adolescents be encouraged to gain knowledge about having healthy relationships. (Jerves, et.al., 2021, p. 13) How one is adapting a culture or religion is individual and can influence how one communicates their sexual needs or seek help in relation to sexual issues. Culture or religion should not be a factor that influence whether one can have a sexual issue or not because everyone can encounter sexual issues. (Atallah, et.al., 2016)

Across different cultures a separation between girls and boys usually begins during the early adolescent years (10-14 years) based on feminine and masculine gender norms. Traditional masculinity has its history in cultural structuring where a heterosexual cis male is supposed to be a dominating strong leader. By being domineering, strong and leading is the male respected by his peers and a wanted mate. This can be seen in sports, where hyperaggressive males compete against each other. Traditional femininity is seen as being empathic, nurturing, emotional and submissive. This way of viewing girls and boys according to gender norms effects both adolescents and their guardians. Usually, girls will be viewed as being vulnerable and in need of more protection and boys will receive more independence, thus they are viewed as being tough. This can increase gender inequality and can be observed in the way that educational programs about sexuality mostly are focused on girls' sexual health and gender empowerment. Both girls, boys and other genders needs adequate support and information about sexuality. (Drew, 2022; Rivera & Scholar, 2020; Mmari, et al., 2017)

Attitudes toward gender equality can, according to a study made in India on what shapes boys and girls attitudes toward gender equality, change during adolescent development, and factors that can have an effect on the attitudes are the society the adolescent live in, their education, work, social media, their individual values and their social relationships. (Patel, et al., 2021, p. 14)

Bullying can have negative effect on healthy adolescent development, especially among sexual minorities because sexual minority adolescents can have a less confidence than heterosexual adolescents. It is crucial that guardians, educators and other adults that adolescents come in contact with, create an atmosphere where all sexualities are accepted. Adolescents should be supported to become accepting towards sexual minorities and educated on how to build their recourses through sex education interventions. (Coulter, et al., 2016)

A study made by Yoon, Voith and Kobulsky (2018) argues that there are gender-based differences whether suffering from childhood abuse increase risky sexual behavior in the adolescent years. Risky sexual behaviour refers to for example having unprotected sex, that could lead to unwanted pregnancies or sexually transmitted diseases. Boys who have suffered from physical abuse in their childhood can have increased risky sexual behavior while the study did not find childhood abuse being a risk-factor for risky sexual behavior amongst girls. This could indicate that there is a need for gender-specific interventions to tackle the issue and support adolescents who may have a high-risk of having risky sexual behavior. (Yoon, et al., 2018) Also parent-child relationships can be a factor that increases risky sexual behaviour among adolescents, especially if the adolescent has poor self-management skills. (Kahn, et al., 2015)

2.2 Boys' and men's sexuality

The distinction between genders is learned through social processes and are constructed in society, the distinction and attitudes toward gender roles are different in different societies and can change through time. The distinction can lead to gender inequality.

UNESCO supports including gender-specific information in comprehensive sex education, this should be done with the goal of gender-equality and not support gender norms. (United Nations Educational, Scientific and Cultural Organization, 2023, pp. 82, 92, 112) To improve gender equality in society it is essential that educators teach young boys and men to challenge and recognize, both their own and other's perceptions of toxic masculinity. Educators can include such topics as, for example, gender-based violence, diverse masculinities or sexism their teaching. (Elliot, 2018) Waling discusses factors that could decrease gender inequality and emphasizes the need to use other concepts than *toxic* or *healthy masculinity* when discussing gender-based harms done in society. Using toxic masculinity as an explanation for men's violence could be seen as a way of moving the responsibility away from the perpetrator. Boys and men should also be aware of the options to being masculine, such as having feminine qualities. (Waling, 2019)

Unrealistic or macho beliefs of men's sexual ability to performance, can increase inadequate stereotypes amongst both gay and heterosexual men because of that the macho culture maintains flawed beliefs such as how men always should be ready for intercourse, how erectile dysfunction is shameful and undesirable as well as how they always must be able to satisfy their partner. These unrealistic beliefs can have their history in myths about men's sexual performance, such as "a man should not show feelings" or "a man should always perform sexually". Myths about men's sexual performance have been acknowledged by researchers such as William master's and Virginia Johnson. (Baker & De Silva, 1988; Masters & Johnson, 1970; Peixoto & Nobre, 2017)

Risky sexual behaviour can be a consequence of adolescent boys who have suffered from sexual abuse. Homma, Wang, Saewyc and Kishor studied whether sexual abuse in childhood is a significant factor for later displays of risky sexual behaviours. The study's results indicated that boys that had suffered from sexual abuse more often displayed risky sexual behaviour compared to boys that had not been sexually abused.

The risky sexual behaviours that were measured in the study are unprotected sex, multiple partners, and the occurrence of teen-pregnancy. (Homma, Wang, Saewyc, & Kishor, 2011, p. 22) Depression, reactive aggression, weak conflict management skills and acceptance of sexual violence among adolescents are factors that can lead to executing aggressive sexual behaviour, such as sexual harassment, bullying and psychological dating violence. Low maternal monitoring can also be a significant factor for adolescents executing aggressive sexual behaviour. (Basile et al., 2016, pp. 679, 681)

Teaching adolescents in school how to improve attitudes and knowledge about healthy relationships can decrease intimate partner violence. This is important because intimate partner violence has been noted to begin as early as in adolescent years. (McLeod, Jones, & Cramer, 2015, p. 114) According to the National School Health Promotion study conducted by the Finnish Institute for Health and Wellbeing, being part of a sexual minority can lead to increased risks of having poor general health and poor mental health in comparison to heterosexual youths. (Klemetti, et al., 2020) As stated in subchapter 2.1, an accepting environment in schools in combination with adequate support for sexual minorities, can decrease the risks for sexual minorities to suffer from poor health. (Coulter, et al., 2016)

2.3 Sexual health promotion and sex education

In this subchapter I will explain how the sexual health promotion and sex education looks like in Finland and what factors affect sex education and sexual health promotion around the world. Finland offers various public health services for families and individuals, and the Finnish National Agency of Education's curricular programme includes sex education.

Finland has various health promotion services for children, adolescents and young adults and their families as a part of the public health care, such as maternity and children's clinics, school and student health care, contraceptive- and family planning clinic' and health care centres.

These services are free of charge. The service is statutory and offered in the school/institution by a public health nurse. Annually health check-ups include going over topics related to the students social, physical, and mental health, such as developmental matters and sexual health. Health advice is given during the appointment and additional appointments can be offered if needed. The public health nurse is also available for open appointments where a student can visit briefly. Students also visit a doctor for health check-ups but not as frequent as the public health nurse. Contraceptive advice and sexuality counselling is additional to health care centres also offered at schools/institutions by the public health care nurse. The service offers support regarding topics such as relationships, sexuality, matters regarding sex, sexual violence, sexual diseases and prevention of them and contraception. Many municipalities in Finland offer free contraceptives, such as condoms and hormonal and non-hormonal contraceptives for adolescents and young adults. (Finnish Institute for Health and Welfare, 2022) Sex education is part of the mandatory basic education in Finland and schools are receiving material and guidelines on how to conduct the education from the Finnish National Agency for Education. Educators can cooperate with a school's health care nurse or psychologist to get expert advice. The materials include 21 different topics regarding sexuality, emotions, communication, contraceptive health. (Finnish National Agency for Education, 2022)

Bildjusckin, Gissler and Klemetti cover the topic of sexual health promotion services for men in the Finnish institute for health and welfares blog. The blog text is based on the Finnish Institute for Health and Welfare's plan of action for sexual and reproductive health for the period 2014–2020. They discuss how men are less likely to be included in the maternal health care and contraceptive advisory appointments and how it is important to include men in these appointments so that not only the person who will start a contraceptive or the pregnant person is the one who receives the advice and counselling regarding the relationship. Also, single men and men suffering from sexual violence should be focused on more in health care settings. Men should be supported to seek help for sexual health matters. (Bildjusckin, Gissler, & Klemetti 2019)

The Finnish Institute for Health and Welfare included men's sexual health as one of the four priorities in their plan of action for sexual and reproductive health during the period between the years 2014–2020. One motivator for focusing on boys' and men's sexual health in the plan of action, was that women have carried most of the responsibility for taking care of sexual and reproductive health. This has led to the services to be intended mostly for women. Their main goal for increasing boys' and men's use of sexual health services was to make the services visible and assessable for boys and men from a young age, establish discussing sexual health with boys and men in health care, integrate discussions about sexual health in the health services, for example during the mandatory health check-ups for men before entering military service's. (Bildjuschkin, et al., 2014)

High quality sex education may lead to better self-efficacy, higher sexual satisfaction, and sexual confidence. The quality of sex education is not only defined by the content of the education, but also on how an educator behaves when giving the information. If an educator is confident speaking about sex and well aware of the topics, such education can be more meaningful for students than gaining merely a pragmatic sexual viewpoint.

Educators of sex education and professionals working with adolescents regarding sexuality, should have a broad knowledge, skills, youth-friendly values and a positive attitude toward sexuality, so they could ensure they can give comprehensive sex education for their students. Educators and other professionals should know about the different developmental stages of adolescents and have knowledge about matters regarding sexuality. (Elfers, et al., 2014) According to a study made in India, it is important that an educator participate in sexual health training regularly, so they can provide adequate information about sexual health when educating students. (Kaushal, et.al., 2015)

High quality sex education in schools can have a greater effect on adolescent sexual satisfaction and confidence, than parental acceptance on sexuality. Sex education commonly focuses mostly on the negative outcomes of sex, such as sexually transmitted diseases and unwanted pregnancy. There should be more topics regarding the emotional and social side of sexuality, as it can benefit adolescents in creating healthy sexual relationships as they can through sex education learn how to communicate in sexual situations. (Nurgitz, Pacheco, Senn, & Hobden, 2021) Educators who provide sex education for adolescents have the power of defining sexuality and developing students knowledge about sexual health, because the educators own understanding of sex educations importance and information regarding sex education can effect how they share information to their students. The educator's way of conducting sex education can form the students way of viewing sexuality because, their own values, restrictions regarding the school curriculum and the society they live in can form the educator's own agency. Students can be empowered in classes were sex education is given and sexuality is supported. (Preston, 2019, pp. 332, 339–340)

Even though there is a copious amount of practical information and self-help guides regarding sex available online, is it enough together with sexual health promotion in school, to cover everything that is important for a young adult regarding their sexual health? According to Kivimäki, Saaristo and Wiss, up to 11 % of boys aged 15 to 16 years find it difficult to reach a school health nurse in Finland, which is concerning because school health nurses offer help regarding sexual matters and are an important support for adolescent's sexual maturity, physical and psychological health. (Kivimäki, et al., 2018, pp. 171-172) This brings up the question, do young people discuss sexuality with health care professionals? Sexuality is a theme that is commonly left out in the discussions between young people and health care professionals. Particularly this concerns young people with disabilities or chronic diseases. Despite sexuality being an unexplored theme in the discussions between young people and health care professionals are both groups aware of the value of discussions about sexuality and the importance of sexuality as a wellbeing resource.

