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Transactional sex among youth in Oslo

Prevalence, associated characteristics and vulnerabilities

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Abstract

Background: The aim of this master thesis was to investigate the prevalence of experience with transactional among a representative sample of youth and the association with sexual abuse, substance abuse, perceived mental health problems and socioeconomic status.

Theoretical framework: This study utilized the following theoretical concepts: developmental psychopathology, theory of traumagenic dynamics, the general strain theory and resilience theory.

Method: Quantitative analysis were employed to investigate the research questions. The current study used data material from the cross-sectional survey Young in Oslo 2018. The analytical sample consisted of 8914 participants (response rate of 65%) from senior high school students in Oslo.

Findings: Of the participating adolescents, 3,4% (3% girls and 3,8% boys) had exchanged sexual favors for money, drugs or other reimbursements. Transactional sex was associated with sexual abuse and substance abuse, and these associations tend to be stronger among adolescents with low socioeconomic status.

Conclusion: Transactional sex is a marginal phenomenon among adolescents in Oslo. However, the phenomenon is strongly associated with other activities of concern such as substance abuse and sexual abuse, and certain vulnerable groups are more likely to engage in the activity and be engaged in other problems and problem behaviors.

Keywords: Transactional sex, selling sex, adolescents, sexual abuse, substance abuse



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Chapter 1. Introduction

1.1 Background of the thesis:

Transactional sex among youth, or the informal exchange of sexual favours for money or gifts, has become an increased topic of concern in the public health field. In 2019, the Nordic Council of Ministers initiated the research project *young people, vulnerabilities and prostitution/sex for compensation in the Nordic countries*, with an aim to review existing knowledge about young people's experiences of transactional sex in the Nordic countries (Holmström et al, 2019). The report states that young people who have experience with transactional sex are a particularly vulnerable group more likely to have experience with other activities of concern, such as substance abuse, physical and sexual abuse, self-harm and mental illness (Holmström et al, 2019). However, the report indicates that there is limited empirical knowledge about the phenomena in the Nordic countries. Research on the phenomena is required in order to develop preventive measures targeting young people who have experiences with transactional sex (Holmström et al, 2019). These findings inspired the current aim of this master thesis; to investigate transactional sex among youth living in Oslo and associations with risk factors such as sexual abuse, substance abuse and mental health issues, based on data material from the cross-sectional survey Young in Oslo 2018.

The report *sex som kapital* from Pro Sentret, Oslo municipality's service for individuals who have experience of selling or trading sex, summarised existing knowledge about young people trading sexual favours in Norway (Bjørndahl, 2017). The report states that transactional sex is a rather marginal phenomenon in Norway, however certain groups are more at risk of becoming involved in the activity. According to the report, transactional sex occurs in different forms, often characterized as a grey area between infatuation, exploration of sexuality and boundaries, pressure, survival, prostitution and as a way of dealing with a difficult situation (Bjørndahl, 2017). Based on the lack of knowledge about

adolescents involved in transactional sex, the report states that social service providers are requesting research-based knowledge on the phenomena in Norway (Bjørndahl, 2017).

According to the global review (Krisch et al., 2019) exploring transactional sex among the general population of youth, transactional sex among youth in high-income countries is rather uncommon. The prevalence rate between 1,0 % and 1,5 %, was reported in the Nordic countries (Krisch et al., 2019). Few studies have examined the extent of transactional sex among adolescents in Norway. A previous study based on the survey Young in Oslo 1996, found that 1,4 % of the adolescents in Oslo had sex sale experience, respectively 2,1 % boys and 0,6 % girls (Hegna & Pedersen, 2003). Contrary to common perceptions, previous research examining transactional sex among youth in high-income countries have generally reported a higher prevalence among males than females (Svedin & Pribe, 2007; Svensson et al., 2013; Edwards et al., 2006). There has been reported inconsistent findings regarding the relationship between adolescents selling sex and sociodemographic factors (Fredlund et al., 2013; Pedersen & Hegna, 2003; Svedin & Priebe, 2007). However, a longitudinal study found that low socioeconomic status was associated with selling sexual services among youth in Switzerland (Averdijk et al., 2020). Hence, the present study will examine the prevalence of transactional sex among a representative sample of senior high school students, in addition, to investigate the prevalence regarding gender and socioeconomic status.

Exchanging sexual favours has often been found associated with negative outcomes and health risks, such as physical and sexual abuse, substance abuse and mental health problems (Hegna & Pedersen, 2003; Svedin and Priebe, 2007; Svensson et al., 2013). Hegna & Pedersen (2003) found a strong association between sex sale and drug use, among adolescents in Oslo who had experience with sex sale. Similarly, a study examining adolescents who had exchanged sex for drugs or money in the United States, found that the likelihood of having experience with transactional sex was higher for youths who had used drugs (Edwards et al., 2006). In several studies, transactional sex has been linked to sexual abusive experiences (Kaestle, 2012; Svedin & Priebe, 2007; Svensson et al., 2013; Edwards et al., 2006; Lavoie et al., 2010). Among youth in Sweden, 61% of the girls and 29.7% of the

boys who sold sex, reported that they had experiences with sexual abuse (Svedin & Priebe, 2007). Svensson et al. (2013) reported that the adolescents who had sold sex had been exposed to all forms of sexual abuse to a higher degree than the adolescents who had not sold sex. 51% of the adolescents in the index group had been exposed to some form of penetrative abuse, compared with only 6.4% of the adolescents in the reference group (Svensson et al., 2013). Youth involved in transactional sex have also been found to have a higher likelihood of mental health issues including depression (Edwards et al. 2006; Svedin and Priebe, 2007; Svensson et al., 2013). Drawing on this evidence, I will explore to what extent transactional sex among youth in Oslo is related to sexual abuse, substance abuse and mental health problems, and hence part of a more general “Problem-Behaviour Syndrome”.

1.2 The Norwegian context:

According to the Norwegian Penal Code, it is legal to sell sexual services in Norway. However, under Norwegian law, the purchase of sexual services is a criminal act and has been prohibited since 2009 (Penal Code, 2005, Section 316). Purchasing sex from minors under the age of 18 years, results in an aggravated penalty of a fine or imprisonment for approximately two years. (Penal Code, 2005, Section 309). Whereas purchasing or trading sex with a person under the age of 16 years, is according to the Norwegian Penal Code, sexual assault against a child (Penal Code, 2005, Sections 302, 303, 304). Purchasing sex from minors under the age of 14 years is considered rape of a child under the Norwegian Law (Penal Code, 2005, Sections 299, 300, 301) This means that an individual under the age of 18 selling sex is considered a victim of a crime, even if the youth initiated the contact with the buyer.

1.3 Defining the key concepts:

Transactional sex: Transactional sex is the phenomenon of exchanging sexual favours for goods such as money, gifts, alcohol, drugs, accommodation, travel, experiences, contact with an adult, a sense of belonging or access to different groups and milieus (Hegna & Pedersen, 2002). The phenomenon is often viewed as an informal and experiential trading of sex with low frequency. Previous research frequently emphasized that transactional sex is distinct from sex work and prostitution (Krisch et al., 2019). Transactional sex is employed when prostitution would be misrepresenting, lead to unnecessary stigmatizing and negative associations of the adolescents involved in the activity (McMillan et al., 2018). Youth involved in transactional sex often do not consider themselves to be engaged in prostitution, and they may be involved in the engagement for other than financial reasons (Hegna & Pedersen, 2002; van de Walle et al., 2012; Krisch et al., 2019). Prostitution, on the other hand, can be defined as the practice or occupation of engaging in sexual activity for payment (Hegna & Pedersen, 2002). In comparison to transactional sex, prostitution may be considered a profession or trade, and provide the main source of income for those involved in the activity (Krisch et al., 2019).

Sexual abuse: According to the Nordic Institute of Public Health (2020) sexual abuse consists of forced sexual activities such as rape, touching of the genitals or other forms of sexual assault without informed consent. Child sexual abuse is defined as sexual activity with a child where an adult or older adolescent engage in the activity (Folkehelseinstituttet, 2020).

Substance abuse: This study will apply separate definitions for harder illegal substance abuse and marijuana use. Harder illegal substance abuse will include substances such as cocaine, MDMA, amphetamines and synthetic drugs.

Mental health issues: Mental health issues is specified through the level of self-reported symptoms of depression. This thesis operates under assumption that if the reported level of depressive symptoms is high, the individual has mental health issues.

Socioeconomic status: The present study will utilize a combined measure of socioeconomic status, including three dimensions of the family's resources and social position. These dimensions entail economic resources, cultural resources and parental education level (Bakken et al., 2016).

1.4 The structure of the thesis:

This chapter has introduced the main issue of this master thesis. The next chapter will review existing literature on transactional sex among youth in high-income countries, and the relationship between transactional sex and associated risk factors. Chapter three presents the theoretical framework used to explain the possible relationship between problems and problem behaviours and transactional sex. Chapter four will clarify the research questions and the analytical model of the study. Chapter five outlines the data and methods used in this master thesis. Chapter six will present the results of the statistical analysis. Finally, chapter seven will discuss the results of the study related to the theoretical framework and previous research.

Chapter 2. Literature review

2.1 Introduction:

The following section will serve as a background review, to provide theoretical and empirical context and identify gaps in the literature. First, this chapter will examine previous research about the prevalence of transactional sex among youth, and the context surrounding transactional sex. Last, this chapter will turn the attention to the relationship between transactional sex and socioeconomic status, substance abuse, mental health issues, and sexual abuse.

2.2 Literature search strategies:

The database EBSCOhost (all databases) and ORIA were used to find relevant references. I started the literature search by using the keywords “sex for compensation” “transactional sex” or “prostitution” or “selling sex” AND “adolescents” or “teenagers” or “young adults” or “teen” or “youth”. Initial search strings were conducted including the search words (scandinavia, or norw*, or sweden, or denmark or finland or Iceland or oslo) (sexual assault or rape or sexual violence or sexual abuse) (drug abuse or substance abuse or alcohol). For each study, preliminary relevance was determined by title and the abstract. If the content seemed to involve transactional sex among youth in either Scandinavian, North American or European countries, the study was obtained in full text. The quantitative studies included had cross-sectional and longitudinal research designs, and the data collection methods varied from paper-based questionnaires and other online questionnaires. The qualitative studies used in-depth qualitative interviews as method.

2.3 Criteria for inclusion or exclusion:

For the purpose of this master thesis, the included studies met the following criteria:

First, only studies written in English or Norwegian, available in full text and published after 2000 were included. Second, only relevant studies reporting transactional sex among youth were included. Third, both quantitative and qualitative were included. Fourth, studies about youth selling sex for payment/prostitution were included, because previous research on transactional sex among youth is rather scarce. Finally, studies that focus on transactional sex in low-income countries is of little relevance, since this study is aimed at understanding the phenomena in a Norwegian context. Therefore, only studies conducted in high income countries such as North America, Scandinavia and Europe were included. The aim of this study is to examine transactional sex among a general population sample of youth. Studies about young people from high-risk populations were therefore excluded, for instance youth living on the street.

