

**DETERMINANTS OF SEXUAL VIOLENCE AMONG EASTERN ETHIOPIAN
SECONDARY SCHOOL STUDENTS**

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Determinanten van seksueel geweld onder leerlingen van middelbare
scholen in het oosten van Ethiopië

(met een samenvatting in het Nederlands)

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CHAPTER 1

General Introduction

The period of adolescence is considered to be a time of heightened sexuality (Hyde & Delamater, 2000). At this time adolescents think about, explore and experiment with many sexual issues. For instance, they wonder whether they are sexually attractive, they think about and question how they should behave sexually, and they even contemplate what the future holds for their sexuality (Santrock, 2008). They also speculate as to whether they are sexually attracted to members of the same sex, the opposite sex, or to both sexes. They are also concerned about how they present themselves to others and how others view them sexually (Santrock, 2008). Along with these changes in feelings and thoughts about sexuality, there is an increase in sexual behavior (Santelli et al., 2004). Some adolescents start their first heterosexual romantic relationship by 12 years and have their first sexual intercourse within the age range of 12 to 15 years (Cavazos-Rehg et al., 2009; Rosenthal, Burcklow, Lewis, Succop, & Biro, 1997; Santelli et al., 2004). These sexual interests usually occur within the context of romantic relationships (Little & Rankin, 2001; Rosenthal et al., 1997). All this demonstrates that adolescents go through a lengthy process of learning to manage sexual feelings, developing new forms of intimacy and learning to regulate sexual behaviors (Crockett, Raffaelli, & Moilanen, 2003). This journey to the development of a matured sexual identity, however, encompasses vulnerability to risky sexual behaviors with many adolescents becoming either a victim or perpetrator of sexual violence. The present dissertation focuses on the investigation of sexual violence perpetration and victimization among Ethiopian adolescents. Many adolescents experience risky sexual behaviors during this period (Jackson, Cram, & Seymour, 2000; Koss, 1989). Risky sexual behavior is defined as any sexual activity that leads to unintended pregnancy, STD, HIV, bodily physical injury and psychological trauma. It includes a number of sexual activities such as unprotected sexual intercourse, having intercourse under the influence of alcohols and drugs, having intercourse with multiple partners (Kotchick, Shaffer, Forehand, & Miller, 2001) and sexual violence (Peterson, Janssen, & Heiman, 2010). The present dissertation focuses on sexual violence victimization and perpetration among Ethiopian adolescents. Sexual violence among these youth is one of the highest in the world (Bekele, Van Aken, & Dubas, 2011; Mulugeta, Kassaye, & Berhane, 1998) and the outcome takes its toll on both the psychological and physical health of the victims (Clements, Speck, Crane, & Faulkner, 2004). Sexual violence also forces the society to spend its meager resources to rehabilitate the victims and prosecute perpetrators.

Sexual Violence

Sexual violence is defined as any unwanted sexual behavior, from verbal comments, jokes, sexual expressions, sexual contacts (embracing, kissing, petting, genital

fondling) to sexual intercourse perpetrated by a person against another person (e.g., a young man on a young woman) (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Many young people are at risk of engaging or experiencing sexual violence (Johnson, Morgan, & Sigler, 2007; Petersen, Bhana, & McKay, 2005). The risk of experiencing sexual violence appears to be particularly great among adolescent girls of Sub-Saharan African countries because of a large number of forced sexual initiations (Krug et al., 2002). For example, a study conducted in four Sub-Saharan African countries has documented 38 percent in Malawi, 30 percent in Ghana, 23 percent in Uganda and 15 percent in Burkina Faso forced first sexual intercourse among adolescent girls aged 12-19 years (Moore, Awusabo-Asare, Madise, John-Langba, & Kumi-Kyereme, 2007). Another study in an African setting has reported 33% forced sexual initiation among adolescent girls of South Africa (Jewkes & Abrahams, 2002). Investigations in Ethiopia also show a close to 16% prevalence of forced intercourse among young women with the age range of 15 to 24 years (Dibaba, 2007; Garoma, Belachew, & Wondafrash, 2007). About 5.2% to 12.5% forced sexual intercourse victimization was also reported among adolescent girls of developed countries (Basile et al., 2006; Hines, 2007; Maxwell, Robinson, & Post, 2003).

Sexual violence thus appears to be a major characteristic of school life for many adolescent females in Ethiopia (Gorfu & Demisse, 2007; Mulugeta et al., 1998; Worku & Addise, 2002) and elsewhere (Basile et al., 2006; Howard, Wang, & Yan, 2007; Jewkes & Abrahams, 2002; Rhynard, Krebs, & Glover, 1997). The majority of the sexual violence perpetrators are either male peers or older students (Patel, Andrews, Pierre, & Kamat, 2001) who are in a friendly or acquaintance relationship with the adolescent girls or young women (Dibaba, 2007; Forke, Myers, Cattalozzi, & Schwarz, 2008; Tjaden & Thoennes, 2000). The fact that the perpetrators often are friends or acquaintances exposes adolescent girls to psychological and sexual problems, often resulting in psychological disturbances such as feelings of guilt, frequent depression, extreme suspicions of all men, failure to concentrate, lack of motivation to continue schooling, sleep disorders and even hopelessness (Dibaba, 2007; de Visser, Rissel, & Richters, 2007; Lacasse & Mendelson, 2007; Mulugeta et al., 1998). Sexual violence also exposes young women to STD and HIV/AIDS because the majority of non-consensual sex among young people are committed without the use of condoms (Dunkle et al., 2004; Gomez, Speizer, & Beauvais, 2009; Howard et al., 2007). Thus, it appears relevant to investigate the determinants (risk and protective factors) of sexual violence perpetration and victimization.

Risk and Protective Factors for Sexual Violence Perpetration and Victimization

Several risk factors (both on an individual as well as on a relationship level) have been linked with sexual violence perpetration and victimization. With respect to perpetration, a positive attitude towards sexual violence, an exaggerated sense of sexual self-entitlement, involvement in alcohol, drugs and pornographic film use, and engagement with multiple partners have been found to be linked with increased levels of sexual violence perpetration (Bushman, Bonacci, Dijk, & Baumeister, 2003; Carr & Van Deusen, 2004; Maxwell et al. 2003; Vega & Malamuth, 2007). In addition, experiencing violent family life experiences, having insecure attachment and involvement with violent peer groups were also found to contribute to the perpetration of sexual violence (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Borowsky, Hogan, & Ireland, 1997; Schwartz & DeKeseredy, 2000; Smallbone & Dads, 2000).

With respect to sexual victimization, involvement in alcohol, drugs and pornography use and having multiple sexual partners were found to increase young women's vulnerability to sexual violence victimization (Champion, Robert, Rebecca, & Mark, 2004; Yeater & Lenberg, 2008; Yimin et al., 2002). Additionally, young women's lack of sexual assertiveness, low self-esteem, fear of a partner's rejection and submission to female friends' pressure or norms concerning sexual relationships increase the likelihood of experiencing sexual violence (Lacasse & Mendelson, 2007; Livingston, Testa & VanZile-Tamsen, 2007; Young & Furman, 2008; Zweig, Barber, & Eccles, 1997). Finally, a woman's attitude of male supremacy in sexual relationships has been linked to higher exposure to non-consensual sexual intercourse (Enosh, 2007).

Protective factors such as parental and environmental factors, besides showing main effects, were also found to moderate the relationship between risk factors and sexual or other health risk behaviors. For example, parental factors like secure parental attachment and parent-adolescent communication on sexual matters, and environmental factors such as religiosity and school connectedness have buffered the relation between risky sexual behavior and health compromising behaviors (Blum & Ireland, 2004; Earl & Burns, 2009; Kliewer & Murrelle, 2007; Parera & Suri's, 2004). Adolescent men with secure parental attachment are less likely to engage in violence with their partner and also least likely to perceive themselves as superior in their relationship with their partner (Schwartz, Waldo, & Higgins, 2004). Young men who regularly attend religious services (Borowsky, et al., 1997) and who are highly attached to school related activities (Frey, Ruchin, Martin, & Schwab-Stone, 2009) were found to be less involved in dating violence.