Lung et al. highlight the importance of working in a multidisciplinary way together with young people, their families, health care professionals and researchers to explore different ways of addressing sexuality between health care professionals and young people. (Lung, et.al., 2021) Media literacy entails the ability to access, analyze, evaluate, create and to take action while receiving and using different forms of media outputs. (Aufderheide, 1993) Media literacy interventions can have a positive effect on attitudes and behavior regarding risky sexual actions of adolescents. (Vahedi, et al., 2018, p. 150) Many adolescents receive information about sexual health from different media forums, some of which can glamourize risky sexual behavior and not discuss matters that support a healthy sexual development. If adolescents receive media literacy interventions regarding sexual health matters, they can navigate and critically evaluate the information they receive through media. (Scull, et al., 2022, p. 721)

Media literacy is an important skill for anyone who scrolls through media. To say one is media literate one is able to access, analyze, evaluate, create and to take action while using different forms of media messages. (Aufderheide, 1993) Media literacy interventions can have a positive effect on attitudes and behavior regarding risky sexual actions of adolescents. (Vahedi, et al., 2018, p. 150) Many adolescents receive information about sexual health from different media forums, some of which can glamourize risky sexual behavior and not discuss matters that support a healthy sexual development. If adolescents receive media literacy interventions regarding sexual health matters, they can navigate and critically evaluate the information they receive through media. (Scull, et al., 2022, p. 721) Internet-based education interventions combined with classroom discussions could be a beneficial addition to sex education. According to a study made in Mexico an internet-based intervention can improve knowledge, attitudes and self-efficacy for adolescent condom use. The intervention should be comprehensive, related to the adolescents' culture and society they live in and be aimed for their age-group. Adolescents have positive opinions regarding sex education that is entertaining, teaches new information and explains it well.

Long sessions and uncomfortable information can give a negative response from adolescents. Attitudes and self-efficacy are important factors regarding condom use, for example can strong self-efficacy lead to adolescents negotiating condom-use and carrying condoms with them. Positive attitudes towards condom use can decrease risky sexual-behavior (unprotected sex, transmitting STDs) (Doubova, et al., 2017, pp. 492, 495–497)

According to a participatory study conducted in England should there be more room for listening to adolescents wishes and needs when planning sex education, held by educators and school nurses, in school. Adolescents are aware of what information they are lacking regarding sexual health and including their thoughts and views in the education could benefit their sexual health promotion. Including discussions about relationships was one issue adolescents wished for in their sex education. (Aranda, et al, 2017) Adolescents wish to receive more comprehensive information about sexual health, such as sexual consent and coercion, diversity, pleasure, relationships and sex in media. Safe spaces is important for sex education, because a atmosphere were adolescents feel comfortable in affects the quality of the sex education. Some ways of making a safe and comfortable space for adolescents' sex education is educators being sensitive and aware of adolescents issues and concerns, using an inclusive language, planning sex education that is empowering for the students by for instance supporting an active participation. By supporting active participation and students contributing in the topics of the education is the sex education updated and relevant to adolescents. Including active participation is one way of supporting the development of adolescent agency because it can be empowering for the students to form their own perceptions of sex education topics. (Cense, et al., 2020, pp. 12–5)

United Nations Educational, Scientific and Cultural Organization's (UNESCO) International technical guidance on sexuality education was developed to support comprehensive sexuality education. UNESCO defines comprehensive sexual education as: Scientifically accurate, incremental(on-going through a persons life), age- and developmentally accurate, curriculum based, comprehensive

(covers a full range of sexual health topics), based on human rights and gender equality, culturally relevant and contextually appropriate, transformative and supports development of life skills. The technical guidance is aimed to be utilized by governmental education, Non-governmental organizations and stakeholders working on developing sex education for children and young people. According to the technical guidance does student learn best when they are supported to develop their own beliefs through processing information through their own critical lense. The technical guidance focuses on three learning objectives: knowledge, attitudes and skill-building. Knowledge is a important foundation, attitudes supports students ways of viewing themselves and others, skills such as, communication, decision-making and negotiation, empathy, challenging stigma support students to act. (United Nations Educational, Scientific and Cultural Organization, 2023, pp. 12 35)

Sexual agency is seen as an multi-faceted phenomenon and it is different in every individual. To support adolescent students sexual agency, educators should consider utilizing comprehensive methods that engages students into participation in sex education, critical thinking, negotiation empowerment etc. (Vanwesenbeeck, et al., 2021) An comprehensive sex education can help students form sexual agency. Cense suggest implementing a model for promoting students sexual agency in sex education. The model divides agency into four different categories: 1) Moral agency, 2) Embodied agency, 3) Bonded agency, and 4) Narrative agency.

Students taking part in sex education were gender and social norms and different sexual cultures are discussed, can support them forming their own sexual identity (moral agency). Discussing different scenarios and preparing students for scenarios that could happen in real life and not avoiding cases with conflicts, could support students navigating skills for real life scenarios. In addition teaching students to learn by doing and see mistakes as a way of learning can support students to form embodied agency. By learning about their different relationships, potential need of fitting in or belonging to a community, students learn how to interact in their social relationships and in different social situations (bonded

agency). When educators tell students different stories about sexual health matters, they can evolve their knowledge of sexual diversity (narrative agency). (Cense, 2018)

According to a Finnish study on how adolescents', aged 13-17 years old, act in social interactions with their peers, their self-efficacy was formed by their ability to debate the potential obstacles of actions with them self. The study discussed five themes that influence adolescent self-efficacy: social atmosphere, evaluating consequences, cognitive aspect, emotional aspect and self-identity. Simply, when adolescents acted based on their own beliefs, they felt better than acting based on what their peers wanted. Understanding adolescent's self-efficacy is important, for example for health care professionals when trying to understand what can influence adolescents' actions regarding their health. (Nyman, et al., 2018) Adolescents' health choices are made based on individual and social context, such as the environment they live in, guardian restrictions, and their friends' opinions. Their choices affect their own and others daily and long-term health and they may need support from professionals to make their decisions. It is important for educators to support adolescents decision making by helping them form their own values with practical information and guidance. Still it is noted that adolescent can make poor choices regarding their health, in spite of being well-informed. A another way to support adolescent healthy decision making is to help them speak up about their needs and have them met. (Moilanen, et al., 2021, pp. 834, 839–841) A Sex education interventions can increase adolsents'sexual self-efficacy. A study made in a Juvenile Detention Center (studies say that detained adolescents are prone to risky sexual behaviour because they tend to miss out on sex-education) resulted in adolescent males aged 17-19-year-old increasing their sexual self-efficacy after nine sex education interventions held by students of medical-, social work- and nursing programmes The interventions included themes such as sexual violence, consent and safe relationship. The study showed results in adolescent males improvement of sexual self-efficacy, attitudes consent and intervening in situations that might lead to sexual violence. (Shekar, et al., 2019, pp. 302–306)

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2.4 Game-based learning and sex education

The term gamification describes an approach where game mechanics are used in a non-gaming situation (Deterding, Dixon, Khaled, & Nacke, 2011, p. 10). Unfavorable behavior and lack of motivation among people has given inspiration for new ways on how people can be motivated to behavioral change or motivated to learn new things (Stieglitz, Lattemann, Robra-Bissantz, Zarnekow, & Brockmann, 2017, p. 3). People can be motivated by play, excitement, and joy (Huizinga, 1949, cited in Stieglitz, et al., 2017). Even though play can motivate people it is important to mention that there is a difference between play and games. Where play is a more abstract and free way of having fun, games have rules and certain goals (Juul, 2005; Salen & Zimmerman, 2004). The aim of the use of gamification is to improve behavior and motivation, for example in work, personal life or on social media. (Stieglitz, Lattemann, Robra-Bissantz, Zarnekow, & Brockmann, 2017, p. 3) The aim of using game-based learning in for example education or health care is to help the users to acquire new skills or information. Game-based learning have often been used in education and shown that game-based mechanics can motivate learning. (Deterding, Dixon, Khaled, & Nacke, 2011, pp. 18–20)

If the game played and the environment is right, game-based learning can benefit improvement of skills, knowledge, and attitudes. In addition to the environment and game played is the moderator essential in the process. Discussions before and after playing a game is vital. Critics towards game designs, such as a game not having the same aesthetics as a commercial game, can be avoided by either modifying commercial games or having the students creating their own game. Choosing the right game for the right purpose accompanied with a proper moderator, can support achieving the learning goals. (Wastiau & Kearney, 2009, pp. 122–123)

According to a study made in a secondary school in Tanzania game-based learning is a meaningful way to teach adolescents about sexual health matters, such as sexual health literacy. The study compared how game-based learning and traditional teaching helps adolescents gain knowledge about sexual health matters. 120 students, both boys and girls, in the age 11-15 participated in the study and was either assigned to participate in traditional teaching or game-based learning. The results indicated that game-based learning could have an even greater influence on learning about sexual health than traditional learning. (Haruna, et al., 2018, p. 12) When used wisely can games be a way for adolescents to gain knowledge about sexual health, especially in places, where talking about sexual health issues can be a taboo. (Haruna, et al., 2018, p. 18) Furthermore, game-based learning that includes narratives in the games can influence change in participants self-efficacy, behavior, and knowledge, and make the game-based learning enjoyable for the participants. (Li, et al., 2020)

2.5 Summary of the conceptual framework

The conceptual framework consists of previous studies, theories and literature of adolescents' sexual development, boys' and men's sexuality, sex education and sexual health promotion and game-based learning.

In Finland is sex education part of the mandatory basic education and educators can receive material and guidelines from the Finnish National Agency for Education (Finnish National Agency for Education, 2022). Sex education commonly focuses on topics such as sexually transmitted diseases and unwanted pregnancy. In addition, should be more focus on topics such as building healthy relationships. (Nurgitz, Pacheco, Senn, & Hobden, 2021) Intimate partner violence can begin already in the adolescent years, and by teaching adolescents early in school about improving their attitudes and knowledge about relationships can decrease intimate partner violence. (McLeod, Jones, & Cramer, 2015, p. 114) Professionals working with sex education, have the power of defining sexuality, because their knowledge and attitudes can have an influence on how they provide sex education (Preston, 2019, pp. 332, 339–340). Professionals working with adolescents' sexual health matters, should be aware of the development of adolescents' sexuality. (Kar et al., 2015) Boys can take longer, than girls, to fully develop their brain, and sometimes boys are in need of more guidance than they ask for. Brain development usually requires external support and guidance to develop healthy behaviour (Hermanson & Sajaniemi, 2018). UNESCO guides professionals working with sex education to focus on three learning objectives: knowledge, attitudes and skill-building. (United Nations Educational, Scientific and Cultural Organization, 2023, p. 12-35) To support adolescents forming their sexual agency, can engaging students into participating in sex education be helpful (Vanwesenbeeck, et al., 2021). Adolescents know what information they are lacking, and the learning can be more motivating if they can influence their own learning (Aranda, et al, 2017).

Adolescents' self-efficacy is formed by their ability to negotiate the potential obstacles of actions. For facilitators working with adolescents, is it essential that they understand them, so they are aware of what can influence adolescents' actions. (Nyman, et al., 2018) Game-based learning is often used in education and can motivate learning. The aim of using GBL is to support students to gain new knowledge (Deterding, Dixon, Khaled, & Nacke, 2011, pp. 18–20) Game-based learning can have an greater influence on learning than traditional learning (Haruna, et al., 2018, p. 12) and can be an creative approach to discussing sexual health (Haruna, et al., 2018, p. 18). For adolescents learning about sexual health and forming their own agency, is it important that the facilitator has the right knowledge, skills and attitude regarding sexual health. One way of motivating students learning through GBL, is to include the students in creating the game. (Wastiau & Kearney, 2009, pp. 122–123) Below is a summary of the key concepts in the form an of a figure (Figure 1).