2.4 Prevalence of transactional sex:

According to the global review by Krisch et al (2019) exploring transactional sex among the general population of youth, transactional sex among youth in high income countries is rather uncommon. The prevalence rate between 1,0 % and 1,5 % was reported among the Nordic countries (Krisch et al, 2019). In high income countries the highest prevalence was reported in Germany (7%), followed by Canada (4%) and the United States (3,5%) (Krisch et al, 2019).

A previous study based on the survey Young in Oslo 1996, analysed the prevalence of selling sex for payment by asking the respondents "Have you, in the course of the recent 12 months, given sexual favours for payment?" (Hegna & Pedersen, 2003). They found that 1,4 % of the adolescents in Oslo had sex sale experiences, respectively 2,1 % boys and 0,6 % girls (Hegna & Pedersen, 2003). A study among senior high school students in Sweden, reported that selling sex were not very common (Svedin & Pribe, 2007). Of the participating adolescents, 1,4 % answered that they had sold sex for payment or other reimbursements, 1,8% were boys and 1,0% were girls (Svedin & Pribe, 2007). A more recent study based on a national survey of third year high school students from Sweden, report that 0,9 % of the

participants stated that they had sold sex for compensation (Fredlund et. al, 2018). Svensson et. al (2013) reported that 1,5% of the high school students participating in the study had sold sex, 1.7% were boys and 1.2% were girls.

A previous study by Edwards et al. (2006), examining the prevalence and correlates of exchanging sex for drug or money among a nationally representative sample of adolescents in the United States, indicate that 3,5% of the participants have exchanged sex for drugs or money. The majority of these youths were boys (Edwards et al., 2006). Head et al. (2021) found that 7,4% of high school students in Washington D.C. had engaged in exchange sex. The prevalence was higher among male, compared with female students (Head et al., 2021). According to Lavoie et. al (2010), the prevalence rate among Canadian high school student who reported having sold sexual services were 4%, more girls (6%) than boys (2%).

2.5 Contexts surrounding transactional sex:

Exchanging sexual favours for compensation happens in different contexts, often in some sort of grey area between infatuation, exploration on one's sexuality, exploration of boundaries, pressure, survival, prostitution, and as a way of dealing with a difficult situation (Bjørndahl, 2017). Fredlund et al. (2018) reported that three groups of adolescents can be distinguished with regard to the most common underlying motives for selling sex. Respectively, adolescents selling sex for pleasure and fun, adolescents selling sex for money, drugs or other compensations, and adolescents selling sex for emotional reasons.

According to Svedin and Priebe (2007) the most common way in which sellers and buyers initiate contact were through friends. This was also the case in a Canadian study, where for the most part transactional sex happened between friends or an acquaintance (Lavoie et al. 2010). Fredlund et al. (2013) stated that the most common way of contact with the buyer was through the Internet or friends, in a bar, restaurant, or discotheque. The majority of youths reported receiving money as the most common type of compensation (Svedin and Priebe 2007; Fredlund et al. 2013). More girls than boys reported having

received clothes or other items as compensation (Svedin and Priebe 2007). According to Fredlund et al. (2013) sexual favours were frequently exchanged for alcohol, cigarettes and drugs.

Previous research indicates that the first experience of selling and trading sexual favours often occur at a young age (Holmström, 2019). In a Swedish study the age of the first-time exchanging sex was between 14 and 18 years of age (Svedin & Priebe, 2007). Similarly, in a Canadian study 63% of those involved in transactional sex were aged 13 to 15 years (Lavoie et al. 2010). According to Fredlund et al. (2013), the overall mean age for onset of selling sex was 15.4 years. In the study by Svedin & Priebe (2007), only one third of the adolescents who had sold sex had done this more than five times. Similarly, Fredlund et al. (2013) found that for males it was most common to have sold sex two to five times (52%), and for female adolescents the modal number of occurrences was one time (61.9%).

Several studies suggest that there is no link between socioeconomic background and selling sex (Svedin & Priebe 2007; Pedersen & Hegna 2003; Fredlund et al. 2013). For example, Pedersen & Hegna (2003) found no association between selling sex and parental social class, adolescents with unemployed parents or parents receiving social security. Fredlund et al (2013) found no significant differences in regard to sociodemographic variables, concerning parent's education and economic situation. Contrastingly, a longitudinal study by Averdijk et al. (2020), examining predictors of selling sexual services among a nationally representative sample of youth in Switzerland, found that low socioeconomic status was associated with selling sexual services (Averdijk et al., 2020). Further, Fredlund et al. (2013) found that it was less common to live with both parents and to have parents working, among the adolescents who had sold sex compared to other adolescents.

2.6 Transactional sex and substance abuse:

Hegna & Pedersen (2003) found an association between sex sale and drug use among adolescents in Oslo who had experiences with sex sale. There was a strong association between the use of heroin and sex sale among boys, almost four in ten of those who had sold sex more than five times, had also used heroin (Hegna & Pedersen, 2003). Hegna & Pedersen (2003) found a strong association with use of MDMA in girls involved in sex sale. A study investigating sex work among students in Berlin, reported that substance use was significantly higher in the group of students who had experiences with sex sale compared to other students (Betzer et al., 2015) There were no association between sex sale and alcohol consumption (Betzer et al., 2015). This was the opposite of the finding by Svedin and Priebe (2007) and Hegna & Pedersen (2003), who found correlations between adolescents who sold sex and a higher frequency of alcohol consumption.

Compared to youths who have never exchanged sex, Edwards et al. (2006) found a larger proportion of youths who have exchanged sex had used drugs in their lifetime and in the past 30 days. For example, 10.6% of those who have exchanged sex reported using cocaine in the past 30 days, compared to 1.0% of those who have never exchanged sex (Edwards et al., 2006). Similarly, Head et al. (2021) found that students who used illicit drugs and synthetic marijuana were more likely to ever have engaged in exchange sex.

2.7 Transactional sex and mental health issues:

Youth involved in transactional sex display an elevated risk of mental health issues and depression (Edwards et al. 2006; Svedin and Priebe 2007; Svensson et al., 2013). Adolescents selling sex have more emotional problems than their peers in the reference group. Girls selling sex perceived their mental health during the preceding week as having been worse than the girls in the reference group (Svedin and Priebe 2007). Svensson et al. (2013) state that the perceived mental health was significantly poorer among the adolescents who had sold sex compared to youth who had not. In a Swedish study, more than half of the female youth who had sold sex reported that they felt that 'everything was a

struggle,' had troubles sleeping, and felt unhappy, miserable, depressed, tied up, or tense (Svedin and Priebe 2007). Similarly, 22% of male and female youth involved in transactional sex in the United States reported that they felt depressed, compared to 11% of youth who did not sell sex (Edwards et al. 2006). Averdijk et al. (2020) found that anxiety and depression were associated with selling sexual services, among youth in Switzerland.

2.8 Transactional sex and sexual abuse:

Among youth in Sweden, 62% of the participants who sold sex reported that they had experienced sexual abuse before they started selling sex (Svedin & Priebe, 2007). Similarly, the study by Svensson et al. (2013) found that the adolescents who had sold sex had been exposed to all forms of sexual abuse to a higher degree than the adolescents who had not sold sex. 51% of the adolescents in the index group had been exposed to some form of penetrative abuse compared with only 6.4% of the adolescents in the reference group (Svensson et al., 2013). The most common forms of sexual abuse to which the adolescents had been exposed, were that somebody had touched their genitals in an indecent way or tried to undress them to have sex with them, forced vaginal intercourse, or that somebody had exposed him/herself indecently towards them (Svensson et al., 2013).

Kaestle (2012) analyzed data from a longitudinal nationally representative sample of youths in the United States and reported that experiences with child sexual abuse were a significant predictor for selling sex among youths. The respondent's history of sexual abuse was still a significant predictor when controlling for demographics factors and risk factors in the multiple logistic regression analysis (Kaestle, 2012). According to Averdijk et al. (2020), female youths had higher likelihood of selling sexual services at high levels of victimization. Lavoie et al. (2010) found that a history of sexual abuse was related to selling sex in adolescence. The presence of sexual abuse was associated with a three times greater risk for selling sex (Lavoie et al., 2010). According to Edwards et al. (2006) 16.8% of girls who had exchanged sex, had been physically forced to have sex.

Chapter 3. Theoretical framework

3.1 Introduction:

The following section will provide a theoretical underpinning with the purpose to understand transactional sex and the associated problems and problem behaviours. First the developmental psychopathology approach will present a life course perspective on the processes underlying individual pathways to dysfunctional behaviour. Second, two conceptual models, the traumagenic dynamics model and the general strain theory will be presented. These conceptual models are deemed to understand the possible association between sexual abuse, substance abuse, mental health issues and transactional sex. Finally, the theoretical perspective resilience will provide a basis to understand to possible impact of socioeconomic status on transactional sex.

3.2 Developmental psychopathology:

According to the World Health Organization (2021), adolescence is the phase of life between childhood and adulthood, from the ages 10–19 years. During this phase adolescents experience rapid developmental changes. These changes involve physical, biological, cognitive and psychosocial growth, which affects how adolescents make decisions and interact with the world around them (World Health Organization, 2021). Biological changes drive many aspects of growth and development during adolescents, including the onset of puberty. Puberty marks the transition from childhood to adulthood; secondary sexual characteristics appear, fertility is achieved, and profound psychological changes take place (Blakemore et al., 2010).

Brain development during adolescents is associated with severe cognitive and emotional changes (Konrad et al., 2013). However, the part of the brain that serves cognitive functions such as behaviour control, planning and risk assessment, continues to develop throughout adolescence and does not fully mature until early adulthood. Consequently,

reward and emotions will more likely drive adolescent's behaviour, in comparison to rational decision-making (Konrad et al., 2013). Therefore, adolescents are more likely to engage in risky behaviours, as the behaviour often are based on other aspects than risk assessment and planning (Konrad, 2013). Risky behaviours among adolescents can hence be viewed as a biological immaturity lacking reflection, reasoning and planning, in addition to a search for independence and sensation seeking (Konrad, 2013).

Developmental psychopathology is the study of the development of psychological disorder within a life course perspective. The approach argues that it is critical to adopt a developmental perspective in order to understand the processes underlying individual pathways to dysfunctional behaviour (Rutter & Sroufe, 1984). A developmental psychopathology perspective highlights the role of both psychological and biological development when examining dysfunctional behaviours (Rutter & Sroufe, 1984).