Young women with a higher level of parental attachment were also found to be less victimized by verbal as well as physical violence from their partner (Earl & Burns, 2009).

Young women's open sexual communication with their mother was also reported to protect them from involvement in early age sexual intercourse (Henrich, Brookmeyer, Shrier, & Shahar, 2006; Hutchinson, Jemmott, Jemmott, Braverman, & Fong, 2003; Sieving, McNeely, & Blum, 2000). Adolescent girls' participation in co-curricular activities (Martyn & Martin, 2003) and religious services (Howard, Qiu, & Boekeloo, 2003) protect the adolescent girls from experiencing risky sexual behaviors and dating victimization.

The Present Study

A number of studies have shown individual and relationship factors contributing to both sexual violence perpetration (for males) and victimization (for females). However, the majority of the studies have investigated only a fairly limited number of risk factors to sexual violence perpetration and/or victimization at the same time. This makes it difficult to prioritize risk factors for intervention in countries with resource shortages. The present dissertation investigates several risk and protective factors simultaneously in order to determine which of these factors are the most important. Moreover, sexual violence perpetration is only sporadically investigated in the country in which the present study took place (Ethiopia) or in other sub-Saharan African countries. In addition, most of the few studies conducted in Ethiopia have focused on prevalence and consequences of sexual violence victimization (Gorfu & Demisse, 2007; Mulugeta et al., 1998; Worku & Addise, 2002) rather than on risk factors that predict who perpetrates or who is most likely to become a victim. Last, with the exception of Philpart, Goshu, Gelaye, Williams, and Berhane (2009) almost all of the sexual violence studies have investigated sexual violence from the victims' (females) perspective rather than from perspective of the perpetrators (males) (Dibaba, 2007; Garoma et al., 2007). The culture in Ethiopia as well as in sub-Saharan Africa, however, is extremely male dominant in determining when, where and how to have sexual intercourse (Gossaye et al., 2003; Jewkes & Abrahams, 2002). Thus, although very little is known about how males judge their own victimizing behaviors, this seems to be a very relevant issue.

The study area (Eastern Ethiopia) also has the highest rate of risk behaviors among school youth compared with other regions of Ethiopia (Mitike et al., 2007). Moreover, two of the towns in the region (Dire Dawa and Harar) together account for a very high rate of induced abortion (184 per 1,000 women aged 15 to 45 per annum) compared with other regions of Ethiopia. This figure is much higher than the national average of 23 per 1,000 women aged 15 to 45 per annum (Singh et al., 2010). This appears to indicate that there is high likelihood of unwanted or unsafe sex among young people of the Eastern Ethiopia region.

In addition, very few studies have been conducted anywhere on the main effects and particularly the moderating roles of protective factors on the relation between risk factors and sexual violence (Hall, Teten, DeGarmo, Sue, & Stephens, 2005) and violence (Brookmeyer, Henrich, & Schwab-Stone, 2005; Holt & Espelage, 2005), let alone within Ethiopia or Africa. Among a sample of American youth Hall et al. (2005) have demonstrated the moderating roles of protective factors: perceived minority status, importance of loss of social identity and ethnic identity on the relation between risk factors like early risk, delinquency, sexual experience and acceptance of violence, and sexual aggression. In their study of Americans adolescents, Brookmeyer et al. (2005) have also documented the buffering role of parental support and prosocial cognitions on the relation between witnessing community violence and the perpetration of violence among adolescents. Studying the moderating roles of protective factors, might enhance the success of sexual violence interventions by lowering young people's exposure to the risk factors that lead to sexual violence.

In the present dissertation, the risk factors for both sexual violence perpetration and victimization were examined both through variable-centered as well as person-centered approaches. The person-centered approach was added to examine the possibility of different types of perpetrators and victims, showing or being the victim of different forms of sexual violence. If different young men perpetrate and particular groups of young women are victimized by different forms of sexual violence, which type of perpetrator or victim may be characterized by different risk factor/s. This approach will make the study more comprehensive by investigating the prevalence as well as the risk factors for the various perpetrators and victims types.

In sum, this dissertation investigates the determinants (risk and protective factors) of sexual violence perpetration and victimization among secondary school students of Eastern Ethiopia. To this end, the dissertation raises the following research questions.

- * How severe is the extent of sexual violence perpetration and victimization among secondary school students? (Chapter 3 and 5)
- * What individual (sexual violence attitude, risky behaviors, narcissism, self-esteem, sexual assertiveness, rejection sensitivity) and relationship (peer pressure, parental attachment, violent family experience) factors contribute to sexual violence perpetration and victimization? (Chapters 4 and 5)
- * How many sexual violence perpetrator and victim types can be found, and what risk factors characterize these types? (Chapter 6)

* Do protective factors (parental connectedness, open parent-adolescent sexual communication, religiosity, school connectedness) moderate the relation between risk factors and sexual violence perpetration and victimization? (Chapter 7)

Outline of the Dissertation

This dissertation is organized into eight chapters including this chapter. Chapter 2 concerns the study area background and the methodology used in this dissertation. Chapter 3 concerns the prevalence and patterns of sexual violence perpetration. Chapter 4 focuses on risk factors for sexual violence perpetration from the male perspective. Chapter 5 deals with the risk factors that increase young women's vulnerability to sexual violence victimization. Chapter 6 concerns perpetrator and victim types of sexual violence and the risk factors that characterize them. Chapter 7 focuses on protective factors that moderate the relation between risk factors and sexual violence perpetration and victimization. In the last chapter we present a general discussion, elaborating the main findings of the five empirical studies and implications of the findings.

CHAPTER 2

Study Area Background and Research Method

Area Background

Ethiopia is the tenth largest country in Africa. It covers 1,138,512 square kilometers and constitutes the major landmass of Horn of Africa. It has diverse cultures embracing peoples speaking more than 80 languages (CSA, 2006). It is the second most populous country in Africa with a population of 79.2 million (F- 39,530,000; M- 39, 691,000). About 13 million people live in urban areas and 66 million people live in rural areas. More than 33.8 million are under the age of 15 and 15.6 million are young people between the age ranges of 15-24 years (CSA, 2007). Currently, Ethiopia is classified into nine regional states (Tigray, Affar, Amhara, Oromiya, Somali, Benishangul-Gumuz, Southern Nations, Nationalities and Peoples, Gambela and Harari) and two chartered cities (Addis Ababa and Dire Dawa) (CSA, 2006). Eastern Ethiopia includes the city administration of Dire Dawa, and the regional states of Harari, Somali, as well as the eastern and western Harerghe zones of the regional states of Oromiya. The current study was conducted in the cities of Dire Dawa, Harar, and Jijiga, the main towns in the eastern part of Ethiopia, with Harar and Jijiga being the capitals of the regional states of Harari and Somali, respectively.

Dire Dawa

The town of Dire Dawa is located 505 kilometers away from the capital Addis Ababa, in the eastern part of Ethiopia. It is the capital of Dire Dawa Administrative Council. According to CSA (2007) estimates, Dire Dawa Administrative council has a total population of 428,000 people, out of which 214,000 are male and 214,000 are female. About 106,000 (24.8%) people are rural and 322,000 (75.2%) are urban inhabitants. The town of Dire Dawa comprises a population of 306,499 (F-153,381; M-153,118) people of which 60,521 (F-32,486, M-28,035) are young people in the age range of 15 to 24 years.

Harar

The town of Harar is located 525 kilometers east from the capital Addis Ababa and is 55 kilometers southeast of Dire Dawa). It is the capital of Harari regional state. According to CSA (2007) estimate, the regional state of Harari has a total population of 209,000 people, out of which 107,000 are male and 102,000 are female. About 78,000 (36.3%) people are rural and 131,000 (F-64,000; M-67,000) (62.7%) are urban inhabitants of which 40,428 (F-20,768; M-19,660) are young people, 15-24 years old.