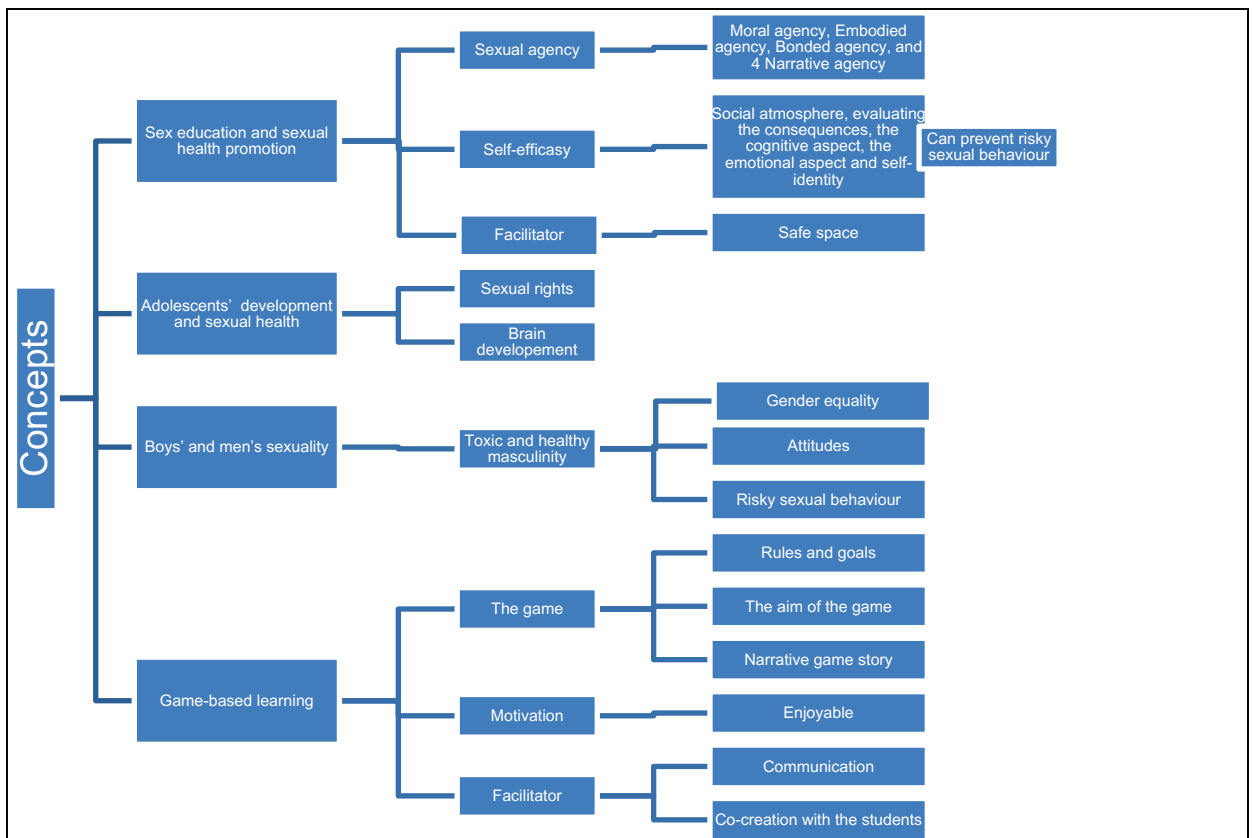


Figure 1 Conceptual framework of the study

3 Implementation of the research

In this chapter will I present my research task and question, my methodological starting points, my data collection and analysis and my research ethics.

3.1 Research task and question

The aim of this study is to examine and describe ways how game-based learning can contribute adolescent boys' approaches and discussions on sexual health with a facilitator. The participants in this study actively participate in the creation of a game and are offered to meet in a space where they can create a game about sexual health according to their current worldview.

The research question for the study is:

In what ways could game-based learning contribute to adolescent boys' sexual health promotion and sex education?

3.2 Research methodological starting points

This is an empirical and qualitative study in which the methodological background is aligned with the interpretivist paradigm. (Leavy, 2022, p. 11) The study is about understanding the views of the participants in the data collection process and myself as the researcher being part of the inquiry. Qualitative approaches can support the understanding of various themes and exploring the thoughts the research participants have on the research theme. The qualitative approach suits my study as I aim to understand the subjective thoughts of my research participants and describe the data collected thoroughly. (Leavy, 2017, p. 124) The aim of the study is to explore if and in what ways game-based learning used as a creative approach to sexual health promotion for adolescent boys. This is done by collecting participants' thoughts about the approach after being part of the game creation process. In addition to data collection through interviews, I observed the participants during the process.

As we created a game together, I also collect data from the steps of the game creation, such as which themes we chose to include in our game and why. My research is also partly utilizing the participatory action research methodology, since the study participants are stakeholders who do not have research backgrounds and we are solving an issue related to their age and gender group together. This research could still be seen as a way of making social changes during the data collection process. One could say that we were solving a problem of the participants' community (adolescent boys). The participants can also learn new information about the themes during the study. This all said is this not fully following the participatory action research guidelines since I do all the observations, interviews and analyze the data collected without the participants involved. (Kidd & Kral, 2005; Lawson et al., 2015)

I am aware that interpretivists researchers are never value free and of my own subjective understandings regarding the study. (Pope & Mays, 2020, pp. 15–21) In this study I see my own background as a public health care nurse and a sexology counsellor as an essential part of the study as I used my previous experiences and professional understanding when facilitating the process of data collection through creating the serious game. I have chosen to study a topic, game-based learning when discussing serious matters in education, that has been shown positive results in studies. (Stieglitz, Lattemann, Robra-Bissantz, Zarnekow, & Brockmann, 2017; Wastiau & Kearney, 2009)

Game-based learning have, when teaching sex education for adolescents in school, shown improvements in sexual health behavior and knowledge of sexual health problems (Haruna, et al., 2018). My role in the process was to facilitate the game creation as a researcher but also as a “knower” of the topic. My background as a public health nurse and sexuality counsellor supported my ability to guide the participants through the process. I used self-reflection as a lens to understand my way of facilitating the process, including the approaches of guiding the discussions about the themes and how I chose to interpret the opinions of the participants.

My sexology studies supported my facilitation as I focused on being objective when discussing the themes with the participants and I utilized the Finnish National Agency for Education guidance, for sexual health promotion and the Finnish Institute for Health and Welfare's guidance for public health care and sexual health promotion in mind when creating the game together. As said in the introduction I got inspiration for my topic from my previous experience from working in a vocational school as a student health care nurse. From my experience adolescents identifying as girls spoke more openly about sex and were not afraid to ask questions, whereas adolescents identifying as male usually did not open about matters regarding sex.

3.3 Data collection

The data was collected through one-on-one semi-structured interviews, field observations of the participants during this process, and by analysing the creative approach I chose to use in this study, game-based learning. The data collection took place in May 2022, and we met three times for the co-creation of the game, and I had separate interviews, through phone-calls with every participant after the co-creation.

3.3.1 Game development

I collaborated with a Non-Governmental Organization (NGO) in the Helsinki metropolitan area. The NGO's youth-worker chose the group they thought would be best suited for my project (based on age and gender). I worked together with a purposely selected homogenous group consisting of eight adolescent boys, in the ages between 16-19 years old. The participants were eligible for the study because of their gender and age. The size of the participant group was suited for my study due to the nature of my data collection methods (qualitative interviews, observation, game creation) (Leavy, 2017, p. 77)

The game structure was created based on Connex's guidelines, Connex is an international (Finland, Sweden and Belgium) project about game-based learning and empowerment. Connex game-development guides the game creator to do background work, set the game's focus and goals and gives step by step guidelines on what to include in the game development process. (Connexadmin, 2020) The plan was to create a serious game on the game platform Seppo (seppo, 2022) together with the participants. We created a game about sexual health for adolescent boys that we named "William's dilemma" (Williamin dilemma).

The process started with a meeting with the participants where I explained them about sexual health promotion and sex education in Finland, and what kind of topics are included in the Finnish comprehensive educational system's curriculum framework. (Finnish Institute for Health and Welfare, 2022; Finnish National Agency for Education, 2022) The participants were not required to acquire any information about the themes before the data collection. After this we proceeded to the warm-up activities, which for some of the participants seemed a bit dull but after some time they got more engaged in the process. I had chosen some "not so serious" allegations about sexual health which made the participants laugh and smile, which I interpreted as a good way of starting the process and making the participants comfortable. To warm up the participants into discussion and brainstorming I had planned some exercises about sexual health for them. They answered TRUTH/FALSE questions about different sexual health themes and after that they finished three exercises in small groups. I wanted to gather information about what the participants thought that the adolescent boys their ages should learn about sexual health and what they feel like they are missing in for example sex education in school. After finishing the exercises, we went over the answers and discussed different themes of sexual health. We then decided on which themes we wanted to include in our game and started to create a narrative for the game. The game has seven different themes 1) Contraceptives, 2) Sexually transmitted diseases, 3) social media, 4) Dating and relationships, 5) Pornography, 6) Consent, 7) Sexual pleasure and sexual anatomy.

Participants were involved in the game creation as “knowers” of what information they believe adolescent boys should be educated in and what information they think is missing from the education. Together we started to create a game narrative where the main character was a young man having difficulties with his sexual health and needed support. I guided the planning, but the participants decided on what issues the main character would have and what would happen to him. As stated in my methodological starting points, is this study partly a participatory research study because the participants are the “knowers” and shares their opinion on what to include in the game. (Kidd & Kral, 2005; Lawson et al., 2015) Discussions about sexual health occurred naturally during the creation of the game and I supported the discussion by utilizing my knowledge as a sexuality counsellor and a public health nurse.

3.3.2 Participant observations

I observed the participants during the creative process and utilized an observation model by Laura Huhtinen-Hildén and Anna-Maria Isola (2020) “From systematic observation to verifying impacts: observation model for creative group activities”. I took field notes during the facilitation and continued the data collection after the participant-meetings. I had the observation model in mind while taking field notes and it guided me to observe the group through different perspectives. It can be possible that some observations could have been missed because I was integrated in the setting by being the facilitator of the setting, simultaneously as being the observer. I decided to use Huhtinen-Hildén and Isola’s observation model in my research because it is a suitable way to systematically observe creative group activities. The observation model has four different perspectives which helped me collect and analyse my observational data. They are 1) Means and approaches of creative activities, 2) Facilitation, 3) Individual participants’ means of being and doing and 4) Group interaction. (Huhtinen- Hilden & Isola, 2021) My observation was followed with participant interviews.

3.3.3 Semi-structured interviews

The reason of the interviews is to explore the participants opinion's about utilizing a creative approach when conducting sexual health promotion. The interviews took place after the participants participated in the workshop sessions and the participants were interviewed individually. I gave the participants an option for either participating in a face-to-face meeting, a meeting via zoom or by a telephone call. The interviews were recorded. The interview-model was semi-structured interview with different topics and open-ended questions. The topics were the participants own reflection on participating in the study/creating the game, the participants thoughts about gamification as an approach to promote sexual health, the participants feelings about the matters brought up in the study. The aim was to research the participants subjective opinions on if and how game-based learning could benefit the discussion about sexual health with adolescent boys.

The participants were informed of the research question and aim, and different definitions important to this study before the interview begins. Because the aim was to study how and if a creative approach could contribute to the sexual health promotion among adolescent boys, it was important for the study that the questions would not be related to the participants own personal healthcare and that the interview-situations would not be counselling. (Pope & Mays, 2020, p. 43) I ensured that the interview-questions would not be about the participants and their own well-being, and rather focus on their opinions about participating in creating the game and if they could see it being applicable in for example educational settings.

The questions I asked the participants were 1) Could you describe what you and your group have been doing in this project? 2) Could you describe your part? Can you tell me about your experience? 3) In what ways should we discuss about these matters?, 4) Is there a need for this kind of approach?, 5) What do you remember most? What was the most interesting? Could something has been done better? 6) What did you come to think of? What would you like to add to the game? 7) How would this be a useful/helpful tool for sex education/sexual counselling, sexual health promotion? Where could you envision it? 8) How could this be a useful tool for sex education/sexual health promotion?, 9) How could this approach encourage your peers to talk about sexual health matters?, 10) Why would this approach not be useful?