The developmental psychopathology approach argues that sexual abuse affects youths' development related to affect regulation, coping and impulse control (Rutter & Sroufe, 1984). When sexual abuse takes place in childhood and adolescence, it is thought that an immature cognitive function lacking reflection, reasoning and planning, may contribute to impulsivity in response to difficult emotions (Rutter & Sroufe, 1984). Consequently, behaviors that are labelled as 'risky' could be utilized as a means to cope with the emotional impact from the abusive experience. Hence, the developmental psychopathology approach provides an explanation for how dysfunctional behaviours such as transactional sex may emerge from sexual abuse.

3.3 The traumagenic dynamics model:

The traumagenic dynamics framework, developed by Finkelhor & Browne (1985), is a seminal theory used to explain the negative impacts of child sexual abuse. The theory proposes that four trauma causing factors, termed traumagenic dynamics, emerge from child sexual abuse. These factors include traumatic sexualization, betrayal, stigmatization and powerlessness, and it is thought that these dynamics distort the child's self-concept,

world view and affective capacities (Finkelhor & Browne,1985). The child's attempt to cope with the world through these distortions may result in behavioral problems such as sexual risk behaviours (Finkelhor & Browne,1985).

One dynamic, traumatic sexualization, refers to the process in which the child's sexuality is shaped in a dysfunctional and developmentally inappropriate manner as a result of sexual abuse (Finkelhor & Browne,1985). This may occur when a child is rewarded for sexual behaviour, and the child learns to use sexual behaviour as a strategy to satisfy developmental needs such as affection, attention and privileges. Children who have been traumatically sexualized can develop confusions and misconceptions about their sexual self-concepts and lead them to use sexual behaviours as a means later in life (Finkelhor & Browne,1985). Those who experiences traumatic sexualization in childhood may believe sex is necessary to obtain affection from others later in adolescents and adulthood.

The second dynamic, betrayal, refers to the processes where the child discovers that someone they trusted and were dependent on has caused them harm. Betrayal can be caused the abuser, or others who failed to recognize and stop the abuse (Finkelhor & Browne,1985). Betrayal and loss of trust may lead to depression, anger, anxiety and increased vulnerability to later sexual revictimization (Finkelhor & Browne,1985).

The dynamics of stigmatization, refers to the processes where the child may experience shame and guilt after the abuse, and thus incorporates a negative self-perception (Finkelhor & Browne,1985). These feelings may occur when directly communicated to the victim from the abuser, or when the victim perceive negative attitudes about the abuse from other individuals. Consequently, the victim may believe that they are different and assume that others will reject them because of the abuse. This is thought to be linked to coping impairment and low self-worth, and contribute to self-injurious behaviour, depression and identification with other stigmatized behaviours such as drug abuse and prostitution (Finkelhor & Browne,1985).

A fourth dynamic, powerlessness, refers to the process in which the child's will, desires and sense of worth are continually contravened (Finkelhor & Browne, 1985). This may occur when the child's body and territory are repeatedly invaded against his/hers will. A situation where the child feels fear or is unable to make other adults understand or believe the abuse, will increase the degree of powerlessness (Finkelhor & Browne, 1985). Consequently, the child may learn that his or her needs or requests are ignored by others; the child thus fails to develop self-efficacy to stop unwanted sexual advances. Feelings of powerlessness may cultivate fear, anxiety and ineffective coping skills within the victim (Finkelhor & Browne, 1985). Powerlessness could contribute to explain findings linking sexual abuse and adult sexual risk behavior (Senn et al., 2012). Feelings of powerlessness has also been shown to predict psychological distress and symptoms of depression.

There is evidence that the traumagenic dynamics is associated with sexual risk behaviors. According to Senn et al. (2012) all four traumagenic dynamics may influence later engagement in sexual risk behaviors. Traumatic sexualization may contribute to alterations in norms related to sexual behavior, and feelings of stigmatization, betrayal and powerlessness may cause negative outcomes related to mental health, relations and sexuality, and thus consequently lead to engagement in risky sexual behavior (Senn et. al, 2012).

3.4 General strain theory:

The General Strain Theory has been proposed to explain how negative experiences tend to generate negative emotions, and in turn, create pressure for corrective action (Agnew, 1992). Agnew's (1992) general strain theory argues that various types of negative events (strains), may lead to negative emotions that require some type of coping mechanism. The coping mechanisms are more likely to be negative and dysfunctional such as substance abuse, when the strains are views as unjust, associated with low control and linked with negative emotions such as depression, anger or fear (Agnew, 1992). According to Agnew (1992) these coping mechanisms present an attempt by the adolescent to terminate,

reduce or escape the pain and the negative emotions caused by the strains. Although the general strain theory is originally a model of delinquency and crime, explaining additional harmful outcomes such as victimization, is not beyond the scope of the theory (Reid, 2011).

Agnew (1992) predicts that experiences with strains could lead to negative emotions, such as depression and anxiety. Sexual abuse is considered a potentially severe traumatic experience and associated with low control for the victim, thus be particularly consequential for emotional states and behavior (Watts & McNulty, 2013). According to this model transactional sex and substance abuse may be viewed as an affect regulation strategy, with the attempt to alleviate difficult emotions. The theory has been applied by Reid (2011) to describe how neglect and abuse in childhood may shape individual vulnerability to commercial sexual exploitation in adolescents.

3.5 Resilience:

Resilience refers to the dynamic process of overcoming and adapting well in the face of adversity or significant sources of stress (Rutter, 1987). The conceptual framework was developed in order to understand why some individuals cope well facing adversities, while other individuals struggle and develop psychosomatic symptoms. Rutter (1987) emphasized the importance of conceptualizing resilience as an ongoing process and not a static individual trait, for the reason that resiliency varies over the lifespan modified by contextual, social and individual factors.

Resilience theorists utilize the term “protective factors” and “risk factors” (Rutter, 1987). Protective factors may be described as personal traits and environmental influences that serve to protect the individuals from harmful psychological effects. It’s a combination of positive contextual, social and individual factors, that assist with overcoming adversities and contribute to an individual ability to “bounce back” from potential traumatic experiences. Protective factors have an important role in enabling resilience to develop, and include domains such as relationships with safe adults, positive family relationship, self-esteem, as well as connection to school and service providers (Rutter, 1987).

Risk factors operate in opposition to protective factors, and refers to personal traits and environmental influences that are associated with a higher probability of a psychopathology and bad outcomes (Masten, 2001). When risk factors co-occur, it has additionally increased risk for adverse consequences for the individual. Masten (2001) reported that previous studies of resilience have operationally defined risk factors in diverse ways. Risk factors such as low socioeconomic status or exposure to violence or maltreatment, are well-established as statistical predictors of subsequent developmental problems (Masten, 2001). Sexual abuse would be considered to be a risk factor for harmful psychological effects.

A previous study investigated resilience in sexually abused adolescents found that characteristics related to socioeconomic status were significantly linked to resilience (Williams & Nelson-Gardell, 2012). For instance, individuals who reported lower levels of socioeconomic status and had a prior history of abuse, had a higher level of general behavioral problems (Williams & Nelson-Gardell, 2012). Reid (2014) investigated risk and resiliency factors associated with adolescent and adult onset of prostitution. According to Reid (2014) substance abuse was a risk factor for selling sex in adolescent, and in regard to protective factors education was the most important.

Chapter 4. Addressing the research questions

4.1 Introduction

This chapter will first provide a description of the research questions in this study. Finally, an analytical model on the hypothesized relationship between transactional sex, sexual abuse, mental health issues, substance abuse and demographic factors will be presented.

4.2 Research questions:

Considering that adolescents involved in transactional sex is a particularly vulnerable group, and the limited knowledge available about this phenomenon in Norwegian context, the current study aims to investigate the prevalence of transactional sex among youth (16 – 19 years old) living in Oslo. The study will explore the possible relationships between involvement in transactional sex and experiences with sexual abuse, mental health issues and substance abuse. Additionally, this study will investigate if the possible relationship between involvement transactional sex and experiences with sexual abuse, mental health issues and substance abuse vary with gender and socioeconomic status. Understanding transactional sex and associated risk factors may give important information and guide practitioners to develop effective intervention programs and preventive measures for vulnerable youths. The following research questions will be investigated in this study:

- *How prevalent is the involvement in transactional sex among adolescents in Oslo, and does the prevalence vary with gender and socioeconomic status?*
- *To what extent is involvement in transactional sex related to experiences with sexual abuse, substance abuse and mental health problems, and hence part of a more general “Problem-Behaviour Syndrome”?*
- *Does the association between involvement in transactional sex and related problems and problem behaviours, vary depending on the family’s socioeconomic status and gender?*

4.3 Analytical model:

Figure 1: Analytical model.

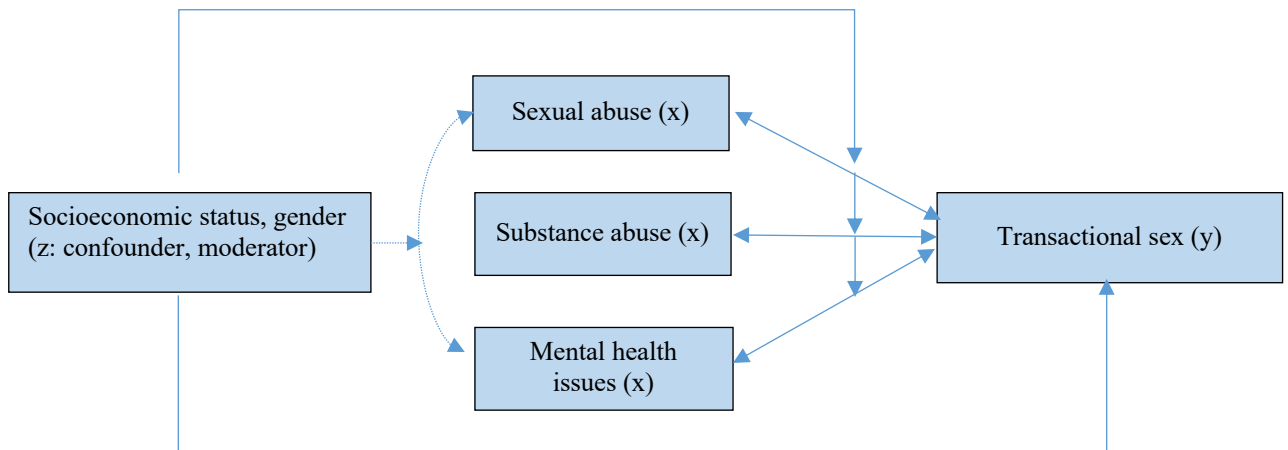


Figure 1. illustrates the analytical model guiding the investigation of the possible association between involvement in transactional sex, and experiences with sexual abuse, substance abuse and mental health issues, and if socioeconomic status and gender may moderate this association. The possible association between involvement in transactional sex and experiences with sexual abuse, substance abuse and mental health issues, may be confounded by socioeconomic status and gender. Having a low socioeconomic status might affect the association between having experiences with sexual abuse, substance abuse and mental health issues, and engaging in transactional sex. Similarly, the association between other problem conditions and behaviors might play out differently among male and female adolescents. An interaction analysis with socioeconomic status and the running of separate multivariate models for male and female will address these possibilities.