Jijiga

The town of Jijiga is located in the eastern part of Ethiopia, 615 kilometers east of Addis Ababa and 160 kilometers from Dire Dawa. It is the capital of the regional state of Somali. According to CSA (2007) estimate, the regional state of Somali has a total population of 4,560,000 people, out of which 2,444,000 are male and 2,116,000 are female. About 3,756,000 (82.4%) people are rural and 804,000 (18.6%) are urban

inhabitants. The town of Jijiga is located in the Jijiga zone, and has a total population of 107,297 (F-52,353; M-54,944) of which 31,035 (F-13,899, M-17,136) are young people in the age range of 15 to 24 years.

Studies conducted in 2005 into the HIV status of the Ethiopian adult population have revealed a prevalence of 9.5% for the urban and 2.2% for the rural population. The national HIV prevalence in 2005 was reported to be 3.5%. The Eastern Ethiopia regional towns are also among the higher prevalence group, with Dire Dawa accounting for 8.5%, Harar for 7.5% and Jijiga for 5.5% (FMH, 2006). Out of the urban population, young people aged 15-24 years are at high risk for a HIV infection (FMH, 2004). For example, young females aged 15-24 years show the highest prevalence of HIV (5.6% in 2005) compared with any other age range; followed by 25-34 years of age (5.4% in 2005) (FMOH, 2006). The number of females infected with HIV in the age ranges of 15-19 years is much higher than the number of infected males in the same age group because of biological, cultural and economic reasons (CSA, 2006). For example, the female genital tract is made up of a larger exposed area. Semen has higher viral load than vaginal fluids and the semen stays longer in the female genital tract after acts of sex which increases the chances of HIV transmission. The pervasive patriarchal culture in Ethiopia also condones male dominance over females in social and sexual relations. The following figure depicts the towns of Dire Dawa, Harar and Jijiga in relation to the neighboring countries and capital cities of Djibouti (Djibouti) and Hargeysa (North Somalia).

Methodology

As noted above, the current study was conducted in the cities of Dire Dawa, Harar, and Jijiga, the main cities in the eastern part of Ethiopia. All schools in the towns were targeted for multistage sampling described in more detail below.

Target population

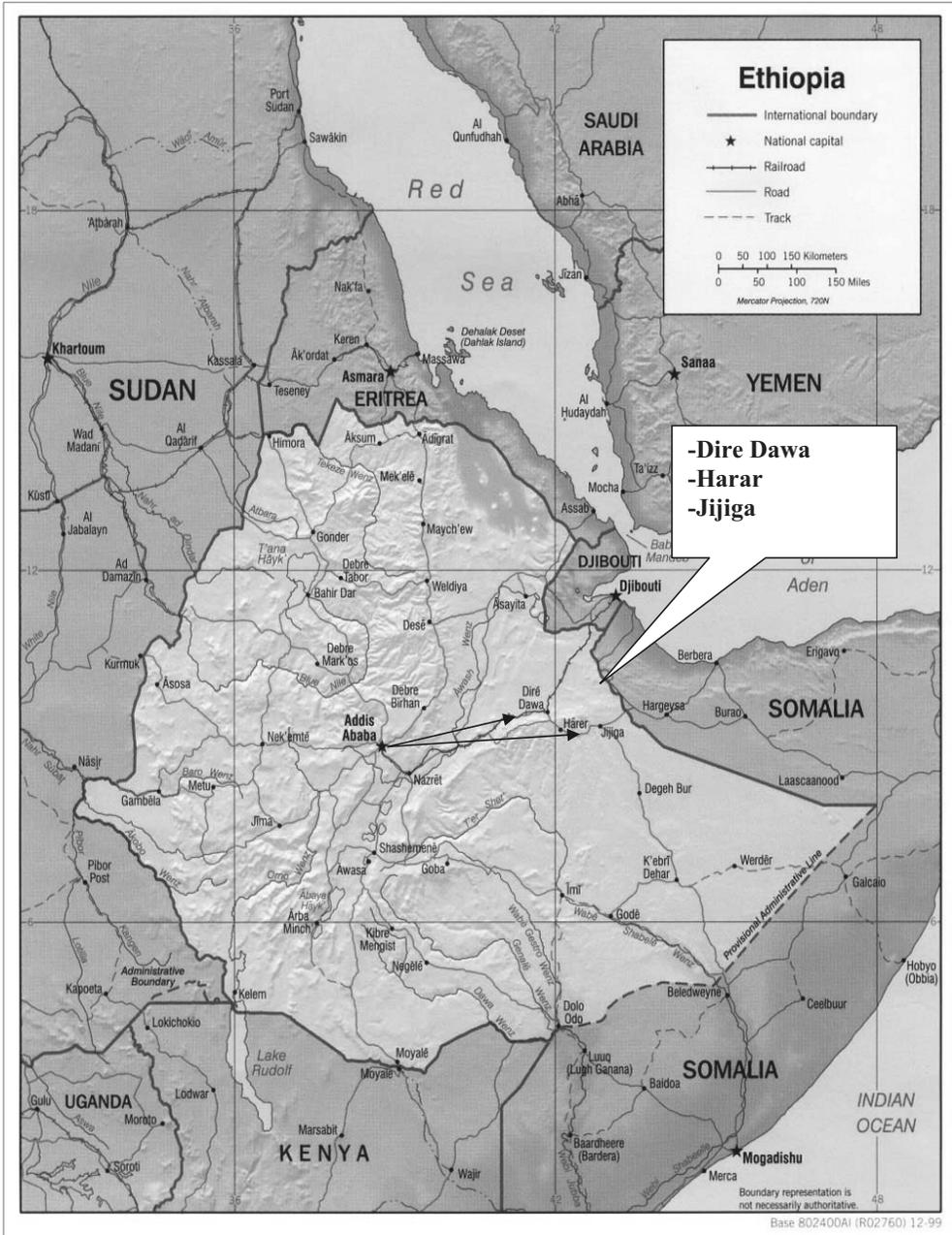
The target population of the study was all secondary school students of the towns of Dire Dawa, Harar, and Jijiga. There were twelve secondary schools in Dire Dawa, six in Harar and three in Jijiga towns in the year 2008/2009. In that same academic year, there were 21393 students (F-7896 and M-13497) enrolled in the secondary schools of the three towns. Specifically, Dire Dawa had 4099 female and 6743 male students; Harar, 2408 females and 2985 males, and Jijiga 1389 females and 3769 males.

Study Population

The study population was drawn from six randomly selected schools (three from Dire Dawa, two from Harar and one from Jijiga). We included all students from grades 9 – 12 in the study population. The age range of the study population was from 14-24 years. The study population included 12,337 students (F-4,669, M-7668). The number of

Figure 2.1

Map of Ethiopia showing the location of Dire Dawa, Harar and Jijiga towns.



students, sex, grade level and number of classes per grade level that were included in the final sample is presented in Table 2.1.

Table 2.1
Study population size by sex, grade level and number of classes

No.	Name of the School	Number of students		Grade level	Number of classes
		Female	Male		
1	Harar Secondary school	949	855	9	26
		577	784	10	22
2	Abubeker Preparatory school	216	379	11	10
		185	349	12	9
3	Dire Dawa Comprehensive Secondary school	324	576	9	13
		206	450	10	10
		133	213	11	6
		128	246	12	8
4	Sabian Secondary school	437	621	9	19
		420	500	10	18
		72	240	11	5
		90	184	12	6
5	Bisrat Gebreal Secondary school	62	78	9	2
		63	64	10	2
		54	72	11	2
		65	68	12	2
6	Jijiga Comprehensive Secondary school	246	496	9	8
		243	524	10	8
		94	505	11	7
		105	464	12	4
Total		4669	7668		187

Sample size

The determination of the sample size needed for our study was done using EpiInfo version 3.4.3 software. The software has options for calculating the sample size needed for a variety of study designs. For the present study, a cross-sectional design and estimates were entered concerning the prevalence of sexual violence, effect size and likelihood of exposure to violence. Accordingly we took 15% prevalence of sexual violence (Dibaba,

2007), 2.3 odds perpetrating sexual violence as a result of alcohol drinking (Deribew, 2007), and 1:4 (lower proportion) proportion of exposed to unexposed to sexual violence. Moreover, the standard confidence level of 95% and the minimum requirement for power 80% were also used in computing the sample size needed. Based on these data, the EpiInfo program calculated a sample size recommendation of 755.