3.4 Data analysis

I utilized the observation model for creative group activities by Laura Huhtinen-Hildén and Anna-Maria Isola (Huhtinen-Hildén & Isola, 2021) when analysing my observational data. I looked at the material from four different perspectives as described in the observation model: 1) Means and approaches of creative activities, 2) Facilitation, 3) Individual participants 'means of being and doing and, 4) Group interaction. I will describe in detail how the analysis proceeded.

I wrote field notes during the meetings with the participants. My field notes involved descriptions of the participants emotions and communication with me and the other participants, descriptions of the activities did and how the participants reacted to them, how they participated, what they said and what they did and non-vocal communication. And after the meetings with the participants, I read my notes and wrote longer observations descriptions utilizing the observation model by Huhtinen-Hildén and Isola. I interviewed the participants after the final meeting with the participants, the interviews were all recorded but I also wrote some short notes during them. After conducting the interviews, I listened to them and manually transcribed them. I printed the transcribed interviews and have not them stored on any digital device. I stored the interviews in my home, in a place where no one else has access to them.

The interviews were semi-structured and in some situations, I needed to explain the questions due to the interviewee not fully understanding them. I listened to the data again and read my transcriptions to fully gain an idea of what the data says to me and started to create an idea of what results the interviews gave me. Following this I started to roughly code the data by hand. I used value-coding for the interviews. (Leavy, 2017, pp. 150—157; Comparative Keyword analysis Pope & Mays, 2020, p. 115) After coding the data I started to look for patterns and themes, and categorized the data together with similar codes. While deconstructing the data I wrote down my own memo notes to get a further interpretation of my data. The aim of the interview analysis was to generate themes and the participants subjective opinions about the project.

In the findings section of this thesis will I present the interview analyzes results by describing the interviewees views and themes I generated from the data. (Pope & Mays, 2020, p. 116) The analysis of this data was doing an inductive process where I gathered segments together in meaningful patterns. Themes was formed from the data and helped me understand common answers and variation. (Polit & Tatano Beck, 2014)

The game we co-created together with the participants were one part of the data collection. What I found important for this study was looking at the process from start to finish, from the warm-up activities to the end result. I have written in my findings about the process and how I interpreted what I observed, and the participants also discussed the game process with me in their interviews.

3.5 Research ethics

Adolescent boys' sexual health promotion and education was chosen as a topic from my previous experience in my work with adolescents in the student health care. My own experience motivated me to select this topic, due to me believing studying this topic could be valuable and the results could be beneficial for people working with adolescents' boys around sexual health matters.

My topic selection was formed by my understanding of which problems need research (adolescent boys sexual health promotion and sex education) and the potential impact of the research (new ways of how to approach sexual health matters with adolescent boys). Studying a sensitive topic such as sexual health required me to have a multifaceted ethical approach during the research process. The author Patricia Leavy's book about research design have guided me through my research ethics process. (Leavy, 2017) This study's research ethics involved me focusing on my own background and analysing my own potential bias, during the whole research process.

My own values and moral compass guided me how to think and act during the process; my nursing degree and work experience in the health care field has knowledge of nursing ethics, for example the most important professional secrecy, utilizing science and peer-reviewed academical references when co-creating the game, and seeing every participant as equal, my work experience have shaped my moral compass and chosen actions in the study. Having a degree in sexology has also supported my research process, I have knowledge of the topic I study, and I have an open mind and genuine interest of the topic. I believe that my education and work experience from the public health care has shaped my ability to be objective during the cocreation of the game, I do not judge, I do not have favourite topics, I do not bring my own personal political or religious beliefs into the research process. This said, is my role interpretative during the research process when collecting the data, because I use qualitative data that I analyse based on different academic studies. During the data collection did I not collect information that was not necessary for the study, for example did I not utilize information about the participants personal sexual health. If any of the participants would have discussed their own sexual health, for example during the interview, did I not use it in my study. Before collecting the data, I thought of some potentially harmful situations that could occur during the process and how I would deal with those situations (cf. reference).

My goal was to “do no harm” and protect the participants integrity, be fair and truthful. Potential harmful situations that I thought of were for example: 1) What if the participants would get into arguments with each other; 2) What if they would feel like they have overshared about their own personal beliefs; and 3) Could I possibly pressure them to participate in something they would not like to participate in. My own experience of working with adolescents regarding these matters supported me to protect the participants, if something like this would occur and them knowing their rights to choose to not participate in the study. (Leavy, 2022, pp. 11, 25–40) I followed the responsible conduct of research guidelines of the Finnish Advisory Board on Research Integrity when collecting and handling my research data. I decided to choose participants age of 16- to 19-year-old. I so there was no need for parental permission. My Master Thesis programme’s tutor teacher Mai Salmenkangas suggested that I contacted a youth centre in the Helsinki metropolitan area and asked for potential participants. I got in contact with a youth worker that suggested that I would work with a group of adolescent boys in the age of 16- to 19-year-old. I did not have any other requests for the participants than that they would be identifying as male, between the ages of 16-20 and able to communicate in Finnish. I met with the youth worker and explained the study before meeting with the participant group. The participants were informed both orally and in written form about the aim of the study, the intended outcome of the study and what the participation entailed, before signing a consent form. The participants were informed that they had the option to stop participating the study in any point. According to the Finnish Advisory Board on Research Integrity, trust between the researcher and participants can be maintained with respecting the participants’ rights. The data was stored on my computer, which only I have access to, due to it being protected by a password. The interviews were recorded on a phone without cloud settings and deleted after my analysis of the interviews. The transcriptions were printed out and destroyed after my data analysis. (TENK, 2023) I highlighted the fact that this is research discussed the confidentiality of the participation, no information discussed in the workshops should be discussed outside the study. There was no conflict of interest in this study. The participant consent form is included as an appendix in the end of this thesis.

When working with the participants while collecting this study's data, it was important to think about what language I use with the participants so that everyone understands. If a participant would not understand my question during the cocreation of the game or during the interviews, I explained my question until the participant was able to understand my question and contribute with an answer.

I have the ownership of this research; all of the participants have contributed to make it possible to finish this study. This master thesis will be published online on the website Theseus, a webpage that holds all the theses and publications of the Universities of Applied Sciences in Finland. I would hope that as many as possible could benefit from my master thesis and further study this topic.

In this master thesis I use the Harvard referencing style. The literature I have used in this study are peer reviewed journal articles (mostly articles published between the years 2013 and 2023) materials from e-books, books and organisations webpages have also been used in this study.

4 Findings

This chapter presents the findings in relation to the study's aim of examining and describing ways how game-based learning can contribute adolescent boys' approaches and discussions on sexual health with a facilitator. The participants in this study actively participated in creating a game about sexual health according with me as a facilitator. I have analyzed data collected through my observations, the game created and participant interviews.

The research question is: In what ways could game-based learning contribute to adolescent boys' sexual health promotion and sex education?

4.1 Sexual health promotion and sex education through game-based learning

This subchapter is about how the study's participants and me as an observer consider game-based learning as an approach for sexual health promotion and sex education. After the warm up exercises and learning about sexual health in the Finnish educational systems curriculum, the participants brought up themes that interested them and told me that they feel like the theme of sexual health is not discussed enough in school, and also that they felt like they did not want to discuss the theme with just any adult in school or at a youth center due to it being too "awkward".

After the warm-up exercises, we started to create a story for the game. The participants brought up ideas for the story, for example one participant did bring up an idea of why the main character of the game did not have any knowledge about sexual health, and all the other participants added other ideas for the story about the main character, for example what his friends in the game story did. The participants gave examples of things that we could add to the game story and looked for approval from me and each other. One quote from my observation field notes was, "For me as a facilitator and observer this is almost magical, I have never seen a group of adolescents being so open and active together when creating a story". We chose different themes regarding sexual health that we

wanted to include in the story, the participants created all themes. I made suggestions for the group, and they created a story around the themes. The objective of the activity was to create a narrative story for the game where the main character had different obstacles. The whole group participated actively by listening, talking, supporting each other, asking me questions, looking for ideas online, by being present (by not focusing on other things such as their phones or talking about other stuff not regarding the process). I observed excitement when their ideas were discussed in the group and included in the story.

Participant 5 (P5) commented as follows:” I liked that to do the story together, all the group members make their own decisions, and everyone dared to talk and had fun, there was no silence. It was a good way to discuss sex, you learn quickly, you don't have to just hear about something in class, it's fun to do something for a change”.

We chose to have one main character and two sub-characters. The group wanted to decide how the main character looked, why he had trouble with his own sexual health and what happened to him through the game. The main character had different problems that the player would solve when playing the game and the focus on was to help the main character. When we were done with the story, we ended the setting, and I created the game on the platform and during the next setting the group played the game and gave me ideas on what they would like for me to change in the game.

Unfavorable behavior and lack of motivation among people has given inspiration for new ways on how people can be motivated to behavioral change or to learn new things. (Stieglitz, Lattemann, Robra-Bissantz, Zarnekow, & Brockmann, 2017, p. 3). People can be motivated by play, excitement, and joy. (Huizinga, 1949, cited in Stieglitz, et al., 2017) Even though play can motivate people it is important to mention that there is a difference between play and games. Where play is a more abstract and free way of having fun, games have rules and certain goals. (Juul, 2005; Salen & Zimmerman, 2004) In the interviews the participants told me how they found game-based learning to be a good way of discussing

about sex. Participant 1 (P1) said that he could see the game being used in middle school or high school and that a similar game for girls could be a good idea. Participant 2(P2) told me it was far more interesting than other ways of education. (P2): “This would be a great way to learn about sex because this is a game, it's more interesting than reading some book or watching instructional videos (about sex education)...You get to do something, and the story we created could happen to people in our age, so it was nice”. Participant 4 (P4) said: “We've talked a lot, learned a lot, and had a lot of fun”.

If the game played and the environment is right, can game-based learning benefit improvement of skills, knowledge, and attitudes. In addition to the environment, is choosing the right game for the right purpose accompanied with a proper moderator, important for supporting students achieving the learning goals. (Wastiau & Kearney, 2009, pp. 122–123) According to participant 1 (P1) can discussions about sex be embarrassing, but by making a game about sex and playing it reduced the level of “awkwardness”. P1 commented: “The game was a good idea, because if you would just talk directly to young people about sex then it's a bit awkward. When we talked about the game, we got very involved in it!... You must talk about such things; every young person should talk about such things”. Sexuality is commonly left out of discussions between young people and health care professionals. Despite this, are both, young people and health care professionals, aware of the value of discussions about sexuality and the importance of sexuality as a wellbeing resource. It is important to work in a multidisciplinary way together with young people, their families, health care professionals and researchers to explore different ways of addressing sexuality between health care professionals and young people. (Lung, et.al., 2021) Participant 5 said that creating the game story together was fun because everyone could participate in the decision making and had fun together P5: “I liked that you do the story together, all the group members make their own decisions and everyone dares to talk and had fun, there was no silence”.

Discussions before and after playing a game is vital. Critics towards game designs, such as a game not having the same aesthetics as a commercial game,

can be avoided by either modifying commercial games or having the students creating their own game. Choosing the right game for the right purpose accompanied with a proper moderator, can support achieving the learning goals. (Wastiau & Kearney, 2009, pp. 122–123)

Participant 3 said in their interview that game based learning could support young people to open up and discuss about sexual health, and checking in after the game about what information the students have learned is a good way to evaluate their learning. P3 “ This would be a good way to promote the sexual health of young people as they have in mind, to make it a game, and to see what they learn from it. The game would make young people open up and discuss sexual health better, in my opinion”.