Chapter 5. Data and Method

5.1 Introduction:

The first section of the method chapter will present the data material, the specifics of the questionnaire and data collection. Further, the operationalization of the variables included in the study will be presented. Next follows a presentation of the statistical analysis employed in this study. Last, the quality of the study will be evaluated in regard to validity and reliability, as well as ethical considerations.

5.1 Data sample:

The current study used data material from the cross-sectional survey *Young in Oslo 2018*, conducted by the Norwegian Social Research (NOVA) in collaboration with the Regional Competence Centre for alcohol and substance abuse (KoRus). The survey is a large-scale questionnaire designed to investigate the health, welfare and general living conditions of adolescents living in Oslo. The *Young in Oslo* survey is administered by the national data collection scheme Ungdata, and is based on the general Ungdata questionnaire, including themes such as parents and friends, school and future, free time, health and wellbeing, drugs and tobacco, risky and violent behavior (Bakken, 2018). Norwegian Directorate of Health, Ministry of Children, Equality and Social Inclusion, Ministry of Justice and Public Security and Ministry of Education and Research has financially supported the development of Ungdata.

The data collection was conducted in the period from January to March 2018. All high schools in Oslo were invited to participate in the survey, and in total 56 junior high schools and 28 senior high schools in Oslo participated (Bakken, 2018). The survey was conducted electronically during school hours, and the students answered the questionnaire at the same time (Bakken, 2018).

The data sample in the present study consisted of senior high school students (grades 11th, 12th, 13th, age range 16-19 years), because the question concerning involvement in transactional sex only was posed to senior high school students. Altogether a total of 10 825 senior high school students participated, and yields a response rate of 65% (Bakken, 2018). The analytical sample in this study only includes the participants who responded to all the variables included in the study. This entails an analytical sample of N = 8914. The sample seems to be representative of the general population of adolescents in Oslo, however adolescents not found in the school system presumably is likely to have overall higher rates of transactional sex than that found in the current sample. This may result in a conservative estimate of the phenomenon found in this study.

5.3 Operationalization of variables:

5.3.1 The outcome variable - exchanging sexual favors for goods:

For the purpose of this study the outcome variable ever having exchanged sexual favors for goods was assessed with the question, "Have you in the past 12 months exchanged sexual favors for goods (money, clothes, makeup, alcohol, drugs, a place to stay, food, travel, other things or gifts)?" Response options were "no", "yes, 1 time", "yes, 2-5 times", "yes, 6 times or more". Since this is a marginal phenomenon, the variable was recorded dichotomously "yes, 1 or more times" or "no, never". The respondents who answered "yes" to exchange sex, were given the question "How old were you the first time you exchanged sexual favors for goods?". The response option was "13 years or younger", "14 years", "15 years", "16 years", "17 years", "18 years", "19 years or older" and "have never done it". The participants who answered "have never done it" (69 respondents) were removed from the group who had exchanged sex, as this suggested they have not been involved in exchanging sex despite their initial affirmative answer.

5.3.2 Independent variables measuring demographic factors:

Socioeconomic status was measured using three measures of family resources (Bakken et al., 2016). First, economic resources were measured using four items from the Family Affluence Scale (FAS II) (Currie et al. 2008): (1) Does your family have a car? (2) Do you have your own bedroom? (3) How many times have you travelled somewhere on holiday with your family over the past year? and (4) How many computers does your family have? An average FAS score across items was constructed (range 0–3). Second, cultural resources were measured by asking the participants “How many books do you think your family have?”. The measure was recoded into a six-scaled variable ranged 0 – 3, were for example 0 = no books and 3 = more than 1000 books. Third, parental education was measured by mothers’ and fathers’ education level and asking the respondents about the number of parents who have higher education. The scale was recoded from 0 – 3 (0 = none, 1,5 = yes, one of them, 3 = yes, both). An average mean score was constructed based on FAS, number of books at home and parental education (Bakken et al., 2016). The socioeconomic measure was recoded into a three-scale variable (0 = low, 1 = middle, 2 = high). Other sociodemographic characteristics included gender (female/male) and class level (11th, 12th, 13th).

5.3.3 Independent variables measuring problem indicators:

Sexual abuse was measured by the question “Have you during the past 12 months been forced to have sex or other sexual activities against your will?”. Because this is a marginal phenomenon, the answers were recoded dichotomously “yes, 1 time or more” or “never”.

Harder illegal substance abuse was measured by the four questions: “How many times have you done any of the following things over the past year? (1) used amphetamine. (2) used cocaine. (3) used MDMA, (4) used synthetic drugs”. The summary variable was recoded dichotomously, (0) never or (1) 1 time or more. To assess *marijuana use*, the participants were asked “How many times have you done any of the following things over the past year, used marijuana?”. The variables were recoded dichotomously (0 = never, 1 = 1 time or more).

Depressive symptoms were measured using six items from the SCL-90 depressive scale (Derogatis et al., 1974). The six questions included problems and worries experienced during the preceding week (felt that everything was a struggle, had any trouble sleeping, felt unhappy, miserable or depressed, felt helplessness towards the future, felt tied up or tense, and worried too much about things). Each question was scored 1–4 (1 = not been affected at all, 2 = not been affected much, 3 = been affected quite a lot, 4 = been affected a great deal). An average depression scale of the six items was constructed (response scale from 1–4). The respondents needed to have answered at least three of the questions to be included in the average depression measure. The internal consistency, assessed using Cronbach`s alpha, was 0,88. The depression scale was recoded as (0) not affected/ not affected much, (1) affected quite a lot and (2) affected a great deal.

5.5 Statistical Analysis:

The current study employed frequency analysis, cross-tabulation analysis, bivariate and multivariate regression analysis to investigate the research questions. In addition to the total analytical sample, the results were presented separately for male and female respondents, in order to identify any gender specific relationships. The results were reported with a significance level set at $<0,05$ (P). Statistical analysis was carried out using SPSS version 2. The association between grade level (proxy for age) and transactional sex was not significant, and therefore not included in the analysis

The strategy for analysis was first to present descriptive statistics of the variables included in the study. Further, a cross-tabulation analysis of the outcome variable *exchange sex* by gender, socioeconomic status, symptoms of depression, drug and marijuana use, and exposure to sexual abuse was presented, to establish relationships between transactional sex and the independent variables. A chi-square test was employed to assess whether the relationship between the variables was significant.

This was followed up by multivariate analysis. Logistical regression is traditionally

used with a binary dependent variable. However, Hellevik (2009) argues that a linear analysis of dichotomous dependent variables is acceptable, and in many situations this approach is preferred due to an interpretation that is meaningful, intuitive and easy to comprehend. In social science where the phenomenon under study often is of great concern for the public, a linear regression can make it easier to communicate the research results (Hellevik, 2009). Considering these arguments, this study applied a bivariate and multivariate linear regression to assess the association between transactional sex and experiences with sexual abuse, substance abuse and mental health issues. Based on the associations in the bivariate analysis, a set multiple linear regression models were developed. In a stepwise multiple regression analysis, variables that were assumed to affect the association between transactional sex and other problem indicators were included. In model 1 the variables sexual abuse, substance abuse and symptoms of depression were included. Further the possible confounding variables socioeconomic status and gender were included in model 2. The interaction effect between low socioeconomic and sexual abuse, substance abuse and depression on transactional sex, were investigated in model 4. The bivariate regression and the full multivariate model (model 4) were then run separately for male and female respondents in order to identify any gender specific relationships between transactional sex and the independent variables.

Last, an analysis was carried out to investigate the prevalence of risk factors among respondents who report to exchanged sexual favours. The individuals in this groups were divided into four subgroups according to gender and socioeconomic status in an effort to establish if any of these subgroups exhibit a particular high coexistence with other problems and problem behaviours.

5.6 Study quality:

The data material from Young in Oslo 2018 has been assessed by the Norwegian Social Research (NOVA), and was regarded as high quality, mainly because of the high response rate and the large sample size (Bakken, 2018). To evaluate the quality of the study,

including data material, the measures used, and the analysis employed in the current study, the concepts validity and reliability are considered (Bryman, 2016).

5.6.2 Reliability:

Reliability is concerned with issues of the consistency of measures (Bryman, 2016).

Internal reliability applies to multi-item measures, which may raise the possibility that the indicators lack coherence. Cronbach's alpha is a commonly used test of internal consistency between items within a composite measure. An alpha level above 0,8 implies an acceptable level of internal reliability (Bryman, 2016). This study conducted a Cronbach's alpha test for the measure of *depressive symptoms*, which comprised six items. The measure had an alpha level of 0,88, and therefore an acceptable level of internal reliability.

5.6.1 Validity:

Validity refers to the extent to which a study measures what it is intended to measure (Bryman, 2016). Internal validity refers to issues related to causality (Bryman, 2016). The cross-sectional design in the current thesis cannot provide information about the causal relationship of the variables. This study could only provide information about the associations and characteristics among youth involved in transactional sex, not the causal relationships. External validity, on the other hand, refers to the representativeness of the data sample, and whether the results can be generalized to the rest of the population. The relatively high response rate and large sample size in the present study, should contribute to a representative sample of Oslo's senior high school students (Bakken, 2018). Therefore, in this case, the external validity appears to be high.

Measurement validity is concerned with the question of whether a measure of a concept really captures the concept in question (Bryman, 2016). There are no standardized instruments for transactional sex, which may raise concerns in regard to measurement validity. To evaluate the measurement validity of the variable *transactional sex*, I have compared the operational definition to the theoretical definition. The measure transactional sex appears to accurately capture the phenomena of interest, as the measurement item

includes both material goods, money and other reimbursements in the exchange for sexual favors.

Another issue related to validity is concerned with response bias. In self-report surveys, social desirability bias may be a limitation to some extent. Socially desirable responding can be viewed as a response style or bias that displays the tendency to appear more socially favourable in respect to cultural norms, either to themselves or to others (Netemeyer et al., 2003). This might lead to either exaggerated or understated responses with respect to social norms. I will return to issues related to validity in Chapter 7, as the results of the statistical analysis will contribute to a more comprehensive discussion of these matters.