In our selection of the sample students, we employed two-stage sampling. In the first stage, we randomly selected the schools, and in the second we randomly selected the classes from each grade level. To minimize the loss of sampling efficiency at two levels it is recommended to multiply the calculated sample size by two (Naing, Winn, & Rusli, 2006). That is $755 \times 2 = 1510$. Moreover, because of the nature of the topic concerning questions that are highly personal and potentially sensitive, we expected that there would be non-response by some respondents either to a part of the questions or even to all of the questions. Thus, an additional 5% of respondents were added to the recommended sample size. Accordingly, the total sample size was calculated to be $[1510 + (5/100 \times 1510)] = 1586$ 1586 secondary school students.

Sampling Technique

The sample population of the study was taken through multistage sampling technique from the three towns (Dire Dawa, Harar, Jijiga). First, we randomly selected six schools out of the twenty one schools in the study population. Following this, we again randomly selected 105 classes (out of the 187 possible). In our procedure of sampling, we selected an approximate equal number of males and females since both sexes were the focus of our study. Figure 2.2 displays a schematic portrayal of how the target samples were taken.

The final sample consisted of 1586 students, 793 males and 793 females, ranging in age from 14 to 24 years. The sample size of the respondents across the studies varies depending on the focus: male, female or both sexes. The actual sample for the specific studies is described in more detail in each consecutive empirical study, presented in Chapters 3-7.

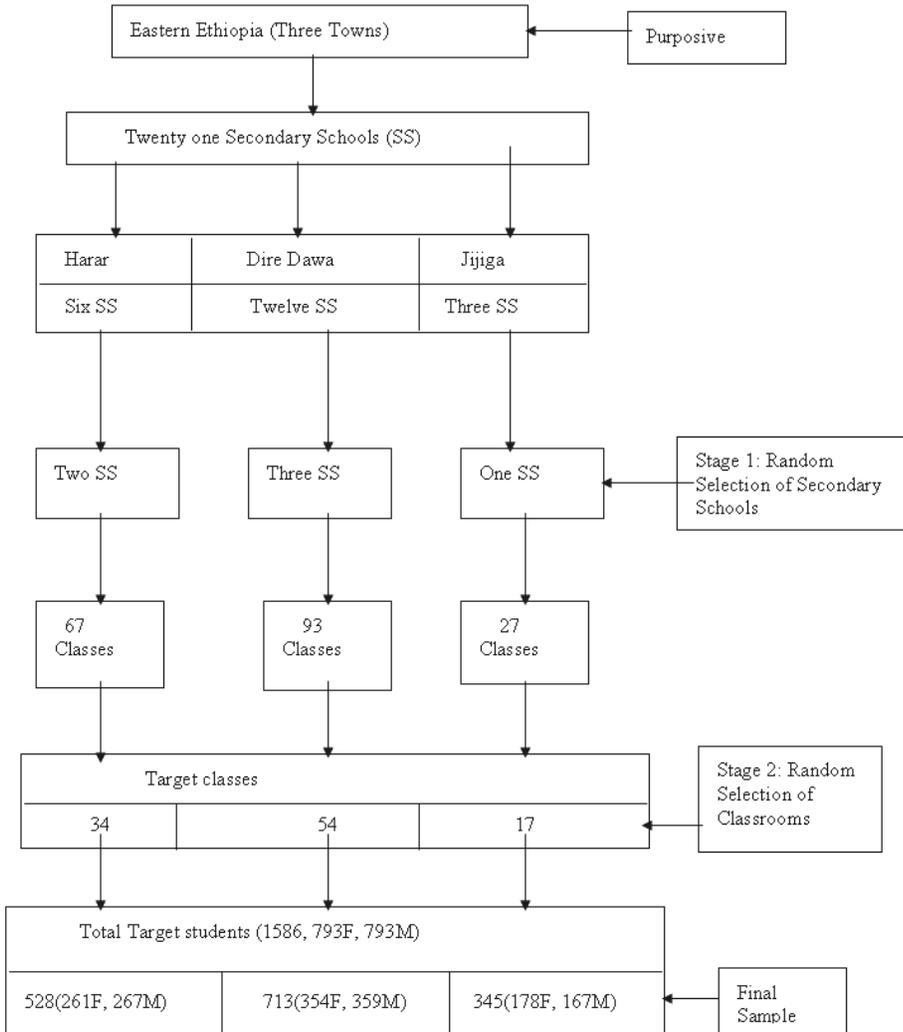
Pre-testing

The questionnaire was pre-tested on 70 (38F, 32M) students. The pre-testing was done in Haramaya Comprehensive Secondary School in November 2008. Haramaya Comprehensive Secondary School is found in the town of Haramaya, situated 20 km away from Harar adjacent to the main road to Dire Dawa. The pre-testing of the questionnaire was undertaken by two teachers (1F, 1M) and the author of this dissertation. Teachers were given a half day briefing on the objectives of the study, the nature of the questionnaire, on how to respond to students' questions and on the role of the students while filling in the

questionnaire. At the beginning of the administration of the questionnaire, the students were informed to write down substitute word/s of their own in case they felt the word or phrase was not suitable or was difficult to understand. The questionnaires were administered to males and females in separate classrooms. The comments made by the students were incorporated into the final version of the questionnaire.

Figure 2.2

Schematic portrayal of target sample selection



Instruments

The study used questionnaire, interview and focus group discussion assessment techniques to gather data. The self-report questionnaire was used to gather quantitative data to generate prevalence of sexual violence, perpetrator and victim types, and to measure risk and protective factors along with demographic characteristics. The interviews and focus group discussions were used to gather qualitative information to be used as a context in explaining the quantitative information on issues of sexual violence victimization. The original items of the instruments were all in English. They were translated into Amharic in a way that fit the cultural background of the area, maintaining contextual meaning. Specific details concerning the concepts measured and instruments used are presented in detail in chapters 3 through 7 where the empirical studies are presented.

Method of Analysis

Both descriptive and multivariate analyses are used in this dissertation. The multivariate analyses included MANOVAs, cluster analysis, discriminant analysis and regression. All analyses were conducted using SPSS 16.0. Detailed information concerning the specific analyses used per research question is presented in the respective study chapters.

Ethical considerations

The self-report questionnaire, interview and focus group discussion items were first examined and approved by Department of Psychology, Utrecht University, The Netherlands. These measures then translated to Amharic language by three assistant professors from Haramaya University and the author of this dissertation. The translators were all native speakers of Amharic, were Ethiopian and had lived in eastern Ethiopia for more than ten years; thus they were familiar with the cultural background of the region in the translations of the items.

The administrations of the actual study questionnaire, FGDs and Interviews were performed after getting approval from respective education bureaus' and schools' officials of the regions. Following this, informed verbal consent was obtained from all participants before the administration of the questionnaire, FGDs and interview (Gorfu & Demsse, 2007; Kebede et al., 2005). The participants filling the questionnaire were informed that they were entitled to skip item/s or even totally decline from filling the questionnaire if they wished. The questionnaires were completed anonymously and no real names are used when reporting results from the interviews or focus groups. Because the questionnaires were anonymous, no referral for help or assistance was made to any female that reported

any form of victimization. The participants were also informed that their response will be kept confidential and analyses of the data will only be done on an aggregate sample level.

The administration of the questionnaire was conducted in classrooms and halls with the help of 14 teachers and four supervisors. Males and females completed the questionnaire in separate classrooms. The administration of the questionnaire lasted on average 2 hours. The FGDs were held in classrooms and were conducted in single-sex groups for the adolescents. Interviews were held in private offices. On average one FGD session lasted 40 minutes and one interview session lasted 25 minutes.