In addition to observing the participants I also observed my own behavior as the facilitator of the process. I was physically positioned at the same levels as the participants, sitting in a lounge on couches. I gave instructions to the activities, guided and maintained a structure during the process, and also let the participants discuss freely and if needed I asked the ones who were quieter for opinions so that everyone could be heard. In addition to working with the themes chosen for the story, we also discussed about some themes that we did not include in the game, because I saw it as an important part of creating an atmosphere where the participants could discuss openly. I saw this as one way of supporting the participants creative flow and keeping them interested in participating. The participants asked different questions about the topics and were very keen on learning more about them, and I felt that my knowledge about sexual health was a very important factor. It is important that health professionals and educators are aware of the development of adolescents’ sexuality and the factors effecting it, to give the best support when promoting or educating adolescents in matters regarding sexual health. (Kar, et al., 2015) My way of behaving around the participants were also, to my opinion, significant, as I did not get embarrassed about their questions, I laughed together with them and did not lecture at them. I observed that it was important that I had professional but friendly approach when discussing with the participants. As I mentioned in 4.1 the

participants all agreed on that they would not like to discuss sexual health with just any adult due to it possibly being too “awkward” for them. The participants did at some moments get really excited for example they talked on each other, did not give each other space to talk, did not follow instructions and me as the facilitator had to put in extra effort to maintain the structure of the process.

The aim of the process was not to be in more power than the participants. The main point of facilitating was not to keep the group well behaved; it was to interact with them and guide them through the process and receive information from them. The quality of sex education is not only defined by the content of the education, but also on how the educator behaves when giving the information. The educator confidence when speaking about sex and having the knowledge of the topics, can students gain a more pragmatic sexual viewpoint. (Nurgitz, et al., 2021)

According to the participants it was important for them that an adult/facilitator was with them while playing the game, because we discussed the themes while playing. Participant 3 (P3) commented “The fact that you have an adult with you while playing the game makes it fun. If you hadn't been there, we would have only played the game through quickly, then you'll lose the whole point... When playing the game, it is important to discuss the tasks”.

4.2 What do boys want to know about sexual health?

Giving the participants the role of deciding together on what themes to choose to the game, gave them a space to get involved in their own and their peers sex education. The participants shared what themes regarding sexual health they wanted us to include in the game. We (I as the facilitator, and the participants) chose to include themes such as dating, relationships and break-ups, sex and social media, pornography, sexual consent, contraceptives, genital anatomy, sexual pleasure and sexually transmitted diseases. The participants chose themes they found beneficial and interesting for people in their age-group and with the same gender. The participants were showed interest in different kind of

themes, and I found it beneficial that the game we created had a wide set of topics. Adolescents wish to receive more comprehensive information about sexual health, such as sexual consent and coercion, diversity, pleasure, relationships and sex in media. Safe spaces is important for sex education, because a atmosphere where adolescents feel comfortable in affects the quality of the sex education.

By supporting active participation, and students contributing in forming the topics of the education forms updated and relevant sex education for adolescents. Including active participation is one way of supporting the development of adolescent agency, because it can be empowering for the students to form their own perceptions of sex education topics. (Cense, et al., 2020, pp. 12-15)

According to Aranda et al, should be more room for listening to adolescents wishes and needs when planning sex education. Adolescents are aware of what information they are lacking regarding sexual health and by including their thoughts and views in the education could benefit their sexual health promotion. (Aranda, et al., 2017) UNESCO's technical guidance for professionals working with sex education, states that student's learn best when they are supported to develop their own beliefs through processing information through their own critical lense. Students gaining knowledge, developing their attitudes towards sexuality, and their skills (such as communication, decision-making and negotiation, empathy, challenging stigma) supports their way of viewing themselves and others and how they act. (United Nations Educational, Scientific and Cultural Organization, 2023, pp. 12-35) Co-creating a game gave the participants a space where they could share their thoughts and ideas of what to include in the game. They found it interesting because the game told a story that was familiar to what could happen to their peers. Participant 2 (P2) comment about our game-story was "This was a good way to promote sex, because there was an interesting story, it could happen in real life". Participant 5 stated that this project could be important and a necessity in sex education P5: "There is a need for such a project because there is not much talk about these things at school, more health information is talked about in high school, but not so much".

The participants said in the interviews that utilizing the game we created in school could be a beneficial part of adolescent sex education. Participant 3 commented (P3) “There would be a need for this kind of project in schools’ health promotion classes. This would be a nice way to learn about sexual health”.

As previously stated in 4.1, has the educator/facilitator an important role when providing sex education or sexual health promotion for adolescents. I find myself having the right knowledge, attitude and skills for working with sexuality and adolescents and while the participants had given ideas for the topics in the game, I made sure the information we included in the game was accurate. UNESCO defines comprehensive sex education as: Scientifically accurate, incremental (ongoing through a person's life), age- and developmentally accurate, curriculum based, comprehensive (covers a full range of sexual health topics), based on human rights and gender equality, culturally relevant and contextually appropriate, transformative and supports development of life skills. (United Nations Educational, Scientific and Cultural Organization, 2023) Educators/facilitator should have broad skills, youth-friendly values, a positive attitude toward sexuality and knowledge of sexuality and the different developmental stages of adolescents for providing high quality sex education/sexual health promotion. (Elfers, et al., 2014) Educators should participate in sexual health training regularly, so they can provide adequate information about sexual health when educating students. (Kaushal, et.al., 2015) According to the technical guidance does student learn best when they are supported to develop their own beliefs through processing information through their own critical lens. The technical guidance focuses on three learning objectives: knowledge, attitudes and skill-building. Knowledge is an important foundation, attitudes support students ways of viewing themselves and others, skills such as, communication, decision-making and negotiation, empathy, challenging stigma support students to act. (United Nations Educational, Scientific and Cultural Organization, 2023, pp. 12-35)

4.3 Empowering participants through inclusion

Utilizing game-based learning in sexual health promotion and sex education could contribute to supporting the participants sexual agency. The participants noted that their suggestions got included in the story, and would be included in the final creation, the game. The group smiled and laughed together and had small “banter” in-between, they felt relaxed and shyness, I observed in the beginning of the project, disappeared. To support adolescent students sexual agency, educators should consider utilizing comprehensive methods that engages students into participation in sex education, critical thinking, negotiation empowerment etc. (Vanwesenbeeck, et al., 2021) Most of the interview analysis had the same result, one important reason behind the participants enjoyment of the process was their feeling of being able to influence the project. Participant 2 (P2) commented “I felt that I can influence what the game will be like. I said something to you about those questions and you changed them, it's influencing...You asked what we wanted, and we answered. Democracy, that is what it was. Everything was decided together... Everyone played an equally important role”.

High quality sexual education may lead to better self-efficacy, higher sexual satisfaction and sexual confidence. As stated in 4.2 is high quality sex education not only based on the content of the education but the way the educator behaves while teaching sex education. (Nurgitz, et al., 2021) Participant 3 said in his interview (P3): “I think young people have a lot of questions that they can't ask in health promotion classes. They keep the questions in their mind, but they can't open their mouths because no one asks for opinions, someone just decides what the topic is to be written about...Our voice was really heard in the game...The game would make young people open and discuss sexual health better.”

The participants actively participated in the project together as a group. They seemed to have fun together, everyone was involved (although some participants were louder than others), they interacted with each other and the facilitator. Creating safe and comfortable space for adolescents' sex education is important, and educators being sensitive and aware of adolescents issues and concerns, using an inclusive language, planning sex education that is empowering for the students by for instance supporting an active participation, is one way of creating a safe space. Active participation should be supported and students contributing in giving ideas for the topics of the education makes sex education updated and relevant to adolescents. Including active participation is also one way of supporting the development of adolescent agency because it can be empowering for the students to form their own perceptions of sex education topics. (Cense, et al., 2020, pp.

During the project I observed different emotions and behaviour, and I could also see quick changes in the participants behaviour. In the beginning the group acted shy and one participant reluctantly said that he did not want to participate "in any boring school project ", but after the warm-up exercises the participants were all laughing and having fun while participating in the project. The participants laughed together and supported each other, they did also correct each other if someone said something the rest of the group did not approve. While discussing the different themes the participants different group interactions occurred. One way of improving gender equality in society, is teaching young boys and men to challenge and recognize, both their own and other's perceptions of toxic masculinity. This can be done by, for example, including topics, such as gender-based violence, diverse masculinities, or sexism in the education. (Elliot, 2018) Educating adolescents how to improve attitudes and knowledge about healthy relationships can decrease intimate partner violence. It is important to do in school, because intimate partner violence has been noted to begin as early as in adolescent years. (McLeod, Jones, & Cramer, 2015, p. 114)

By learning about their different relationships, potential need of fitting in or belonging to a community, students learn how to interact in their social relationships and in different social situations (bonded agency). When educators tell students different stories about sexual health matters, they can evolve their knowledge of sexual diversity (narrative agency). (Cense, 2018) I observed a situation during our meetings where one participant said that he would look at a girl in a negative way if she would contract a sexually transmitted disease, and that he would find her dirty and “slutty”. The rest of the group did not approve of this and tried to question the participant if he would feel the same if a boy would contract the sexually transmitted disease. After this situation the participants and I had a fruitful discussion about ethics and equality regarding gender and sexual behavior. Different values were discussed but everyone was understanding toward the group’s different opinions and values.

As stated in the conceptual framework is adolescents’ sexual wellbeing affected by the social, cultural and political environment they live in. So that adolescents could have healthy sexual wellbeing should they be encouraged to gain knowledge about having healthy relationships. (Jerves, et. al., 2021, p. 13) The opinion of the participant regarding girls having a sexually transmitted disease being “slutty” could have its background in the early separation between girls and boys. Adolescents starts during their early teenage years so separate genders based on traditional masculine and feminine norms, that are influenced by the society the adolescents live in. This can increase gender inequality and shows in how sex education is often focused on issues girls might have (menstruation, contraception). Both girls, boys and other genders needs adequate support and information about sexuality. (Drew, 2022; Rivera & Scholar, 2020; Mmari, et al., 2017) Taking part in sex education where gender and social norms and different sexual cultures are discussed, can support adolescents forming their own sexual agency. Showing adolescents different scenarios, that could happen in real life and not avoiding cases with conflicts, could prepare adolescents for possible future conflicts. Learning by doing and portraying mistakes as a way of learning instead of failure, can help adolescents forming an embodied agency. (Cense, 2018)

5 Conclusions and Discussion

In chapter 5 Conclusions and discussion, I will go through the summary of my findings, key findings, research ethics, my own self-reflection and ideas for future research.

5.1 Summary of the findings

The creative activities enable a situation where the participants voices are heard, and they can create imaginary scenarios together. The warmup activities and themes chosen by the warmup exercises formed the story, but the participants created the main characters and the storyline. The participants were in control of creating the game with guidance from the facilitator. The objective of the activity was to create a narrative story for the game where the main character had different obstacles. All participants shared the same opinion, that creating the game narrative was one of the most interesting and fun part of the process. The whole group participated actively by listening, talking, supporting each other, asking me questions, looking for ideas online, by being present. I observed excitement when their ideas were discussed in the group and included in the story. All participants said that utilizing game-based learning in sex education could be beneficial because it is a new and fun way of learning and it involves the participants and supports their active engagement, instead of an educator speaking and students listening.

Warm-up is important before starting the activity, participants might be shy/reluctant in the beginning but if they find the activity interesting, they can be motivated to participate. The participants enjoyed being in control of what will happen in the story, they had a lot of ideas and supported each other. The themes helped the participants create storylines. The group smiled and laughed together and had small “banter” in between, they felt relaxed and were not shy.

The facilitators position was on the same level as the participants, the participants could discuss freely, joke, laugh, look up information on their phones, eat snacks etc. during the same time. The participants could ask the facilitator about anything regarding the theme without the facilitator judging. The facilitator still challenged the participants for example with critical thinking for example about ethics. The group discussed different point of views together. According to the participants it was important for them that an adult/facilitator was with them while playing the game, because we discussed the themes while playing.