5.7 Ethical considerations:

The Young in Oslo survey was conducted in accordance with the Norwegian Centre of Research Data (NSD). NOVA was granted approval to implement the survey, and among the requirements is safe storage of data (Bakken, 2018). All students gave their assent to participate. Parents were informed about the survey in advance, and parents of adolescents under the age of 18 were given the possibility to refuse participation. The students received information about the purpose of the survey, that it was voluntary to participate and that it was possible to skip questions they did not want to answer and the possibility to end the questionnaire at any time.

Since the survey entails answering questions of sensitive nature, the students were given contact information for health workers at school in advance of the survey (Bakken, 2018). The survey included indirect personal questions, for example question about parents' immigration background and occupation, that might make it possible to identify participants by combining responses. However, in most cases it will not be possible to identify the participants.

Chapter 6. Results

6.1 Introduction:

The following section will first present the descriptive statistics of the variables in the study. Further, the prevalence of transactional sex and associations between transactional sex and gender, socioeconomic status, depressive symptoms, substance abuse and sexual abuse will be investigated. Further, multivariate regression analysis among male and female respondents will be presented. Finally, a model illustrating characteristics of respondents who report to exchanged sexual favours is displayed.

6.2 Characteristics of the analytical sample:

Table 1. Descriptive statistics of the variables in the analysis, by gender (percentage).

| | Total | | Male | Female |
|-------------------------------|------------|-----------------|------------|------------|
| | (n=8914) | | (n=4060) | (n=4854) |
| | % | Absolute number | % | % |
| Sex exchange* | | | | |
| Never | 96,6 | 8613 | 96,2 | 97 |
| 1 time or more | 3,4 | 301 | 3,8 | 3 |
| Gender | | | | |
| Boy | 45.5 | 4060 | 100 | - |
| Girl | 54.5 | 4854 | - | 100 |
| Socioeconomic status* | | | | |
| High | 36.3 | 3236 | 35.5 | 37 |
| Middle | 33.1 | 2949 | 34.5 | 31.9 |
| Low | 30.6 | 2729 | 30 | 31.1 |
| Depressive symptoms*** | | | | |
| Not affected | 51 | 4550 | 64.8 | 39.6 |
| Affected quite a lot | 25.6 | 2284 | 21.4 | 29.2 |
| Affected a great deal | 23.3 | 2080 | 13.9 | 31.2 |
| Hard drug use*** | | | | |
| Never | 93.7 | 8356 | 90.7 | 96.3 |
| 1 time or more | 6.3 | 558 | 9.3 | 3.7 |
| Marijuana use*** | | | | |
| Never | 75 | 6683 | 67.8 | 81 |
| 1 time or more | 25 | 2231 | 32.2 | 19 |
| Sexual abuse*** | | | | |
| Never | 94.2 | 8401 | 97 | 92 |
| 1 time or more | 5.8 | 513 | 3 | 8 |
| Total | 100 | 8914 | 100 | 100 |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ (refers to gender differences)

Descriptive statistics of the variables included in the analysis are presented in table 1.

The analytical sample consists of 54,5% female and 45,5% male respondents. Table 1 shows that of the 8914 participants in the analytical sample, 3,4% (301 individuals) reported having exchanged sexual favors for goods in the past 12 months. There was a modest but statistically significant gender difference in regard to exchanging sex for goods, respectively 3,8% boys and 3% girls. Further table 1 shows that 6,3% of the adolescents in the sample reported having used hard illegal drugs 1 time or more. Respectively, 9,3% male and 3,7% female. 25% of the adolescents in sample reported using marijuana 1 time or more during the past 12 months, respectively 32,2% male and 19% female. With regard to sexual abuse, 5,8% of the adolescents reported experiences with sexual abuse during the past 12 months. 8% of the female participants reported experience with sexual abuse, compared to 3% male participants. More female participants reported being affected a great deal by depressive symptoms (31,2%), compared to male participants (13,9%).

6.3 The prevalence of transactional sex by characteristics and problem behaviours:

Table 2. Cross-tabulation. Exchanged sex by individual characteristics and risk factors (percentage).

| | Exchanged sexual favors | | |
|---------------------------------|-------------------------|--------------------|----------------------|
| | Total (n=8914) % | Male (n=4060) % | Female (n=4854) % |
| All | 3,4 | 3,8 | 3 |
| Socioeconomic status *** | | | |
| High | 2.6 | 2.9 | 2.3 |
| Middle | 3.2 | 3.5 | 2.8 |
| Low | 4.6 | 5.3 | 4.0 |
| Gender* | | | |
| Boy | 3.8 | - | - |
| Girl | 3.0 | - | - |
| Depressive symptoms*** | | | |
| Not affected | 2.1 | 2.7 | 1.3 |
| Affected quite a lot | 4.0 | 5.3 | 3.2 |
| Affected a great deal | 5.5 | 7.1 | 4.9 |
| Hard drug use*** | | | |
| Never | 2.3 | 2.4 | 2.3 |
| 1 time or more | 19 | 17.7 | 21.8 |
| Marijuana use*** | | | |
| Never | 1.8 | 2.2 | 1.6 |
| 1 time or more | 8.1 | 7.3 | 9.1 |
| Sexual abuse*** | | | |
| Never | 2.4 | 3.0 | 1.9 |
| 1 time or more | 19.1 | 30.9 | 15.4 |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ (refers to differences between groups among the total sample)

Table 2 presents a cross-tabulation analysis of male and female adolescents who have exchanged sexual favors, by individual characteristics and risk factors. More adolescents with a low socioeconomic status were involved in transactional sex (4,6%), compared to those with high socioeconomic status (2,6%). 5,3% of the male adolescents with low socioeconomic status had exchanged sex, compared to 4% of the female adolescents.

Having been affected by depressive symptoms is associated with involvement in transactional sex. 5,5 % of the adolescents who reported that they had been affected a great deal by depressive symptoms had exchanged sexual favors. While only 2,2% of those who had not been affected by depressive symptoms reported to have exchanged sex. 7,1% of the male adolescents who reported a great deal of depressive symptoms had exchanged sex. While 4,9% of the female adolescents who had been affected a great deal by depressive symptoms reported involvement in transactional sex.

Further table 2 shows that 19% of the adolescents who reported using harder illegal drugs 1 time or more during the past 12 months had engaged in transactional sex. Whereas 2,3% who reported no experience with hard drug used had exchanged sex. 8,1% of the adolescents who reported marijuana use 1 time or more had engaged in exchange sex. 1,8% of those who never had used marijuana were involved in transactional sex.

Table 2 shows a strong association between being exposed to sexual abuse and involvement in transactional sex. 19,1% of the adolescents who had been exposed to sexual abuse 1 time or more were involved in transactional sex, compared to only 2,4 % among those who never had been exposed to sexual abuse. Among male adolescents, 31% of those who had been exposed to sexual abuse were involved in transactional sex. While among female adolescents, 15,4% of those who had been exposed to sexual abuse 1 time or more were involved in transactional sex.

Figure 2. Frequency analysis. Age first time exchanging sexual favors, by gender (percentage).

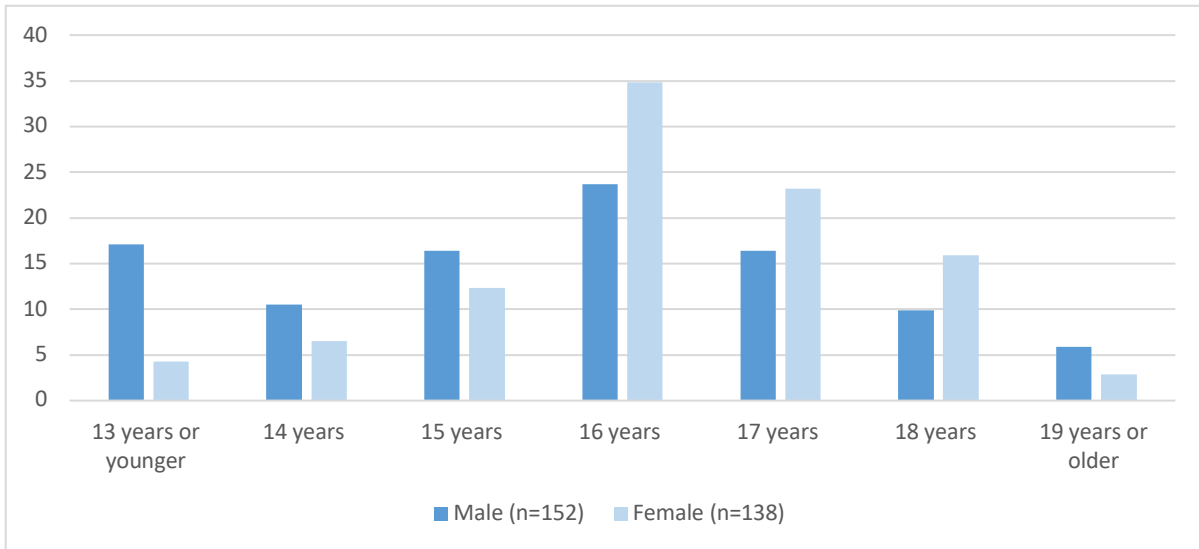


Figure 2 shows distribution of age at the first experience of exchanging sexual favours for goods, among male and female respondents who have reported to have been engaging in transactional sex. The graph indicates that the most common age of onset into transactional sex was 16 years among both males and females. The graph also shows that more boys exchanges sex for the first time at 13 years or younger (17,1%), compared to girls (4,3%). The overall prevalence of transactional sex is lower in figure 2, because not all of the adolescents involved in transactional sex responded to this question.

Figure 3. Frequency analysis. Number of times exchanging sexual favors, by gender (percentage).

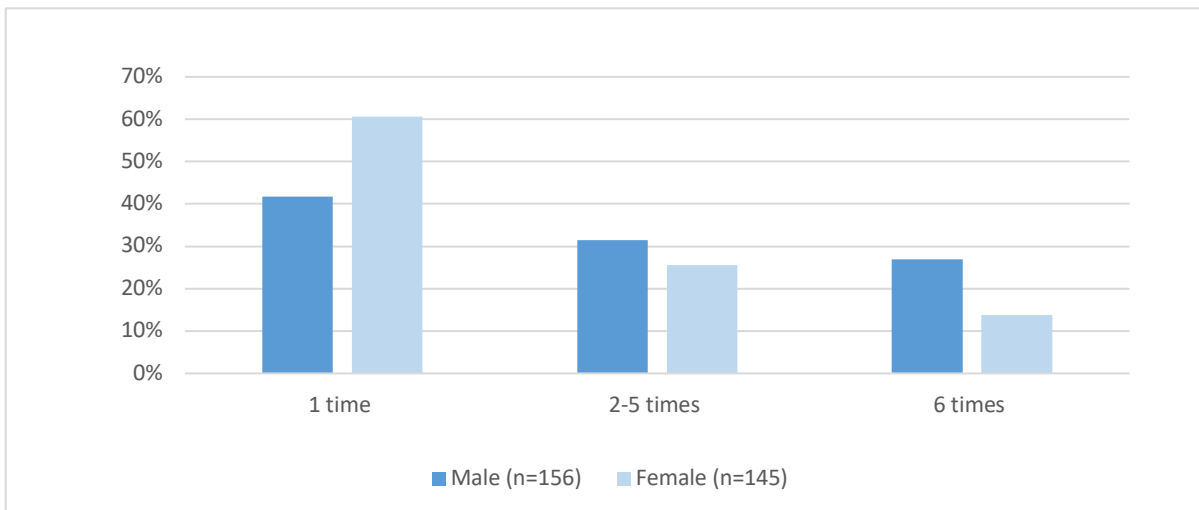


Figure 3 illustrates the number of times the participants involved in transactional sex had exchanged sexual favors. The graph indicates that it was most common to have exchanged sexual favors for goods only one time among male (41,7%) and female (60,7%) respondents. Almost twice as many male adolescents (26,9%) as female (13,8%) had exchanged sexual favors 6 times or more. 31,4% of the male adolescents had exchanges sexual favors 2-5 times, while 25,5% of the female adolescents had exchanged sexual favors 2-5 times.