CHAPTER 3

Prevalence and Patterns of Sexual Violence Perpetration among Male Secondary School Students in Eastern Ethiopia¹

¹ Submitted to: Ethiopian e-Journal for Research and Innovation Foresight (Ee-JRIF)

Abstract

A limited number of investigations have examined the prevalence and patterns of sexual violence perpetration in Africa. Using a random sample of 774 Eastern Ethiopia male secondary school students, we found that 70% reported perpetration of at least one instance of sexual violence. When specific forms of sexual violence were examined, about 56% of the young men perpetrated a sexual offense (unwanted sexual comments, jokes, discussions), 62% perpetrated sexual assault (unwanted touching, kissing, petting), 38% committed sexual coercion (unwanted sexual intercourse through verbal manipulation or psychological pressure), and 23% perpetrated sexual aggression (physically forced sexual intercourse). More than half of the young men who report penetrative forms of sexual violence perpetration have never used a condom during intercourse. These results indicate that there is a high incidence of violent and unsafe sexual activity among Ethiopian youth that needs to be addressed. We suggest raising young men's awareness on developing responsible sexual behaviour: abstinence, condom use, and respecting partner's decision, and by educating young men and women about the negative consequences of sexual victimization on young women through integrating such information into the schools' biology, and civics and ethical education curricula and co-curricular programs.

Introduction

Sexual violence, unfortunately, fairly often occurs in intimate relationships among adolescents and young people (Serquina-Ramiro, 2005; Wubs et al., 2009). In addition, when coercive sexual tactics are used they are often accompanied by other unsafe sexual practices such as lack of condom use (Hoffman, O'Sullivan, Harrison, Dolezal, & Monroe-Wise, 2006; Howard & Wang, 2005) exposing young people to unwanted pregnancies, sexually transmitted disease and HIV/AIDS (Pettifor, Measham, Rees, & Padian, 2004; Reza et al., 2009). Such sexual practices have also been documented as one route to fueling the spread of HIV/AIDS among African youth (Dunkle et al., 2004; Pettifor et al., 2004) including Ethiopia (Dibaba, 2007; Molla, Ismail, Kumie, & Kebede, 2002; Worku & Addisie, 2002). Thus, it appears significant to study the prevalence and patterns of sexual violence perpetration among adolescents and young people.

Sexual violence perpetration is any act of unwanted sexual behaviour ranging from unwanted verbal comments (making unwanted sexual expressions, jokes, discussions) through unwanted bodily contacts (fondling, kissing, petting) to sexual intercourse perpetrated by a man on a woman (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). DeGue and DiLillo (2005) classified these unwanted sexual behaviours into four categories: sexual offense, sexual coercion, sexual assault, and sexual aggression. These categories are based on the nature of the sexual act itself (ranging from verbal to physical contact (non-coital) to sexual intercourse) and the tactics used to obtain the desired sexual act (verbal, psychological and/or physical coercion). Sexual offense is defined as perpetrating unwanted verbal manipulation or psychological pressure for sexual activity that does not include intercourse. Sexual coercion refers to perpetrating unwanted sexual intercourse through the use of verbal manipulation or psychological pressure. Sexual assault is defined as perpetrating physically forced unwanted bodily contact including touching, kissing, forced undressing and petting (but no sexual intercourse). Sexual aggression is referred to as perpetrating unwanted sexual intercourse through the use of physical force (DeGue & DiLillo, 2005). We use these four categories of sexual violence to discuss what is known about these practices worldwide generally and to extend this knowledge to the Ethiopian context specifically.

Prevalence of Sexual Violence

Prevalence worldwide. The prevalence of sexual violence acts varies depending on the nature of the unwanted sexual behaviour studied. Reports of sexual offense perpetration are common and range from 44% to 72% (Fineran & Bennett, 1999; Maxwell, Robinson, & Post, 2003). Sexual assault perpetration varies widely ranging from 9% to 55% (Fineran & Bennett, 1999; Ullman, Karabatsos, & Koss, 1999; Sipsma, Isabel,

Cerrato, & Everaerd, 2000; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003). Sexual coercion occurs less frequently but still ranges from 6% to 32% (Chan, Straus, Brownridge, Tiwari, & Leung, 2008; DeGue & DiLillo, 2004; Maxwell et al., 2003; Raj et al., 2006; Sipsma et al., 2000; Zawacki et al., 2003). Sexual aggression perpetration is not much lower than sexual coercion and ranges from 5% to 25% (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Raj et al., 2006; Ullman et al., 1999; Zawacki et al., 2003). These data show a high prevalence of the four categories of sexual violence, and point to interesting conclusions, such as the fact that unwanted penetrative sex through non-physical means is more prevalent than unwanted penetrative sex through physical means.

Prevalence in Africa. The majority of research on sexual violence in Africa is done from female reports on sexual violence victimization, with only a handful of studies using male reports on violence perpetration (Abrahams, Jewkes, Hoffman, & Laubsher, 2004; Jewkes et al., 2006; Magojo & Collings, 2003; Philpart, Goshu, Gelaye, Williams, & Berhane, 2009; Wubs et al., 2009). The African continent, however, possesses a deep rooted culture of male dominance and a strong sense of sexual entitlement of men over women (Erulkar, 2004; Jewkes & Abrahams, 2002; Philpart et al., 2009; Wubs et al., 2009). This calls for research to document evidence on how males regard their unwanted sexual behaviours against females. In line with this, we have summarized the few investigations on sexual violence perpetration in the African setting to give insight on the existing status. We first report on male perpetration rates and then follow with female victimization rates.

Most studies reporting on male sexual violence perpetration have been conducted in South Africa. Magojo and Colling's (2003) study on 446 male secondary school students aged 16 to 26 years from the Durban area found a 66.8% lifetime perpetration rate of any form of sexual violence. They further indicated that 16.6%, 27.4% and 8% of the young men have perpetrated unwanted sexually abusive language (sexual offense), unwanted sexual body contacts (sexual assault) and forced sexual intercourse (sexual aggression) respectively. Jewkes et al.'s (2006) investigation of 1370 rural young men aged 15 to 26 years from the Eastern Cape provinces reported a 16.3% perpetration rate of rape against non-partners and an 8.4% prevalence of rape with intimate partners. About 44.3% of those men who raped their intimate partners have also raped a non-partner. A study by Abrahams et al. (2004) among 1368 working men aged 20 to 50 years from Cape Town found that 15.3% reported perpetration of any form of sexual violence against intimate partners in the past 10 years. Also in that study 7.1% and 8.2% of the total sample have perpetrated forced sexual intercourse and attempted rape respectively, towards their intimate partner. In a

comparative study of dating violence in South Africa and Tanzania, a somewhat higher prevalence of forced sexual intercourse perpetration was documented in both countries compared to prior studies. Wubs et al. (2009) investigated 1860 males aged 10 to 18 years from Cape Town, 1483 males from Mankweng, South Africa and 367 adolescent males from Dar es Salaam, Tanzania, and found forced sexual intercourse perpetration rates of 11.4% in Cape Town, 14.3% in Mankweng and 22.9% in Dar es Salaam. As it is found worldwide and in Africa, the most severe form of sexual violence (forced sexual intercourse) appears to be low in frequency compared with forcing sexual contact.

Reports on female sexual violence victimization include a number of additional African nations and indicate more variability in rates. For example, the percentage of adolescent females aged 12-19 years old that have experienced forced sexual intercourse, is 38 percent in Malawi, 30 percent in Ghana, 23 percent in Uganda and 15 percent in Burkina Faso (Moore, Awusabo-Asare, Madise, John-Langba, & Kumi-Kyereme, 2007). Notably there is a high and somewhat consistent percentage of girls who experienced forced sexual intercourse initiation: 33% among South African adolescents (Jewkes & Abrahams, 2002) and 37% among 12 to 25 year olds in Cameroon (Rwenge, 2000).

Prevalence in Ethiopia. Male sexual violence perpetration is rarely investigated in Ethiopia. One notable exception is a recent study by Philpart et al. (2009) that was conducted among 1,378 male undergraduate college students from Awassa in southern Ethiopia. Sexual violence perpetration in the past academic year against an intimate partner or non-partner was reported by 17% of their sample. About 12.9% of the young men have reported unwanted sexual touching (sexual assault), 4.6% reported having perpetrated attempted rape and 3.2% of the men reported having raped (sexual aggression) their intimate partner or non-partner in that same time period. No reports on lifetime prevalence of perpetration were given.