The participants chose together with me different themes they believed was mostly interesting and important for them to learn about, the themes were: Dating, relationships and break-ups, sex and social media, pornography, sexual consent, contraceptives, genital anatomy, arousal and orgasms and sexually transmitted diseases. The participants also shared that these themes are not so thoroughly discussed in sex education in schools, as they would like them to be.

Utilizing game-based learning in sexual health promotion and sex education could contribute to supporting the participants sexual agency, because this game-based learning process was a co-creation together with the participants and the facilitator. Most of the interviewees said the same thing, that one of the most important reasons behind the participants enjoyment of the process was their feeling of being able to influence the project.

5.2 Conclusions

In what ways could game-based learning contribute to adolescent boys' sexual health promotion and sex education? Based on the findings of this study, game-based learning is interesting, fun, activating, motivating. Adolescents find it enjoyable that they could create a game about topics that interest them, the most interesting was the game story creation and playing the finished game. Game-based learning is beneficial for adolescent boys in the ages 16-19 and could be played for example in schools. Game-based learning is one way of creating a space where adolescents can discuss sexuality, it makes the discussions comfortable, and it is fun for the adolescents to do something while learning.

As stated in the introduction does sex education in school cover issues regarding preventing un-wanted pregnancies and sexually transmitted diseases, although these are important topics to teach so that one can learn about safe sex should there be more room for discussing topics such as relationships, consent and pornography. There should also be different ways of conducting sexual health promotion and sex education, and by this study the findings show that utilizing a creative approach, specifically game-based learning, could be one way of doing that. Utilizing creative approaches could motivate the student to learn about the topic and not feel uncomfortable discussing the topics. Adolescents are influenced by media and sexual health is one topic that occurs oftentimes in media, and it is important to have that in mind when discussing with the adolescents. Future research topics could be studying medias impact on students' sexual health behavior and how to include media platforms in sexual health promotion and sex education. Professional support when navigating through topics regarding sexual health is important for adolescent learning, because it supports healthy sexual behavior. (World Health Organization, 2022)

As boys sometimes don't ask for support, they would need (Hermanson & Sajaniemi, 2018), can game-based learning be an enjoyable way of learning about sexual health. Boys also suffer from sexual harassment also need to be comfortable to discuss these matters with professionals. (Fröjd et al 2016) One way of utilizing this creative approach with adolescents could be that a student health care nurse or educator, could gather groups of boys to discuss sexual health while playing a game about the matter.

I find myself being able to give comprehensive sex education and sexual health promotion, due to my background in as a public health nurse, sexual councillor and having experience of working with adolescent boys. The research process could have been different if I would not have the skills, knowledge an attitude I have gained through my studies and work. By different I mean that the experience of the participants and the game we created could have looked different. The findings could be useful for professionals working with adolescent sexual health promotion and sex education, because the findings show that adolescent boys

can find game-based learning as a motivating way to learning about sexual health.

5.3 Discussion

I have tried to make my research process as trustworthy as possible, by explaining my data collection process and data analysis process thoroughly. I have collected and analysed my data from three different perspectives: by observations, interviews and the game created with the participants. The research ethics are also discussed carefully, and I have been doing ongoing self-reflection through this process. My references are trustworthy and relevant for this study, due to them being important for every step in the process.

I found that the facilitator's role was more vital than I initially had thought. It gives me, personally, a boost to continue my road through finding ways to support adolescent sexual health development, because I know I, if someone, can do it. My master thesis process has inspired me to look further into the facilitator's role, how important it is and what to have in mind when facilitating a process such as utilizing a creative approach to health promotion or education. I would be interested in reading future studies regarding health promotion and education through creative approaches. I especially suggest studying the role of the facilitator and the participants opinions regarding utilizing creative approaches in health promotion and education. Game-based learning is a meaningful way of teaching adolescents about sexual health, so it could be beneficial to study how other groups, than adolescent boys would find game-based learning.

Other topics I propose for further research regarding my findings are: Adult men's sexual health promotion, toxic masculinity's effect on relationships, sexual health's effect on mental health, incel-groups and professional's self-reflection. Through this process have I been thinking about my participant selection and inclusivity, who are the stakeholders, whose experiences and perspectives do I study. I hope to see, in future research, a researcher trying to be as inclusive as possible, and study various adolescents' experiences (for example, differently

gendered adolescents, adolescents with disabilities, different aged groups et cetera).

I have no regrets looking back on my research process, but I have put some thought on what topics the participants would have chosen, if I would not have told them about all the topics that are in the Finnish school systems curriculum framework, would the topics be different if I would have asked them without giving them information about what is suggested for teachers to include in their sex education? I believe that the findings can be useful for other professionals and others, that are interested in utilizing a creative approach in health promotion and/or education. In particular... I have previously, in education and work, self-reflected on my thoughts, knowledge, attitudes and skills, and I have done self-reflection through this whole research process. I believe doing this kind of research requires self-reflection and that my self-reflection makes my study more trustworthy. My next step could be promoting my findings, the game "William's dilemma" and writing a guidance book for a facilitator.

Finally, I want to thank everyone that have made this master thesis possible, my supervisor, my master programme, my mother who always supports me no matter what I do, and last but most importantly, my biggest thank you goes to the youth-centre and the adolescent boys who gave their time and energy to my research process.

References

- Aranda, K. o.a., 2017. Listening for commissioning: A participatory study exploring young people's experiences, views and preferences of school-based sexual health and school nursing. *Journal of Clinical Nursing*, 13 June, pp. 1-11.
- Atallah, S. o.a., 2016. Ethical and Sociocultural Aspects of Sexual Function and Dysfunction in Both Sexes. *The Journal of Sexual Medicine*, 06 January, pp. 591-606.
- Aufderheide, P., 1993. *Media Literacy. A Report of the National Leadership Conference on Media Literacy*. Washington: The Aspen Institute.
- Baker, C. D. & De Silva, P. 1988. The Relationship between Male Sexual Dysfunction and Belief in Zilbergeld's Myths: an empirical investigation. *Sexual and Marital Therapy*, pp. 229-238.
- Basile, K. C. o.a., 2016. Shared Risk Factors for the Perpetration of Physical Dating Violence, Bullying, and Sexual Harassment Among Adolescents Exposed to Domestic Violence. *Journal of Youth and Adolescence*, 08 January, pp. 672-686.
- Bildjuschkin, K., Gissler, M. & Klemetti, R., 2019. *www.blogi.thl.fi*. [Online] Available at: <https://blogi.thl.fi/seksuaali-ja-lisaantymisterveyden-toimintaohjelma-suuntaa-palveluita-miehille/> [27 October 2022].
- Bildjuschkin, K. Et al, 2014. *Edistä, ehkäise, vaikuta- Seksuaali-ja lisääntymisterveyden toimintaohjelma 2014-2020*, Tampere: Finnish institute for health and welfare.
- Cense, M., 2018. Navigating a bumpy road. Developing sexuality education that supports young people's sexual agency. *Sex Education*, 27 October, pp. 263-276.

Cense, M., de Grauw, S. & Vermeulen, M., 2020. 'Sex Is Not Just about Ovaries.' Youth Participatory Research on Sexuality Education in The Netherlands. *International Journal of Environmental Research and Public Health*, 19 November.

Connexadmin, 2020. *Connex for inclusion*. [Online] Available at: <http://www.connexforinclusion.eu/2020/08/14/game-development/> [Använd 04 April 2022].

Coulter, R. W. S., Herrick, A. L., Friedman, M. R. & Stall, R. D. 2016. Sexual-Orientation Differences in Positive Youth Development: The Mediational Role of Bullying Victimization. *AM J Public Health*, April, pp. 691-697.

Deterding, S., Dixon, D., Khaled, R. & Nacke, L. 2011. *From game design elements to gamefulness: Defining gamification..* Tampere, MindTrek '11 Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments.

Doubova, S. V., Martinez-Vega, I. P., Medina, C. I.-. C. & rez-Cuevas, R. P. 2017. Effects of an internet-based educational intervention to prevent high-risk sexual behavior in Mexican adolescents. *Health Education Research*, 4 November, pp. 487-498.

Drew, C., 2022. Femininity Examples. *Helpful professor*, October.

Eckstrand, K. L. Et al, 2017. Heightened activity in social reward networks is associated with adolescents' risky sexual behaviors. *Developmental Cognitive Neuroscience*, October, pp. 1–9.

Elliot, K., 2018. Challenging toxic masculinity in schools and society. *On the Horizon*, pp. 17–22.

Elfers, J. Et al, 2014. The Core Competencies for Adolescent Sexual and Reproductive Health. *American Journal of Sexuality Education*, 13 March, pp. 81–98.

Finnish Advisory Board on Research Integrity, 2012. *Responsible conduct of research and procedures for handling allegations of misconduct in Finland, Guidelines of the Finnish Advisory Board on Research Integrity 2012*. Helsinki: Finnish Advisory Board on Research Integrity.

Finnish Institute for Health and Welfare, 2022. *www.thl.fi*. [Online] Available at: <https://thl.fi/fi/tutkimus-ja-kehittaminen/tutkimukset-ja-hankkeet/maksuttoman-ehkaisyn-kokeilu> [27 October 2022].

Finnish Institute for Health and Welfare, 2022. *www.thl.fi*. [Online] Available at: <https://thl.fi/fi/web/lapset-nuoret-ja-perheet/sote-palvelut/opiskeluhoolto/kouluterveydenhuolto#M%C3%A4%C3%A4r%C3%A4ikaiset> [27 October 2022].

Finnish Institute for Health and Welfare, 2021. *Kouluterveyskyselyn aikasarjat 2006-2021*. [Online] Available at: https://sampo.thl.fi/pivot/prod/fi/ktk/ktk1/fact_ktk_ktk1?row=200101L&row=199385L&column=area1-600836.&column=time-601069&column=stage of study-161123.161219.&column=gender-143993.&fo=1# [25 November 2021].

Finnish institute for health and welfare, 2022. *www.thl.fi*. [Online] Available at: <https://thl.fi/fi/web/lapset-nuoret-ja-perheet/sote-palvelut/ehkaisy-ja-seksuaaliterveyspalvelut> [27 October 2022].

Finnish National Agency for Education, 2022. *Seksuaalikasvatuksen konteksti*. [Online] Available at: <https://www.oph.fi/fi/oppimateriaali/kosketus/johdannoksi-seksuaalikasvattajalle/seksuaalikasvatuksen-konteksti> [20 December 2022].

Frantsi-Lankia, M. Et.al 2018. Access to a school health nurse and adolescent health needs in the universal school health service in Finland Hanne Kivimäki MSc, Vesa Saaristo MSc, Kirsi Wiss MSc, Marjut Frantsi-Lankia MD, Timo Ståhl PhD, Arja Rimpelä MD, PhD First published: 01 October. *Scandinavian Journal of Caring Sciences*, 01 October, pp. 165-175.

Fröjd, S., Kaltiala-Heino, R. & Marttunen, M., 2016. Sexual harassment and emotional and behavioural symptoms in adolescence: stronger associations among boys than girls. *Social Psychiatry and Psychiatric Epidemiology*, 26 May, pp. 1191–1201.

Halonen, M. & Salonen, A., 2019. *Helsingin Sanomat*. [Online] Available at: <https://www.hs.fi/mielipide/art-2000006149579.html> [2021].

Halonen, M. & Sassi, P., 2020. Psykoseksuaalinen kehitys lapsuus- ja nuoruusiässä; Keskeisiä käsitteitä. i: P. Brusila, K. Kero, J. Piha & M. Räsänen, red. *Seksuaalilääketiede*. u.o.:Kustannus Oy Duodecim, pp. 1–4.