6.4 Multivariate regression analysis:

Table 3. Bivariate and multivariate regression analysis with Exchange sex as the dependent variable.

| N=8914 | Bivariate | | | Model 1 | | | Model 2 | | | Model 3 | | |
|---|--------------------|-------|-----|---------|-------|-----|---------|-------|-----|---------|-------|-----|
| | B | SE | P | B | SE | P | B | SE | P | B | SE | P |
| Sexual abuse | 0,167 | 0,008 | *** | 0,138 | 0,008 | *** | 0,139 | 0,008 | *** | 0,112 | 0,010 | *** |
| Hard drug use | 0,167 | 0,008 | *** | 0,132 | 0,008 | *** | 0,129 | 0,008 | *** | 0,112 | 0,004 | *** |
| Marijuana use | 0,063 | 0,004 | *** | 0,022 | 0,005 | *** | 0,022 | 0,005 | *** | 0,022 | 0,005 | *** |
| Depression | | | | | | | | | | | | |
| (ref. not affected) | | | | | | | | | | | | |
| Affected quite a lot | 0,008 | 0,004 | ns | 0,010 | 0,004 | * | 0,012 | 0,005 | ** | 0,012 | 0,004 | * |
| Affected a great deal | 0,028 | 0,005 | *** | 0,014 | 0,005 | ** | 0,016 | 0,005 | ** | 0,011 | 0,006 | * |
| Socioeconomic status (ref. high) | | | | | | | | | | | | |
| Middle | -0,003 | 0,004 | ns | | | | 0,005 | 0,004 | ns | 0,005 | 0,004 | ns |
| Low | 0,017 | 0,004 | *** | | | | 0,019 | 0,005 | *** | 0,008 | 0,005 | ns |
| Gender (ref. girl) | 0,009 | 0,004 | * | | | | 0,009 | 0,004 | * | 0,008 | 0,004 | * |
| Interaction analysis | | | | | | | | | | | | |
| Sexual abuse* low SES | | | | | | | | | | 0,079 | 0,017 | *** |
| Hard drug use* low SES | | | | | | | | | | 0,055 | 0,016 | ** |
| Depression*low SES | | | | | | | | | | 0,012 | 0,009 | ns |
| Constant | 0,024 ¹ | 0,002 | | 0,006 | 0,003 | | -0,006 | 0,004 | | -0,002 | 0,004 | |
| R2 | 0,046 ¹ | | | 0,088 | | | 0,090 | | | 0,094 | | |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

¹ The bivariate model only shows the constant and R2 for sex exchange and sexual abuse

Table 3 presents a regression analysis constructed as a hierarchical regression model in four steps, where the variables are included sequentially. In line with the research question of this study the regression analysis investigates the association between transactional sex sexual abuse, substance abuse and depression. Second, the regression analysis examines if the association between transactional sex and other problem indicators are cofounded by socioeconomic status and gender. Finally, the regression analysis investigates if the association between transactional sex and other problem indicators vary with the level of socioeconomic status (by introducing interaction terms).

The bivariate regression analysis in table 2 illustrates the association between having exchanged sex and each of the independent variables. The bivariate analysis shows that being exposed to sexual abuse increases the probability for transactional sex by 16,7 percentage points, compared to those who never have been exposed to sexual abuse. Further the table shows that substance abuse increases the probability of transactional sex. The regression coefficients for adolescents with a middle socioeconomic status and affected quite a lot of depressive symptoms were not significant compared to the respective reference categories. However, the table shows significant positive relationships between transactional sex and low socioeconomic status and being affected a great deal of depressive symptoms, compared to the respective reference categories. Also, the bivariate gender difference is weakly significant. Sexual abuse alone explains 4,6% of the variation in the dependent variable.

Model 1 includes the variables exposed to sexual abuse, the use of hard illegal drugs, marijuana use and symptoms of depression. The regression coefficient for sexual abuse is somewhat reduced from the bivariate analysis (from 16,7 percentage points to 13,8 percentage point), which indicates that some of the effect of sexual abuse on transactional sex may be explained by substance abuse and depression. This model including sexual abuse, hard drug and marijuana use, and depression explains 8,8% of the variation in transactional sex.

In model 2 the association between transactional sex, sexual abuse, substance abuse and depression are adjusted for the potentially confounding variables, gender and socioeconomic status. The regression coefficients for, sexual abuse, substance abuse and depression are not reduced by the background variables, indicating that gender and socioeconomic status does not have confounding effects on the association between transactional sex and the other problem indicators. The coefficients for gender (boy) and low socioeconomic status are fairly small (below 2 percentage points) but statistically significant, indicating a small direct effect of these structural variables that is not mediated by the presence of other problem behaviors.

In model 3 the interaction between low socioeconomic status and sexual abuse, as well as the interaction between low socioeconomic status and substance abuse is investigated. The interaction between depression and low socioeconomic status is not found significant in the regression analysis, while the two remaining interaction terms are highly significant. The combination of having a low socioeconomic status and having experience with sexual abuse increases the probability of transactional sex by 7,9 percentage points. The combination of a low socioeconomic status and substance abuse increases the probability of transactional sex by 5,5 percentage points. Put differently, having experience with sexual abuse and substance abuse increase the probability of transactional sex more for youth with a low socioeconomic status, compared to those with a higher socioeconomic status. When including these interaction terms, 9,4% of the variation in transactional sex is explained.

6.5 Multivariate regression analysis separated by gender:

Table 4. Bivariate and multivariate regression analysis with Exchange sex as the dependent variable, separated by gender

| | Male (N=4060) | | | | | | Female (N=4854) | | | | | |
|---|--------------------|-------|-----|--------------|-------|-----|--------------------|-------|-----|--------------|-------|-----|
| | Bivariate | | | Multivariate | | | Bivariate | | | Multivariate | | |
| | B | SE | P | B | SE | P | B | SE | P | B | SE | P |
| Sexual abuse | 0,279 | 0,017 | *** | 0,194 | 0,022 | *** | 0,135 | 0,009 | *** | 0,086 | 0,011 | *** |
| Hard drug use | 0,153 | 0,010 | *** | 0,102 | 0,013 | *** | 0,195 | 0,013 | *** | 0,125 | 0,016 | *** |
| Marijuana use | 0,052 | 0,006 | *** | 0,013 | 0,007 | * | 0,076 | 0,006 | *** | 0,034 | 0,007 | *** |
| Depression | | | | | | | | | | | | |
| (ref. not affected) | | | | | | | | | | | | |
| Affected quite a lot | 0,026 | 0,004 | *** | 0,012 | 0,007 | ns | 0,003 | 0,005 | ns | 0,010 | 0,006 | ns |
| Affected a great deal | 0,044 | 0,005 | *** | 0,017 | 0,011 | ns | 0,029 | 0,005 | *** | 0,007 | 0,007 | ns |
| Socioeconomic status (ref. high) | | | | | | | | | | | | |
| Middle | 0,006 | 0,007 | ns | 0,006 | 0,007 | ns | -0,002 | 0,003 | ns | 0,003 | 0,006 | ns |
| Low | 0,024 | 0,007 | ** | 0,011 | 0,008 | ns | 0,014 | 0,005 | ** | 0,005 | 0,007 | ns |
| Interaction analysis | | | | | | | | | | | | |
| Sexual abuse* low SES | | | | 0,081 | 0,035 | * | | | | 0,064 | 0,019 | ** |
| Hard drug use*low SES | | | | 0,044 | 0,022 | * | | | | 0,064 | 0,028 | * |
| Constant | 0,030 ¹ | 0,003 | | 0,006 | 0,006 | | 0,019 ¹ | 0,002 | | 0,000 | 0,005 | |
| R2 | 0,062 ¹ | | | 0,102 | | | 0,046 ¹ | | | 0,092 | | |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

¹ The bivariate model only shows the constant and R2 for sex exchange and sexual abuse

The current section presents a bivariate and multivariate regression analysis, separately for male and female respondents. The bivariate analysis shows that being exposed to sexual abuse increase the probability for transactional by 27,9 percentage points among male adolescents. Among female adolescents, exposure to sexual abuse increase the probability of transactional sex by 13,5 percentage points. Further the table show that substance abuse increases the probability of transactional sex among male respondents. Hard illegal drug use increases the probability for transactional sex by 19,5 percentage points among female respondents. The regression coefficient for male and female adolescents with a middle socioeconomic status was not significant. However, the table shows significant positive relationships between transactional sex and low socioeconomic status among both genders. The analysis shows that being affected by depressive symptoms increased the probability for transactional sex, among male adolescents. The regression coefficient for affected quite a lot by depressive symptoms was not significant for female

participants. However, being affected a great deal by depressive symptoms increased the probability for transactional sex among female respondents.

In the multivariate regression analysis, the regression coefficients for depressive symptoms and for socioeconomic status were no longer significant, among both genders. However, exposure to sexual abuse and substance abuse were still significant coefficients among male and female respondents. The interaction analysis shows that among male adolescents the combination of having experience with sexual abuse and a low socioeconomic status, increase the probability of transactional sex by 8,1 percentage points. Put differently, being exposed to sexual abuse among male adolescents increases the probability of transactional sex more for youth with a low socioeconomic status, compared to those with a higher socioeconomic status. Being exposed to sexual abuse and having a low socioeconomic status among female adolescents, increases the probability of transactional sex by 6,4 percentage points. The combination of hard illegal drug use and low socioeconomic status was also positively significant, among both male and female respondents. The interaction between low socioeconomic status and depression was not significant, and therefore not included in the analysis.