Several other studies on sexual violence in Ethiopia have focused on female sexual violence victimization. Sexual violence victimization among Ethiopian adolescent girls ranged from 5.4% to 74%, depending on the type of act ranging from unwanted sexual comments and sexual body contact to forced sexual intercourse. The prevalence of forced sexual initiation among high school girls is somewhat low compared with the findings of other African countries but varies widely. For example, Gorfu and Demsse (2007) reported 5.4% forced first-sexual-intercourse victimization among 1118 female secondary school students aged 16 to 25 from the Jimma area in south-western Ethiopia. Worku and Addisie (2002) found that 7% of their sample experienced forced sexual initiation among 216 female secondary school students aged 12 to 21 years from the Debark district in north-western Ethiopia. However, Molla et al. (2002) reported 43% forced sexual initiation

among 654 female street adolescents aged 10 to 24 years in Addis Ababa (central Ethiopia).

When examining other forms of sexual violence a wide range and generally high levels are reported by Ethiopian females. Worku and Addisie (2002) have found 141 (65.3%) episodes of sexual violence victimization among female secondary school students with 8.8% of their sample ever experiencing physically forced sexual intercourse (rape). Gorfu and Demisse (2007) found lifetime prevalence rates of 43% for unwanted sexual bodily contact (sexual assault), 33% for offensive sexual language or comments (sexual offense) and 7.7% for physically forced sexual intercourse (sexual aggression) among female secondary school students. Mulugeta, Kassaye, and Berhane (1998) study in central Ethiopia- Addis Ababa and western Showa, found lifetime prevalence rates of 74% for sexual harassment (sexual offense), 10% for attempted rape and 5% for rape (sexual aggression) among 1401 female secondary school students aged 12 to 23 years.

In a community and college student sample of young females, a different proportion of sexual violence victimization was reported. In a community sample of 588 females aged 15 to 24 years, Dibaba (2007) reported a lifetime prevalence rate of 15.3% for forced sexual intercourse (sexual aggression) victimization in the Jimma area in southwestern Ethiopia. In a similar setting and location in Nekemte town, Garoma, Belachew, and Wondafrash (2007) found a 15.8% lifetime prevalence rate for forced sexual intercourse victimization among 641 females aged 10 to 24 years. Arnold, Gelaye, Goshu, Berhane, and Williams (2008) found lifetime prevalence rates of 54.9% for sexual violence victimization and 13.3% for forced sexual intercourse among 1330 female college students from Awassa in southern Ethiopia. In the past year, 33.3% of the sample experienced sexual violence victimization and 6.1% experienced forced sexual intercourse.

In sum, the prevalence of sexual violence across the studies reviewed above varies depending on the perspective examined. The incidence of sexual violence was assessed at sexual initiation, within the past year, and within the past 10 years, and over the lifetime. It also varied depending on the geographic coverage i.e., the specific site, region or nation studied with most research conducted in South Africa. In Ethiopian studies, sexual violence/victimization has mostly been investigated in central or western regions. It also varied based on the whole continuum of sexual violence versus the specific forms of sexual violence. There are a limited number of studies that have focused on sexual violence perpetration from a male perspective in Africa and that there is only one study to date that reports on male sexual violence perpetration in Ethiopia. Thus, it is important to examine the prevalence of sexual violence perpetration, including a wide range of acts, with a sharpened perspective on the Ethiopian setting.

Present Study

Sexual violence became a research agenda in Africa just a decade ago (Mulugeta et al., 1998; Wood & Jewkes, 1997). However, perpetration of sexual violence reported by males against females is the least investigated on the continent (Abrahams et al., 2004; Jewkes et al., 2006; Magojo & Collings, 2003; Philpart et al., 2009; Wubs et al., 2009). Hence, very little is known about the prevalence and patterns of sexual violence and its different forms both in Ethiopia and Africa (Abrahams et al., 2004; Philpart et al., 2009). While female reports are useful for investigating the extent of the problem for females, they fail to identify the percentage of males that are actually perpetrating the violence. According to the investigations so far, men are the primary perpetrators of sexual violence against women in Ethiopia (Philpart et al., 2009; Worku & Addisie, 2002). Hence, investigation on the prevalence and patterns of sexual violence perpetration and its different forms from a male perspective can be useful for the design of specific prevention strategies to address the perpetrators. This, in turn, helps to minimize the burden of sexual violence victimization experienced by young women.

The purpose of the present study is to investigate the prevalence and patterns of sexual violence perpetration and its different forms as reported by male Eastern Ethiopia secondary school students. It also aims to inform intervention strategies based on the findings.

Method

Participants

The participants of the study were male secondary school students in the towns of Dire Dawa, Harar, and Jijiga in Eastern Ethiopia. Twelve secondary schools in Dire Dawa, six in Harar and three in Jijiga were operational in the year 2008/2009. The twenty one schools have 21,393 (7,896 female, 13,497 male) students. Six schools were randomly drawn from the twenty one schools. The six schools have a total of 12,337 (4,669 female, 7,668 male) students. Based on power calculations, a random sample of over 10% of the male students (793) ranging in age 14 to 24 years was targeted for the present study. After a slight drop-out, the final sample consisted of 352 (45.5%) male students from Dire Dawa, 261 (33.7%) from Harar and 161 (20.8%) from Jijiga. The mean age of the research participants was 17.17 years with a standard deviation of 1.85. The majority 471 (60.9%) of the study participants were under 18 years.

Procedure

The participants were chosen through a multistage sampling technique. In the multistage sampling, six schools (three from Dire Dawa, two from Harar and one from Jijiga) were randomly drawn from the twenty-one schools of the three towns. Out of 187 total classes of the six schools 105 classes were taken via a non-proportional to size allocation technique. This was done in order to ensure a reasonable number of students from all grades even though there were fewer students in grades 11 and 12 (preparatory grades for university education). Then, a simple random sampling technique was used to select the target classes and students from each class. All participants in the target sample completed the questionnaire prepared in the Amharic language. The original items of the questionnaire were all in English. They were translated into Amharic in a way that fit the cultural background of the area, maintaining contextual meaning. Three assistant professors from Haramaya University (Eastern Ethiopia) and the first author were involved with the translation. The questionnaire was first translated to Amharic language and back translated to English to maintain the original meaning of the questionnaire. Following this, the translated questionnaire was pre-tested on 32 male secondary school students (not part of the larger sample). The comments from the students on the wording of the questions were incorporated into the final version of the survey.

The administration of the questionnaire was performed after getting approval from respective education bureaus and school officials. Following this, informed verbal consent was obtained from all participants before the administration of the questionnaire (Gorfu & Demsse, 2007; Kebede et al., 2005). The participants were also told that they could skip item/s or totally decline from filling in the questionnaire if they wanted. The administration was conducted in classrooms and halls with the help of seven teachers and two supervisors. The administration of the questionnaire lasted on average 40 minutes.

The total response rate of the study was 98% (774 out of 793), 14 males declined from completing the questionnaire at the outset and 5 males did not complete all parts of the questionnaire. The anonymity of the survey instrument, the face-to-face administration of the questionnaire in quiet and conducive rooms, a detailed explanation on the purpose and use of the results of the survey, along with free soft drinks provided at the middle of the survey session might have contributed to this high response rate.

Measures

Sexual Activity and Violence

Sexual violence perpetration was measured through 21 items adapted from Koss and Gidycz (1985) and Koss and Oros (1982). The items are answered in a yes or no type response. Seventeen of the items were on the young men's female school friends; two

items were on a girlfriend, one on a young woman in the neighbourhood, and one on an acquaintance young woman. The items on girlfriend, neighbour and acquaintance were to get additional information on perpetration other than school female friends. The prevalence of sexual violence perpetration ranged along a continuum from acts such as making unwanted sexual comments, jokes, embracing and having sexual intercourse through the use of physical forces. The items on the scale were categorized into four subscales using the classification scheme of DeGue and DiLillo (2005) for forms of sexual violence: sexual offense, sexual coercion, sexual assault and sexual aggression. Scores on the different forms of sexual violence were obtained by summing the items comprising that respective category. Cronbach's alpha for each scale was adequate, with a = .77 for sexual offense, .68 for sexual coercion, .75 for sexual assault, and .66 for sexual aggression. For descriptive purpose, three additional items were used to assess whether the participants are sexually active or not, and if so the age at which they first had sex and how often they used a condom during sexual intercourse. The item for condom use is rated on five options (never had intercourse, not used condom, used sometimes, many times, and every time). The item is: "How often have you used condom during intercourse?"