Harden, P. K., 2014. A Sex-Positive Framework for Research on Adolescent Sexuality. *Perspectives on Psychological Science*, 9(5), 17 September, pp. 455–469.

Haruna, H. et al., 2018. Improving Sexual Health Education Programs for Adolescent Students through Game-Based Learning and Gamification. *International Journal of Environmental Research and Public Health*, 17 September, pp. 1–26.

Helminen, M., Kylmä, J., Pakarinen, M. & Suominen, T. 2019. Attitudes, knowledge and sexual behavior among Finnish adolescents before and after an intervention. *Health Promotion International*, Volume 35, 22 August, pp. 821–830.

Hermanson, E. & Sajaniemi, N. 2018. Nuoruuden kehitys - mitä tapahtuu pinnan alla?. i: *LÄÄKETIETEELLINEN AIKAKAUSKIRJA DUODECIM*. u.o.:Duodecim, pp. 843–849.

Homma, Y., Wang, N., Saewyc, E. & Kishor, N., 2011. The Relationship Between Sexual Abuse and Risky Sexual Behavior Among Adolescent Boys: A Meta-Analysis. *Journal of Adolescent Health*, 24 December, pp. 18–24.

Huhtinen-Hildén, L. & Isola, A.-M., 2021. *From systematic observation to verifying impacts: observation model for creative group activities*, Helsinki: Finnish Institute for Health and Welfare.

Huizinga, J., 1949. *Homo Ludens a study of the play-element in culture*. London: Routledge & Kegan Paul.. London: Routledge & Kegan Paul.

Ilmonen, K. et. al, 2019. *Seksuaalioikeudet*, Helsinki: Väestöliitto.

Jerves, E. et al, 2021. Which factors contribute to sexual well-being? A comparative study among 17 to 20 year old boys and girls in Belgium and Ecuador. *Culture, Health & Sexuality*, 14 June, pp. 1–18.

Juul, J., 2005. *Half-real: video games between real rules and fictional worlds..* Cambridge: MIT Press.

Kahn R.E, 1. C. H., Farley, J. P. & Kim-Spoon, J., 2015. Delay Discounting Mediates Parent-Adolescent Relationship Quality and Risky Sexual Behavior for Low Self-Control Adolescents. *Journal of Youth and Adolescence*, 23 July, pp. 1674–1687.

Kar, S. K., Choudhury, A. & Singh, A. P., 2015. Understanding normal development of adolescent sexuality: A bumpy ride. *Journal of Human Reproductive Sciences*, 18 April, pp. 70–74.

Kaushal, P. o.a., 2015. Impact of Health Education on The Knowledge, Attitude and Practices of Teachers Regarding Reproductive Health of Adolescents of Amritsar, Punjab. *Journal of Clinical & Diagnostic Research*, 1 May.

Kidd, S. A. & Kral, M. J., 2005. Practicing participatory action research.. *Journal of Counseling Psychology*, pp. 187–195.

Kivimäki, H. Et al , 2018. Access to a school health nurse and adolescent health needs in the universal school health service in Finland. *Scandinavian Journal of Caring Sciences*, 01 October, pp. 165–175.

Klemetti, R., Luopa, P. & Kivimäki, H., 2020. Health and wellbeing of sexual minority youth – the School Health Promotion study in 2019 in Finland. *European Journal of Public Health*, 05 September, p. 256.

Lawson, H. A. et al. 2015. *Participatory Action Research*. New York: Oxford University Press.

Leavy, P. 2017. *Research Design : Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches*. The Guilford Press.

Leavy, P. 2022. *Research Design : Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches*. Guilford Publications.

Li, M., Wang, Y., Wu, Y. & Liu, H. 2020. Gamification narrative design as a predictor for mobile fitness app user persistent usage intentions: a goal priming perspective.. *Journal of Health Communication*, pp. 54–65.

Lung, S. L. M. et. al. 2021. Are healthcare providers and young people talking about sexuality? A scoping review to characterize conversations and identify barriers. *Child Care Health*, 02 July, pp. 1–14.

Mmari, K. et. al., 2017. ‘Yeah, I’ve grown; I can’t go out anymore’: differences in perceived risks between girls and boys entering adolescence. *Culture, Health & Sexuality*, 18 October, pp. 787–798.

Manninen, S.-M. et. al, 2021. General practitioners’ self-reported competence in the management of sexual health issues – a web-based questionnaire study from Finland,. *Scandinavian Journal of Primary Health Care*, 13 July, pp. 279–287.

Masters, W. H. & Johnson, V. E. 1970. *Human Sexual Inadequacy*. 1 red. u.o.:u.n.

McLeod, D. A., Jones, R. & Cramer, E. P. 2015. An Evaluation of a School-based, Peer-facilitated, Healthy Relationship Program for At-Risk Adolescents. *Children & Schools*, 04 February, pp. 108-116.

Moilanen, T., Rahkonen, N. & Kangasniemi, M. 2021. Finnish adolescents' perceptions of their health choices: A qualitative study. *Nursing & Health Science*, 01 July, pp. 834–842.

Nurgitz, R., Pacheco, R., Senn, C. & Hobden, K. 2021. *The impact of sexual education and socialization on sexual satisfaction, attitudes, and self-efficacy*, Ontario: the Department of Psychology at Scholarship at UWindsor.

Nyman, J., Parisod, H., Axelin, A. & Salanterä, S. 2018. Finnish adolescents' self-efficacy in peer interactions: a critical incident study. *Health Promotion International*, 23 July, pp. 1–9.

Omodan, B. I., 2022. Analysis of emancipatory pedagogy as a tool for democratic classrooms. *Research in Business & Social Science*, 18 March, pp. 348–354.

Patel, S. K., Santhya, K. G. & Haberland, N. 2021. What shapes gender attitudes among adolescent girls and boys? Evidence from the UDAYA Longitudinal Study in India. *PLOS ONE*, 18 March, pp. 1-20.

Peixoto, M. M. & Nobre, P. 2017. “Macho” Beliefs Moderate the Association Between Negative Sexual Episodes and Activation of Incompetence Schemas in Sexual Context, in Gay and Heterosexual Men. *The Journal of Sexual Medicine*, 01 April, pp. 518–525.

Pope, C. & Mays, N. 2020. *Qualitative Research in Health Care*. 4th edition red. u.o.:John Wiley & Sons, Incorporated.

Anon., u.d. u.o.:u.n.

Preston, M. 2019. "I'd rather beg for forgiveness than ask for permission": Sexuality education teachers' mediated agency and resistance. *Teaching and Teacher Education*, January, pp. 332-340.

Rivera, A. & Scholar, J. 2020. Traditional Masculinity A Review of Toxicity Rooted in Social Norms and Gender Socialization. *Advances in Nursing Science*, January/March.

Rosenlund, M. 2021. *Theo*. Helsingfors: Schildts & Söderströms.

Salen, K & Zimmerman, E. 2004. *Rules of play: Game design fundamentals*. Cambridge: MIT Press.

Santalahti, T. 2018. *Nuorten seksuaalinen hyvinvointi, seksuaaliterveyskäyttäytyminen ja niiden uhkatekijät*. [Online] Available at: <https://www.terveyskirjasto.fi/oos00005#s8> [26 November 2021].

Scull, T. M. o.a., 2022. A Media Literacy Education Approach to High School Sexual Health Education: Immediate Effects of Media Aware on Adolescents' Media, Sexual Health, and Communication Outcomes. *Journal of Youth and Adolescence*, 02 February, pp. 708–723.

Seppo 2022. *seppo*. [Online] Available at: <https://seppo.io> [14 November 2022].

Shekar, A., Gross, A., Luebbers, E. & Honsky, J. 2019. Effects of an Interprofessional Student-Led Sexual Education Program on Self-Efficacy and Attitudes About Sexual Violence in Youths in Juvenile Detention. *Journal of Pediatric and Adolescent Gynecology*, 29 December, pp. 302–306.

Stieglitz, S. et. al. 2017. *Gamification - Using Game Elements in Serious Contexts*. Berlin: Springer.

TENK, 2023. *Hyvä tieteellinen käytäntö ja sen loukkausepäilyjen käsitteleminen Suomessa*. 2:edition red. Helsinki: TUTKIMUSEETTINEN NEUVOTTELUKUNTA.

United Nations Educational, Scientific and Cultural Organization, 2023. *UNESCO International technical guidance on sexuality education*. 2:nd edition red. Geneva: the United Nations Educational, Scientific and Cultural Organization.

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 metaanalytic review. *Journal of Adolescence*, 16 June, pp. 140–152.

Vanwesenbeeck, I., Cense, M., Reeuwijk, M. v. & Westeneng, J. 2021. Understanding Sexual Agency. Implications for Sexual Health Programming. *Sexes*, 23 September, pp. 378-396.

Waling, A., 2019. Problematising 'Toxic' and 'Healthy' Masculinity for Addressing Gender Inequalities. *Australian Feminist Studies*, 14 October, pp. 362–375.

Wastiau, P. & Kearney, C. 2009. *How are digital games used in schools?*, Brussels: European Schoolnet.

World Health Organization, 2022. *Adolescent health*. [Online] Available at: https://www.who.int/health-topics/adolescent-health#tab=tab_1 [2 October 2022].

World Health Organization, 2002. *Sexual Health*. [Online] Available at: https://www.who.int/health-topics/sexual-health#tab=tab_2 [19 01 2022].

Yoon, S., Voith, L. A. & Kobulsky, J. M. 2018. Gender differences in pathways from child physical and sexual abuse to adolescent risky sexual behavior among high-risk youth. *Journal of Adolescence*, 05 February, pp. 89–97.

Appendices

Information about the study and Consent form (in Finnish)

TIEDOTE TUTKIMUKSESTA

Sexual Health promotion for adolescent boys using game-based learning as a creative approach.

Nuorten poikien seksuaaliterveyden edistäminen käyttäen pelillisyyttä luovana toimintatapana.

Pyyntö osallistua tutkimukseen

Teitä pyydetään mukaan tutkimukseen, jossa jonka tarkoituksena on tutkia nuorten miesten seksuaaliterveyden edistämistä pelillisyyden avulla. Osallistujana sinun tehtäväsi olisi yhdessä ryhmän kanssa luoda peli, jonka aihe liittyy seksuaaliterveyteen. Sinulla ei tarvitse olla osaamista seksuaaliterveydestä tai pelin luomisesta osallistuaksesi tutkimukseen. Olemme arvioineet, että sovellutte tutkimukseen, koska olette tutkimuksen kohderyhmää (poika, poikaoletettu ja vanhempi kuin 15-vuotias). Tämä tiedote kuvaa tutkimusta ja teidän osuuttanne siinä. Pehdyttyänne tähän tiedotteeseen teille järjestetään mahdollisuus esittää kysymyksiä tutkimuksesta, jonka jälkeen teiltä pyydetään suostumus tutkimukseen osallistumisesta.

Vapaaehtoisuus

Tutkimukseen osallistuminen on täysin vapaaehtoista. Kieltäytyminen ei vaikuta kohteluun nuorisotalon asiakkaana.

Voitte myös keskeyttää tutkimuksen koska tahansa syytä ilmoittamatta. Mikäli keskeytätte tutkimuksen tai peruutatte suostumuksen, teistä keskeyttämiseen ja suostumuksen peruuttamiseen mennessä kerättyjä tietoja voidaan käyttää osana tutkimusaineistoa.

Tutkimuksen tarkoitus

Tämän tutkimuksen tarkoituksena on tutkia nuorten miesten seksuaaliterveyden edistämistä pelillisyyden avulla. Seksuaaliterveys on tärkeä osa nuorten hyvinvointia ja pelillisyyden on tutkitusti hyvä toimintatapa opetuksen ja terveydenhuollon parissa. Pelillisyyden on voimavarakeskeinen toimintatapa ja nuorten voimavaroja tukevat toiminnot luovat hyviä tuloksia nuorten seksuaaliterveyden edistämiseksi.