6.6 Characteristics of respondents involved in transactional sex:

Table 5. The prevalence of risk factors among respondents who reported involvement in transactional sex (percentage).

| | Male | | Female | |
|-------------------------------|-------------------------|------------------------------|------------------------|-----------------------------|
| | Low SES (n= 65) % | Mid/high SES (n= 91) % | Low SES (n=60) % | Mid/high SES (n=85) % |
| Depressive symptoms | | | | |
| Not affected | 43.1 | 46.2 | 21.7 | 14.1 |
| Affected quite a lot | 27.7 | 30.8 | 16.7 | 41.2 |
| Affected a great deal | 29.2 | 23.1 | 61.7 | 44.7 |
| Hard drug use | | | | |
| Never | 55.4 | 58.2 | 75 | 71.8 |
| 1 time or more | 44.6 | 41.8 | 25 | 28.2 |
| Marijuana use | | | | |
| Never | 41.5 | 36.3 | 51.7 | 35.3 |
| 1 time or more | 58.5 | 63.7 | 48.3 | 64.7 |
| Sexual abuse | | | | |
| Never | 69.1 | 80.2 | 56.7 | 60 |
| 1 time or more | 30.8 | 19.8 | 43.3 | 40 |
| Sex exchange frequency | | | | |
| 1 time | 41.5 | 41.8 | 53.3 | 65.9 |
| 2-5 times | 29.2 | 33 | 25 | 25.9 |
| 6 times or more | 29.2 | 25.3 | 21.7 | 8.2 |
| Total | 100 | 100 | 100 | 100 |

Table 5 further portrays the prevalence of problems and problem behaviors among adolescents who have reported involvement in transactional sex, divided by gender and into low socioeconomic status groups, and middle/high socioeconomic groups. Regarding depressive symptoms, 61.7 % of female adolescents with a low socioeconomic status who had exchanged sex reported to be affected a great deal, compared to 44,7% of female adolescents with a mid/high socioeconomic status. More males with a low socioeconomic status reported to be affected a great deal by depressive symptoms 29,2%, compared to male adolescents with a mid/high socioeconomic status. Of the female adolescents with a low socioeconomic status who had exchanged sex, 21,7% had done so 6 times or more. Compared to female adolescents with a mid/high socioeconomic status, only 8,2% reported to have had exchanged sex 6 times or more. For male with a low socioeconomic status, 29,9% reported to have had exchanged sex 6 times or more. 25,3% of male adolescents with

a mid/high socioeconomic status reported to have had exchanged sex 6 times or more. Regarding experiences with sexual abuse, 30,8% of male adolescents with a low socioeconomic status had been exposed to sexual abuse 1 time or more. For male adolescents with a mid/high socioeconomic status who had exchanged sex, 19,8% had experiences with sexual abuse. 43,3% of the female adolescents with low socioeconomic status who had exchanged sex had experiences with sexual abuse. While 40% of the female adolescents with a mid/high socioeconomic status had been exposed to sexual abuse 1 time or more. Of the adolescents who had exchanged sex, 44,6% of the male adolescents with a low socioeconomic status had used hard illegal drugs 1 time or more. 41,8% of the male adolescents with a mid/high socioeconomic status had used hard drugs 1 time or more. For female adolescents, 25% had used hard drugs 1 time or more. 28,2% of the female adolescents with a mid/high socioeconomic status, had used hard illegal drugs.

Chapter 7. Discussion

7.1 Introduction:

The purpose of this study was to investigate the prevalence of transactional sex, and to explore if the prevalence varies with gender and socioeconomic status. Further, this study aimed to explore the association between involvement in transactional sex and experiences with sexual abuse, substance abuse and mental illness among high school students in Oslo. Specifically, to investigate if the association between involvement in transactional sex and experiences with sexual abuse, substance abuse and mental illness varies depending on socioeconomic status and gender. The main findings in this study will be discussed in the following.

7.2 Prevalence and characteristics of transactional sex:

First, based on the analytical sample in this study, the prevalence of transactional sex was 3,4% among senior high school students in Oslo. This estimate is higher than previously reported among youth in the Nordic countries (between 1,0 % and 1,5 %) (Krisch et al., 2019). The comparable study by Hegna & Pedersen (2003), carried out on a representative sample in Oslo, found that 1,4 % of the participating adolescents had sex sale experiences. One potential explanation for the higher prevalence rate found in this study may be differences in the items measuring transactional sex. There is currently no standardized instrument for measuring transactional sex, and previous studies have typically used items referring to “receiving money for sexual favors” or “selling sexual services”. Hegna & Pedersen (2003) used the following questionnaire item “Have you, in the course of the recent 12 months, given sexual favours for payment?”. The present study however, used the measure “Have you in the past 12 months, exchanged sexual favors for goods”, and the type of goods including money, clothes, makeup, alcohol, drugs, a place to stay, food, travel or gifts, were specified in the questionnaire item. This rather different wording in the measurement item may have had an impact on the higher prevalence rate found in this study.

Previous qualitative studies have emphasized that adolescents involved in transactional sex do not view themselves as “sex workers” (Hegna & Pedersen, 2002; van de Walle et al., 2012). The participants in these studies stressed the differences between their own experiences and professional prostitution, especially since adolescents frequently receive gifts and material goods in exchange for sexual services. Hence, questions emphasizing “exchanged sexual favors for goods”, would be more appropriate for these adolescents. This underscores the importance of using a broad item including both money and material rewards in exchange for sexual favors, when measuring transactional sex.

More boys reported involvement in transactional sex, respectively 3,8% boys 3% girls. This is in line with previous studies, suggesting that male adolescents were more likely to exchange sexual favors (Svedin & Priebe 2007; Pedersen & Hegna 2003; Fredlund

et al. 2013). There have been several proposed explanations as to why more male adolescents are involved in transactional sex. However, there may be several complex underlying reasoning behind this finding. Previous studies have suggested that more boys involved in transactional sex report a homosexual or bisexual orientation (Svedin & Priebe 2007). Exchanging sexual favors for compensation could be seen as an arena where youth explore their sexuality identities, especially among male adolescents. Svedin & Priebe (2007) suggested that most buyers of the sexual services were men, and for this reason the majority of transactions were of a homosexual nature. This study did not obtain any information about the buyer, although several studies have reported that males are more likely to purchase sex (Kaestle, 2012).

Alternatively, the higher prevalence among male adolescents could be explained by social desirability bias. Gender norms for sexual behaviours may create different expectations about what is socially acceptable behaviours among males and females (Kelly et al., 2013). According to these gender norms male adolescents may feel less embarrassed or even proud to report ever exchanging sex. Female adolescents on the other hand, might feel shame and be more reluctant to report engagement in transactional sex, as this may be deviating from the norms of female sexuality. Van de Walle et al. (2012) found that female participants who traded sex reported feelings of shame, and the fear of being “discovered” by their family and friends. These experiences were less prominent among male respondents, indication that they had not deviated from norms for acceptable sexual behaviors.

Fredlund et al (2018) found that male adolescents more often reported “pleasure and fun” as the underlying motive for selling sex, compared to female adolescents. This could mean that male adolescents use transactional sex as a way to explore sexual boundaries. Van de Walle et al. (2012) found similar finding when interviewing adolescents involved in exchange sex. More male participants reported motives such as excitement, finding the partner attractive, as well as the reward. These participants experienced trading sex as a rational choice (Van De Walle et al., 2012). Individuals exchanging sex for payment could

be recognized as active agents making informed decisions about their circumstances based on rational thinking. However, it is important to keep in mind that transactional sex among minors always is a form of sexual exploitation, even though pleasure and fun is the underlying motive.

There was a relatively modest but statistically significant association between socioeconomic status and transactional sex. More adolescents with a low socioeconomic status reported involvement in transactional sex (4,6%), compared to adolescents with a high socioeconomic status (2,6%). However, in multivariate analysis this association was slightly weakened, suggesting that the effect of socioeconomic status is to some extent mediated by other variables like exposure to sexual abuse and/or experiences with substance abuse. Previous studies in the Nordic countries have suggested that there is no link in regard to socioeconomic background and selling sex (Svedin & Priebe 2007; Pedersen & Hegna 2003; Fredlund et al. 2013). However, the longitudinal study by Averdijk et al. (2020) reported contrasting findings and found that low socioeconomic status was a predictor of selling sexual service.

The most common age for first-time experiences with transactional sex was 16 years, among both male and female adolescents. A substantial number of male adolescents were under the age of consent between 13 and 15 years (44%), the first time they traded sexual favors for goods. Previous research has suggested that the first experience of selling and trading sexual favours often occurs at a young age (Lavoie et al. 2010). The results indicates that it was most common to have exchanged sexual favors for goods 1 time, among males (42%) and females (61%). This finding supports the assumption that transactional sex often is an informal and experiential trading of sex with low frequency, distinct from sex work and prostitution (Krisch et al., 2019).

7.3 Clustering of problems and problem behaviors:

The analysis in this study shows a strong association between transactional sex

and exposure to sexual abuse. Among the youth who reported to have been exposed to sexual abuse, 19% reported involvement in transactional sex. When other problem indicators and demographic variables were controlled for, the association was still highly significant among both males and females. These findings correspond well with the results obtained by previous studies (Svensson et al., 2013; Svedin & Priebe, 2007; Lavoie et al., 2010; Kaestle, 2012). Concerning gender differences, the association between sexual abuse and transactional sex was especially strong among male adolescents. In the bivariate analysis approximately 31% of the male adolescents who had been exposed to sexual abuse reported involvement in transactional sex.

The causal relationship between transactional sex and sexual abuse was not investigated in this study. However, previous studies have indicated that youth with sexual abusive experience in the past seem to be at higher risk of selling sexual services during adolescents (Svedin & Priebe, 2007; Lavoie et al., 2010). Correspondingly, a prior longitudinal study found that experiences with sexual abuse during childhood was a significant predictor of transactional sex (Kaestle, 2012). According to the developmental psychopathology approach (Rutter & Sroufe, 1984), abuse during different developmental stages can result in a number of dysfunctional behaviours for an individual. The traumatic stress of sexual abuse can interfere with the development of important capabilities, related to affect regulation, coping and impulse control. Consequently, risky sexual activity could be utilized as a means to cope with the emotional impact from the abusive experience (Rutter & Sroufe, 1984). Risk-taking behaviors is a normative aspect of adolescent behavior. However, when risk-taking becomes a coping strategy to deal with difficult emotions, it can lead to severe maladaptive outcomes (Rutter & Sroufe, 1984). Consequently, it is important to address the function of these behaviors in order to reduce re-victimization.