Demographic characteristics

Age

Age of the respondents at the time of data collection was used to examine the difference in mean level perpetration of different forms of sexual violence across age categories. We classified the age of the respondents into three groups: 14-15 years, 16 – 18 years, and 19 – 24 years. This grouping was done to approximate the classification of the respondents into middle and late adolescence and early adulthood.

Family Structure

The data on the living arrangement of the respondents was gathered through a single item. Based on the data, the respondents were classified into those living with: a) both parents, b) a single parent, and c) relatives.

Family socio-economic status

The information on perceived family socioeconomic status of the respondents was gathered through two items. The items were rated on a 5-point Likert type scale ranging from (1) very low to (5) very high. The items were: How do you rate your family monthly income in comparison with monthly expenses? How do you rate the socio-economic status of your family in comparison to your neighbour? Cronbach's alpha of the scale was .86. Based on trichotomizing the sample, respondents were classified into poor, average and high socioeconomic status to examine the existence of mean difference in perpetration across the levels (Wubs et al., 2009).

Method of Analysis

The variables were analyzed using descriptive and multivariate statistics. Descriptive analyses were used to show the prevalence of sexual violence perpetration. In the determination of the prevalence of sexual violence perpetration, the scores of the respondents were dichotomized into those who perpetrated at least one sexually violent act and those who did not. We also used cross tabulation to identify the number of individuals who perpetrated more than one form of sexual violence. Multivariate analysis of variance (MANOVA) was run to examine the mean difference on the different forms of sexual violence across age, socio-economic status and family structure. Scheffe post hoc analysis was also run to examine the difference among groups. Scheffe post hoc test was used since the size of the groups are different. All the data were analyzed using SPSS version 16.

Results

Sexual Activity and Violence

Sexual activity and condom use

The proportion of respondents who already started sexual intercourse at the time of data collection was 342 (44.2%) with a mean age of sexual debut of 16.09 years ($SD=2.0$). Of those sexually active, 37 (10.82%) were 14-15 years old when becoming sexually active, 200 (58.48%) were 16-18 years old, and 105 (30.7%) were 19 to 24 years. More than half of the sexually active young men (189, 55.3%) had never used a condom during sexual intercourse. Moreover, only 61 (17.8%) of the sexually active young men reported using condoms every time they had sexual intercourse.

Sexual violence

The overall prevalence of perpetrating one instance of sexual violence among the young men was 70.4%. Table 3.1 shows the frequency and percentage of different instances and forms of sexual violence perpetration.

Forms of sexual violence

Sexual offense

About 56.1% of the young men have perpetrated at least one instance of sexual offense. Out of the instances of sexual offense, 53.6% of the young men have narrated sexual interactions in pornographic film scene, 39.8% unwanted and persistent sexual discussion and 24.9% unwanted telling of sexual jokes. However, only 10.2% of the young men reported using verbal threats to attempt to have sex with their female school friend.

Sexual assault

The majority (62.7%) of the respondents perpetrated some form of sexual assault. Of all the instances of these unwanted physical gestures, 53.6% of the young men have perpetrated unwanted embracing, 47.4% reported fondling, and 28.4% reported kissing.

Table 3.1
Lifetime prevalence rates of sexual violence

Incidence of sexual violence		Perpetrated	Not perpetrated
		Frequency	Frequency
		%	%
Any sexual violence		545	229
		70.4	29.6
Sexual offense		434	340
Made unwanted sexual comments to a female school friend		117	657
Narrated unwanted sexual jokes to a female school friend		193	581
Had an unwanted and persistent sexual discussion with a female school friend		308	466
Narrated unwanted pornographic film sexual acts to a female school friend		415	359
Pressured a female school friend to watch pornographic films		168	606
Pressured a female school friend to drink alcohol		156	618
Threatened a female school friend to have sex (but sex did not occur)		79	695
Sexual Assault		482	292
Fondled a female school friend without her consent		367	407
Embraced a female school friend without her consent		415	359
Kissed a female school friend without her consent		220	554
Attempted to force a female school friend to have sex (but sex did not occur)		75	699
Attempted to force a girlfriend to have sex (but sex did not occur)		205	569
Sexual coercion		295	479
Have had sexual intercourse as a result of persistent sexual discussion with ones female school friend		187	587
Have had sexual intercourse as a result of narrating pornography film to ones female school friend		130	644
Have had sexual intercourse as a result making ones female school friend watch pornography		117	657
Have had sexual intercourse as a result of getting ones female school friend drunk		125	649
Have had sexual intercourse as a result of threatening ones female school friend		56	718
Sexual aggression		177	597
Have had sexual intercourse forcing ones female school friend		53	721
Have had sexual intercourse forcing ones girlfriend		91	683
Have had sexual intercourse forcing young woman in neighbourhood		94	680
Have had sexual intercourse forcing young woman do not know well		63	711

Moreover, 26.5% of the young men have attempted to have sex with their girlfriend using physical means.

Sexual coercion

Penetrative sexual violence was found to be lower than the above non-penetrative sexual violence, although 38% of the young men perpetrated sexual coercion, that is, they used a variety of non-physical means to get women to have sex with them. The tactics used to obtain penetrative sex included unwanted and persistent sexual discussion (24.2%), unwanted pornographic film narration (16.8%), through getting the woman drunk (16.1%), and through making the women watch pornographic films (15%). In addition, 7.2% of the young men have had sexual intercourse as a result of verbal threatening.

Sexual aggression

About 22.9% of the respondents perpetrated sexual aggression. Of all the instances of sexual aggression, 12.1% of the men reported having had sexual intercourse through physical force with young women in their neighbourhood, 11.8% with their girl friend and 6.8% with their female school friend. Moreover, about 8.1% of the young men also reported having forced sexual intercourse with a young woman whom they do not know well (acquaintance).

Table 3.2
Lifetime perpetration rates using two or more forms of sexual violence

Forms of sexual violence perpetration	Perpetration	
	Frequency	%
Sexual offense and sexual assault	342	44.0
Sexual offense and sexual coercion	261	33.7
Sexual offense and sexual aggression	112	14.5
Sexual assault and sexual coercion	275	35.5
Sexual assault and sexual aggression	147	23.4
Sexual coercion and sexual aggression	162	19.0
Sexual offense, sexual assault, and sexual coercion	243	31.4
Sexual assault, sexual coercion and sexual aggression	134	17.3
Sexual offense, sexual assault and sexual aggression	96	12.4
Sexual offense, sexual coercion and sexual aggression	108	13.9
Sexual offense, sexual assault, sexual coercion and sexual aggression	94	12.1

Patterns of Sexual Violence and Condom Use

Table 3.2 shows the distribution of men who have perpetrated two or more forms of sexual violence. As illustrated in Table 3.2, 342 (44%) of the young men have perpetrated at least one instance of sexual offense and sexual assault, 162 (19%) men reported having intercourse with women using coercion and aggression and 94 (12%) of the men perpetrated at least one instance of all four forms of sexual violence: sexual offense, sexual

assault, sexual coercion and sexual aggression. Out of the total sexual coercion and sexual aggression perpetrators, 159 (55%) of the sexual coercion and 107 (56.6%) of sexual aggression perpetrators have never used condom during intercourse.

Forms of sexual violence and demographic characteristics

In order to examine whether sexual violence varied by demographic characteristics a 3 (age) X 3 (family structure) X 3 (SES) multivariate analysis of variance (MANOVA) was conducted across the different forms of sexual violence. Table 3.3 displays mean differences in all forms of sexual violence perpetration across demographic characteristics. A main effect of age was found in all four forms of sexual violence: sexual offense ($F(2, 776) = 20.996, p < .000$), coercion ($F(2, 776) = 12.057, p < .000$), assault ($F(2, 776) = 20.539, p < .000$) and aggression ($F(2, 776) = 9.333, p < .000$). Scheffé post hoc tests have revealed that young adult secondary students (19-24 years) perpetrated significantly more acts of sexual violence than middle (14-15 years) and late adolescents (15-18 years).