Tutkimuksen toteuttajat

Tämä tutkimus kuuluu Ammattikorkeakoulu Metropolian Terveystieteiden tutkimuskeskuksen missä kuuluu suorittaa opinnäytetyö. Metropolia vastaa tutkimuksesta ja vastuullinen tutkija on

opiskelija Gillan Suvisaari. Ohjaaja Sanna Kivijärvi on vastuussa tutkijan ohjaamisesta.

Tutkimusmenetelmät ja toimenpiteet

Tutkimus suoritetaan nuorisotalon tiloissa sekä etäyhteyden välityksellä. Tutkittava osallistuu pelin luomiseen yhdessä ryhmän kanssa, tutkija antaa ryhmälle ohjeita pelin luomiseen. Pelin luomisen jälkeen tutkija haastattelee tutkittavaa yksitellen. Tutkittavalla on mahdollisuus osallistua haastatteluun joko paikan päällä tai etänä. Tutkimukseen osallistuminen kestää noin 1–4 päivää (osallistuminen pelin luomiseen sekä yksilöhaastattelu).

Tutkimus toteutetaan siten, että tutkija seuraa osallistujien toimintaa pelin luomisen yhteydessä, kuten osallistujien keskusteluja ja elekieltä. Tutkija kirjaa omat havaintonsa tutkimuksen aikana. Haastattelut järjestetään pelin valmistumisen jälkeen ja haastattelut nauhoitetaan tutkimuksen luotettavuuden varmistamiseksi. Tutkimuksessa ei julkaista osallistujien henkilötietoja.

Kustannukset ja niiden korvaaminen

Tutkimukseen osallistuminen ei maksa teille mitään. Osallistumisesta ei myöskään makseta erillistä korvausta.

Tutkimustuloksista tiedottaminen

Tutkimus on osa opinnäytetyötä, joka julkaistaan Theseus-tietokannassa.

Tutkimuksen päättäminen

Myös tutkimuksen suorittaja voi keskeyttää tutkimuksen, jos tutkittavat eivät osallistu tutkimukseen.

Lisätiedot

Pyydämme teitä tarvittaessa esittämään tutkimukseen liittyviä kysymyksiä tutkijalle/tutkimuksesta vastaavalle henkilölle.

Tutkijoiden yhteystiedot

Tutkija / opinnäytetyötekijä

Nimi: Gillan Suvisaari

Puh.

Sähköposti:

Tutkimuksesta vastaa / opinnäytetyön ohjaaja

Titteli: MuT, tutkimusopinnoista vastaava opettaja Luovuus ja taide sosiaali- ja terveysaloilla –tutkinto-ohjelmassa

Nimi: Sanna Kivijärvi

Ammattikorkeakoulu Metropolia

Puh.

Sähköposti:

Tutkimuksen tietosuojaseloste: Henkilötietojen käsittely tutkimuksessa

Tässä tutkimuksessa käsitellään teitä koskevia henkilötietoja voimassa olevan tietosuojalainsäädännön (EU:n yleinen tietosuoja-asetus,

679/2016, ja voimassa oleva kansallinen lainsäädäntö) mukaisesti. Seuraavassa kuvataan henkilötietojen käsittelyyn liittyvät asiat.

Tutkimuksen rekisterinpitäjä

Rekisterinpitäjällä tarkoitetaan tahoa, joka yksin tai yhdessä toisten kanssa määrittelee henkilötietojen käsittelyn tarkoitukset ja keinot. Rekisterinpitäjä voi olla korkeakoulu, toimeksiantaja, muu yhteistyötaho, opinnäytetyöntekijä tai jotkut edellä mainituista yhdessä (esim. korkeakoulu ja opinnäytetyöntekijä yhdessä).

Tässä tutkimuksessa henkilötietojen rekisterinpitäjä on
Opinnäytetyöntekijä X

Voitte kysyä lisätietoja henkilötietojenne käsittelystä rekisterinpitäjän yhteyshenkilöltä

Rekisterinpitäjän yhteyshenkilön nimi: Gillan Suvisaari
Organisaatio: Metropolia Ammattikorkeakoulu
Puh.
Sähköposti:

Tutkimuksessa teistä kerätään seuraavia henkilötietoja

Teiltä kerätään nimet, ikä, sukupuoli ja äänitallenteet yksilöhaastattelujen aikana.

Teillä ei ole sopimukseen tai lakisääteiseen tehtävään perustuvaa velvollisuutta toimittaa henkilötietojanne vaan osallistuminen on täysin vapaaehtoista.

Tutkimuksessa ei kerätä henkilötietojanne muista lähteistä.

Henkilötietojenne suojausperiaatteet

Tutkimuksessa käytetään työvälineitä henkilötietojenne keräämiseen ja ne ovat äänentallennuslaite, korkeakoulun sähköpostijärjestelmä, korkeakoulun verkkolevyasemaa sekä Word-ohjelmaa vastauksien koontiin, analysointiin ja luokitteluun. Jos vastauksia tulostetaan ne säilytetään opinnäytetyöntekijän kodissa paikassa minne muilla ei ole pääsyä.

Opinnäytetyöntekijä on ainut henkilö kenellä on pääsy tietoihin koska ne ovat suojattu käyttäjätunnuksella sekä salasanalla.

Henkilötietojenne käsittelyn tarkoitus

Henkilötietojenne käsittelyn tarkoitus on kerätä ja analysoida vastauksia projektista ja tutkia onko pelillisyyden toimiva tapa seksuaaliterveyden edistämiseen.

Henkilötietojenne käsittelyperuste

Suostumus

Tutkimuksen kesto-aika (henkilötietojenne käsittelyaika)

Kesto-aika

Mitä henkilötiedoillenne tapahtuu tutkimuksen päätyttyä?

Tutkimuksen päädyttyä kerätyt henkilötiedot poistetaan äänentallennuslaitteelta, korkeakoulun sähköpostijärjestelmästä, korkeakoulun verkkolevyasemalta sekä Word-ohjelmasta. Tulostetut tiedot tuhoetaan asianmukaisesti.

Tietojen luovuttaminen tutkimusrekisteristä

Tietoja ei luovuteta muille.

Henkilötietojenne mahdollinen siirto EU:n tai ETA-alueen ulkopuolelle

Tietojanne ei siirretä EU: n tai ETA-alueen ulkopuolelle.

Rekisteröitynä teillä on oikeus

Koska henkilötietojanne käsitellään tässä tutkimuksessa, niin olette rekisteröity tutkimuksen aikana muodostuvassa henkilörekisterissä. Rekisteröitynä teillä on oikeus:

- saada informaatiota henkilötietojen käsittelystä
- tarkastaa itseänne koskevat tiedot
- oikaista tietojanne
- poistaa tietonne (esim. jos peruutatte antamanne suostumuksen)
- peruuttaa antamanne henkilötietojen käsittelyä koskeva suostumus
- rajoittaa tietojenne käsittelyä
- rekisterinpitäjän ilmoitusvelvollisuus henkilötietojen oikaisusta, poistosta tai käsittelyn rajoittamisesta
- siirtää tietonne järjestelmästä toiseen
- sallia automaattinen päätöksenteko nimenomaisella suostumuksellanne
- tehdä valitus tietosuojavaltuutetun toimistoon, jos katsotte, että henkilötietojanne on käsitelty tietosuojalainsäädännön vastaisesti

Jos henkilötietojen käsittely tutkimuksessa ei edellytä rekisteröidyn tunnistamista ilman lisätietoja eikä rekisterinpitäjä pysty tunnistamaan

rekisteröityä, niin oikeutta tietojen tarkastamiseen, oikaisuun, poistoon, käsittelyn rajoittamiseen, ilmoitusvelvollisuuteen ja siirtämiseen ei sovelleta.

Voitte käyttää oikeuksianne ottamalla yhteyttä rekisterinpitäjään.

Tutkimuksessa kerättyjä henkilötietoja ei käytetä profilointiin tai automaattiseen päätöksentekoon

Henkilötietojen käsittely aineistoa analysoitaessa ja tutkimuksen tuloksia raportoitaessa

Teistä kerättyä tietoa ja tutkimusaineistoa käsitellään luottamuksellisesti lainsäädännön edellyttämällä tavalla. Yksittäisille tutkittavalle annetaan tunnuskoodi ja häntä koskevat tiedot säilytetään koodattuina tutkimusaineistossa. Aineisto analysoidaan koodattuna ja tulokset raportoidaan ryhmätasolla, jolloin yksittäinen henkilö ei ole tunnistettavissa ilman koodiavainta. Koodiavainta, jonka avulla yksittäisen tutkittavan tiedot ja tulokset voidaan tunnistaa, säilyttää: Opinnäytetyöntekijä, eikä tietoja anneta tutkimuksen ulkopuolisille henkilöille. Lopulliset tutkimustulokset raportoidaan ryhmätasolla eikä yksittäisten tutkittavien tunnistaminen ole mahdollista.

Tutkimuksessa kerättyjä tietoja ei käytetä muihin tutkimuksiin.

Consent forms (in Finnish)

Tutkimuksen nimi: Sexual health promotion for adolescent boys using game-based learning as a creative approach (Nuorten poikien seksuaaliterveyden edistäminen käyttäen pelillisyyttä luovana toimintatapana)

Tutkimuksen toteuttaja: Ammattikorkeakoulu Metropolia, Gillan Suvisaari, Phone number, mail-adress.

Ohjaaja Sanna Kivijärvi Mail-adress

Minua on pyydetty osallistumaan yllämainittuun tutkimukseen, jonka tarkoituksena on tutkia nuorten miesten seksuaaliterveyden edistämistä pelillisyyden avulla. Olen saanut tiedotteen tutkimuksesta ja ymmärtänyt sen. Tiedotteesta olen saanut riittävän selvityksen tutkimuksesta, sen tarkoituksesta ja toteutuksesta, oikeuksistani sekä tutkimuksen mahdollisesti liittyvistä hyödyistä ja riskeistä. Minulla on ollut mahdollisuus esittää kysymyksiä ja olen saanut riittävän vastauksen kaikkiin tutkimusta koskeviin kysymyksiini.

Olen saanut tiedot tutkimukseen mahdollisesti liittyvästä henkilötietojen keräämisestä, käsittelystä ja luovuttamisesta ja minun on ollut mahdollista tutustua tutkimuksen tietosuojaselosteeseen.

Osallistun tutkimukseen vapaaehtoisesti. Minua ei ole painostettu eikä houkuteltu osallistumaan tutkimukseen.

Minulla on ollut riittävästi aikaa harkita osallistumistani tutkimukseen.

Ymmärrän, että osallistumiseni on vapaaehtoista ja että voin peruuttaa tämän suostumukseni koska tahansa syytä ilmoittamatta. Olen tietoinen siitä, että mikäli keskeytän tutkimuksen tai peruutan suostumukseni, minusta keskeyttämiseen ja suostumukseni peruuttamiseen mennessä kerättyjä tietoja voidaan käyttää osana tutkimusaineistoa.

Allekirjoituksellani vahvistan osallistumiseni tähän tutkimukseen.

Jos tutkimukseen liittyvien henkilötietojen käsittelyperusteena on suostumus, vahvistan allekirjoituksellani suostumukseni myös henkilötietojeni käsittelyyn. Minulla on oikeus peruuttaa suostumukseni tietosuojaselosteessa kuvatulla tavalla.

Allekirjoitus:

Nimenselvennys:

Alkuperäinen allekirjoitettu tutkittavan suostumus sekä kopio tutkimustiedotteesta liitteineen jäävät tutkijan arkistoon. Tutkimustiedote liitteineen ja kopio allekirjoitetusta suostumuksesta annetaan tutkittavalle.