The traumagenic dynamics theory provides an explanation for the association between childhood sexual abuse and sexual risk behaviours during adolescents (Finkelhor & Browne, 1985). The theory states that youth who have been traumatically sexualized can develop confusions and misconceptions about sexual self-concepts and lead them to use

sexual behaviours as a means later in life (Finkelhor & Browne,1985). Those who experiences traumatic sexualization in childhood, may believe sex is necessary to obtain affection from others later in adolescents and adulthood (Finkelhor & Browne,1985). This theory also states that stigmatization as a result of the abuse, may cause coping impairment, low self-worth, contribute to self-injurious behaviour, depression and identification with other stigmatized behaviours such as drug abuse and prostitution (Finkelhor & Browne,1985). According to Senn et al. (2012), the traumagenic dynamics may contribute to alterations in norms related to sexual behavior and cause negative outcomes related to relations and sexuality, and thus lead to engagement in risky sexual behavior (Senn et. al, 2012). However, within this study it was not possible to determine whether sexual abuse was a precursor or consequence of transactional sex. An alternative interpretation could be that the increased likelihood of exposure to sexual abuse is related to the situation of exchanging sex. Further research should investigate the pathway of transactional sex and sexual abuse.

The present study shows that there is an increased risk of symptoms of depression among adolescents trading sexual favors. The increased level of mental health issues among adolescents who sell sex is in line with the findings from previous studies (Fredlund et al., 2013; Svedin & Priebe, 2007; Pedersen & Hegna, 2003). In this study, it was not possible to determine if mental health problems were a cause or an effect of trading sex. According to Fredlund et al. (2018) adolescents involved in transactional sex reported that emotional reasons such as “did not feel mentally well/to reduce anxiety”, was an important motivation for selling sex. Parallels to this behavior might be drawn to self-harming behaviors where the body serve as a tool for regulating feelings. Fredlund et al (2013) found that the extent of self-harm was grater among the adolescents who had sold sex and proposed that selling sex can be used by adolescents as a form of self-harm, with an attempt to reduce negative emotions. However, depressive symptoms could also be a consequence of the situation of trading sexual services.

This study also found that high school students who had used hard illicit drugs and marijuana was more likely to engaged in exchange sex. The bivariate analysis shows that 19% of those who had used harder illegal drugs had engaged in transactional sex. Similar associations of drug use and exchange sex has been reported in previous research on the subject (Hegna & Pedersen, 2003; Betzer et al., 2015; Edwards et al., 2006; Head et al., 2021). Previous research state that substance abuse and risky sexual behavior often cluster together and tend to be contributing factors for each other among adolescents (Wu et al, 2010).

There are several possible explanations for the link between substance abuse and transactional sex. A possible explanation might be that engagement in transactional sex result from a need to support a pre-existing drug addiction. Fredlund et al. (2013) found that youth frequently received drugs as a reimbursement for sexual activities. Similarly, Fredlund et al. (2018) found that material rewards such money or drugs, seemed to be an important motivation for selling sex among high school students in Sweden. Based on data from a longitudinal study, Reid & Piquero (2014) found that the majority of youth had experiences with substance use prior to involvement in prostitution. Reid & Piquero (2014) suggested that substance use may function as a “launch” mechanism, lending youth on a path of problem behaviours (Reid & Piquero, 2014).

Alternatively, substance abuse can be viewed as a way to cope with challenging or difficult experiences. The general strain theory argues that various types of negative events may lead to negative emotions that require some type of coping mechanism (Agnew, 1992). According to this theory, drug use may be viewed as a coping strategy, with the attempt to alleviate difficult emotions related to the situation of exchanging sex. However, again within this study it was not possible to determine if substance abuse were a precursor or consequence of transactional sex.

7.4 The impact of socioeconomic status:

Further, this study examined whether the association between transactional sex and other problems and problem behaviors, would vary according to socioeconomic status. The current study found that the combination of having a low socioeconomic background and experience with substance abuse increases the probability of engagement in transactional sex. It was also found that adolescents with a low socioeconomic status and experience with sexual abuse was especially vulnerable in regard to transactional sex. These results indicate a difference in regard to the socioeconomic groups and show that low socioeconomic status might be a risk factor for harmful outcomes among youth involved in transactional sex. This finding is consistent with a previous study reporting that individuals with a low socioeconomic status and a history of sexual abuse had a higher level of general behavioral problems and were more likely to be less resilient (Williams & Nelson-Gardell, 2012).

These findings could be interpreted in light of the theoretical concept resilience (Rutter, 1987) in that low socioeconomic status is a risk factor for malicious outcomes, while higher socioeconomic status seems to offer protection against such outcomes. Although the analysis has shown that socioeconomic factors are only weakly associated with the prevalence of engagement in transactional sex, the analysis has additionally revealed that socioeconomic status are an important factor when combining transactional sex with other problematic behaviors/experiences, such as substance abuse and sexual abuse. Within this study, protective factors in relation to transactional sex was not investigated. However, based on the results, high socioeconomic status might be viewed as a buffer against problems and problem behaviors such as sexual abuse and substance abuse, among adolescents involved in transactional sex.

The results indicate that transactional sex occurs among adolescents in both low and high socioeconomic status groups. However, based on the findings in the present study it seems to be a more severe phenomenon among adolescents from low socioeconomic backgrounds in regard to stronger associations with substance abuse and sexual abuse. This could indicate that adolescents involved in transactional sex for material or financial reasons,

constituting the main source of income, are more exposed to sexual abuse and more likely to have more problems with drug use.

Until now most studies have focused on the association between transactional sex and socioeconomic factors, or on the association between transactional and other risk factors. To my knowledge, this master thesis is the first to analyze the effect of socioeconomic status on the association between transactional sex and related problems and problem behaviors. The results indicate that socioeconomic status is an important influence on transactional sex and other problems and problem behaviors. Further research should investigate moderating effect of low socioeconomic status on the association between transactional sex other problem behaviors.

7.5 Further research and implications for practice:

This thesis has revealed that further research on the phenomenon is required, in regard to the causal relationships of transitional sex and associated problems and problem behaviors. Further research is also needed to investigate in what context sex exchanges occur, as well as the underlying motivations of the exchanges, to inform preventive programs to promote resiliency and healthy development among adolescents.

In the introduction it was pointed out that service providers are requesting research-based knowledge about transactional sex (Bjørndahl, 2017). In order to develop efficient preventive measures targeting young people who have experiences with transactional sex, health practitioners and service providers working with vulnerable youth must be aware of characteristics, problems and problem behaviours related to transactional sex. The findings in this study may assist with the process of evaluating adolescents at risk in regard to engagement in transactional sex. Conversely, adolescents involved in transactional sex might be screened for possible drug use and possible experiences with sexual abuse. This

thesis also highlights the importance of addressing the functions of risk-taking behaviors, such as transactional sex, among youth.

7.6 Limitations:

The response rate (65%) in the present study is considered relatively high, and should provide a representative sample of a general population of youth equal for males and females (Bakken, 2018). Regardless, one should note that students with high levels of school absenteeism are probably underrepresented in the study (Bakken, 2018). Sex exchange experience are most likely more common among adolescents with high levels of absenteeism and among those not found in the school system. Additionally, previous research shows that adolescents selling sex are less likely to feel happy at school (Kaestle, 2012). For this reason, this study may give a conservative estimate of the phenomena.

Second, the cross-sectional design in the current study cannot provide information about the causal relationship of the variables. This study could only provide information about the association between transactional sex and the risk factors. In other words, the result cannot tell us if substance abuse is a route in or a means to escape difficult emotions related to transactional sex. Similarly, it was not possible to determine if involvement in transactional sex cause exposure to sexual abuse, or if sexual abuse is a predictor to transactional sex.

Third, considering the sensitive character of the question about transactional sex, one may also ask questions about the trustworthiness of the participant's responses (Elstad, 2010). The findings are based on self-reports, and we do therefore not know whether sex exchange experience is under- or overreported. However, the answers were reviewed for trustworthiness, and 191 respondents were excluded from the total sample before the analysis was conducted, due to presumed unserious answers (Bakken, 2018).

Fourth, Elstad (2010) conducted an evaluation of Young in Oslo 2006, and found

that the participant attrition throughout the survey was higher among respondents with a low socioeconomic background. Consequently, there was an underrepresentation of respondents with a low socioeconomic status in the analytical sample (Elstad, 2010). The survey length has been reduced since 2006, however there might be an underrepresentation of adolescents from low socioeconomic groups due to participant attrition in the current study.

Last, the present study cannot provide any information about the context in which sex exchanges occur and the motives underlying the exchanges. For example, the data cannot provide information about the buyer of the sexual services and where the contact with the buyer is initiated. However, previous studies suggest that the most common way of contact with the buyer was through friends or the internet (Fredlund et al., 2013; Lavoie et al., 2010; Svedin & Priebe, 2007).

Chapter 8. Final conclusions

This master thesis has examined transactional sex among senior high school students living in Oslo. In summary, transactional sex is a rather marginal phenomenon among senior high school students in Oslo. Among the sample, 3,4% of the participants reported exchanging sex for goods during the past 12 months. This estimate is higher than previously reported among adolescents in Oslo (Hegna & Pedersen, 2003). However, this study measured transactional sex by asking the respondents if they had “given sexual favors for goods”, increasing the likelihood that a wide range of the phenomenon was captured. Whereas Hegna & Pedersen (2003), asked the respondents if they had “given sexual favours for payment”. More boys reported involvement in transactional sex, respectively 3,8% boys and 3% girls. This study also found that more adolescents with low socioeconomic status were involved in transactional sex, than those with higher socioeconomic status.

Exchanging sexual favors for goods is high-risk behavior, significantly associated with

negative outcomes such as sexual abuse, substance abuse and mental health issues. This study did especially find strong associations between hard illegal substance abuse, sexual abuse and involvement in transaction sex. Although, within this study it was not possible to establish the causality of these problems and problem behaviors, due to the cross-sectional study design. Longitudinal studies examining transactional sex are necessary in order to clarify these pathways.

The findings in this master thesis support results obtained by previous studies examining transactional sex in high-income countries, especially concerning the strong association between substance abuse, sexual abuse and transactional sex. This study did additionally contribute to new findings, including the evidence that transactional sex and the relation with substance abuse and sexual abuse, is stronger among participant with a low socioeconomic status. This suggest that adolescent with a low socioeconomic status and experiences with sexual abuse or substance abuse, are more likely to engage in transactional sex. These adolescents may be a particular vulnerable group with high-risk, in regard to future hard drug use, exposure to sexual abuse and transactional sex in adulthood.

This study indicated that adolescents involved in transactional sex is a heterogeneous group. The findings underscore the importance of treating transactional sex as a broad a spectrum of behaviors, from casual sexual exchanges and exploration to a means for money or drugs, regulating emotions and cope with traumatic experiences. To further inform and guide public health practitioners to develop effective intervention programs for vulnerable youths, additional research on the contextual and causal relationships of transactional sex, as well the underlying motivations of the exchanges is required.

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