There was no significant mean difference among young men with different family structures and perceived socioeconomic status. Moreover, there was no interaction effect found among the demographic characteristics.

Discussion

The purpose of the present investigation was to examine the prevalence of sexual violence perpetration by Eastern Ethiopian male secondary school students. With respect to sexual activity in general, we found that the males reported a mean age of 16 years for their age at first sexual intercourse with some males as young as 14 years old. This average age corresponds with findings in south western Ethiopia, Nekmte (Seme & Wirtu, 2008) and South Africa (Pettifor et al., 2004) and is slightly older than the 15 years reported for Nigeria (Fatusi & Blum, 2008) and the 13 years reported in Kenya (Kabiru & Orpinas, 2009). The proportion of adolescents who already had sexual intercourse was 44%. Out of the sexually active young men, 55% have never used a condom during intercourse. However, lack of or inconsistent condom use among young people is strongly associated with HIV infection (Pettifor et al., 2005). Thus, a sizeable proportion of the young men appear to be exposed to HIV infection because of their unsafe sexual practices.

The prevalence of sexual violence was high and varied in magnitude across the different forms with higher rates for the non-penetrative than for penetrative sexual violence. Accordingly, about 70% of the young men perpetrated at least one instance of sexual violence. Magojo and Colling (2003) have also found 67% prevalence of perpetration of any form of sexual violence among South African male high school students. When specific forms of sexual violence were examined, about 56% of the young

men perpetrated a sexual offense (unwanted sexual comments, jokes, discussions), 62% perpetrated sexual assault (unwanted touching, kissing, petting), 38% committed sexual coercion (unwanted sexual intercourse through verbal manipulation or psychological pressure), and 23% perpetrated sexual aggression (physically forced sexual intercourse). The finding on sexual offense falls within the range of prevalence documented for sexual violence victimization in Ethiopia (Gorfu & Demisse, 2007; Mulugeta et al., 1998). The prevalence of sexual aggression perpetration is also consistent with the finding in Dar es Salaam (Wubs et al., 2009) but higher than other findings in Ethiopia (Philpart et al., 2009) and South Africa (Jewkes et al., 2006; Magojo & Colling, 2003). The finding on sexual assault perpetration is also greater than the previous related finding in Ethiopia (Philpart et al., 2009) and South Africa (Magojo & Colling, 2003). However, there was no related prevalence indication on sexual coercion perpetration (unwanted sexual intercourse through verbal manipulation or psychological pressure) either in Ethiopia or in Africa in both sexual violence perpetration and victimization studies and therefore comparison is not possible. Future investigations need to include questions on sexual coercion in other African settings.

The proportions of prevalence in the perpetration of both non-penetrative (sexual offense and sexual assault) and penetrative sexual violence (sexual coercion and sexual aggression) were higher than the previous findings (e.g., Philpart et al., 2009) in Ethiopia. The reason for the higher proportion of sexual violence perpetration may be linked to the continued existence of a strong sense of male sexual entitlement and a male dominance culture in the determination when and how to have sex in the Ethiopia culture (Gossaye et al., 2003; Philpart et al., 2009; Worku & Addisie, 2002). Our results also seem to be endorsed by the findings from the multi-country study on intimate partner violence conducted by the World Health Organization that found Ethiopia to have the highest (59%) prevalence of women's sexual violence victimization by their partner out of the 11 countries studied (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). Thus, even at younger ages Ethiopian males are already showing high rates of sexual violence.

We have also found a higher proportion of instances of sexual offense and sexual assault than sexual coercion and sexual aggression. The perpetration of intrusive sexual discussion is the most dominant instance of sexual offense, and non-consensual body contact is the most prominent instance of sexual assault. Magojo and Collings (2003) have also found perpetration of unwanted non-penetrative sexual violence more dominant than penetrative forms of sexual violence. The non-penetrative form of sexual violence was viewed as less serious and acceptable among many young people (Katz & Myhr, 2008). In young people's interaction uninvited sexual talks and body contacts might be common

social behaviours. These behaviours, however, may become tactics for obtaining additional sexual behaviours (Katz & Myhr, 2008). For example, 24% of the young men in the present study have perpetrated non-consensual sexual intercourse because of unwanted persistent sexual discussion. Moreover, 17% of the young men have perpetrated sexual intercourse through the use of pornographic films narration. This suggests that young men may use some social contexts to pressure their female school friends to have sexual intercourse. Among young German men, drinking alcohol and ambiguous communication were also used as contexts for having non-consensual sex (Krah'e, Bieneck, & Scheinberger-Olwig, 2007). The perpetration of physically forced sexual intercourse (sexual aggression) is less common than that using social context (e.g., sexual coercion) as tactics to have sexual intercourse in the present study. Physically forced sexual intercourse might also be used by some men, when other options of having sex fail since males' feelings of supremacy in deciding sexual activities in Ethiopia (Gossaye et al., 2003; Philpart et al., 2009) and Africa (Erulkar, 2004; Jewkes & Abrahams, 2002; Wubs et al., 2009) are dominant. Except for the present study, there is no study to date in Africa that has made the distinction between sexual aggression and sexual coercion. Thus, this indicates the need for future studies to establish whether indeed the use of non-physical means is more common than physical force in having sexual intercourse

The proportion of young men who perpetrate different forms of sexual violence decreases as involvement in different forms increases. For example, about 343 (44%) of the young men have perpetrated one act of both sexual offense and sexual assault. Whereas about 243 (31%) of the young men have perpetrated sexual offense, sexual assault and sexual coercion. Moreover, about 94 (12%) of the young men have perpetrated sexual offense, sexual assault, sexual coercion and sexual aggression. This suggests that the majority of the young men are involved in perpetrating either one or two forms of sexual violence. Jewkes et al. (2006) study on South African young men also shows a sharp decline in the proportion of perpetrators who commit multiple kinds of sexual violence as the number of kinds of acts increased. The decline in the proportion of young men involvement is higher when instances move from non-penetrative to penetrative sexual violence. This may also suggest that larger proportion of young men may drop their undesired advance for sexual intercourse if their non-coital advances are not well-received.

Among young men who proceed to penetrative sexual violence perpetration, the majority of sexual coercion (55%) and sexual aggression (56.6%) perpetrators have never used a condom during intercourse. A previous investigation in this regard has found a strong link between perpetration of forced sexual intercourse and lack of condom use during intercourse (Raj et al., 2006). Even among those perpetrators who have claimed to

have used condom, only 50 (17%) of sexual coercion and 27 (14%) of sexual aggression perpetrators have consistently used condoms during intercourse. Thus, this reveals a considerable number of unsafe sexual practices among the perpetrators. As noted previously, unsafe sexual practices during forced sexual intercourse is strongly linked to HIV infection (Lagaa, SchwaÈrtlanderb, Pisanic, Sowd, & Caraeel, 2001; Pettifor et al., 2005).

In the comparison of forms of sexual violence based on demographic characteristics, age significantly differentiated the respondents in perpetration of all forms of sexual violence: sexual offense, sexual assault, sexual coercion and sexual aggression. Young men aged 19 to 24 years reported significantly higher mean perpetration scores in the four forms of sexual violence than those aged 16 to 18 years or 14 to 15 years. Those who are 16 to 18 years also reported significantly higher mean scores on the forms of sexual violence than those who are aged 14 to 15 years, except for sexual aggression. These results indicate that as adolescent males grow older they are more likely to perpetrate more and varied forms of sexual violence. Other research has also found that around 16 years males show a steady increase in sexual violence as they mature. For example, among Spanish youth, the 16 to 17, and 18 to 26 year olds perpetrated more sexually aggressive behaviours on their partner than those aged 15 or below (Muñoz-Rivas, Graña, O'Leary, & González, 2009). These findings suggest that early intervention with males is critical to prevent this increase across the adolescent years.

Surprisingly we found no differences in any form of sexual violence perpetration among students from different family structures or socio-economic levels. This may be because of the pervasive nature of the male dominant culture of the Ethiopian society. This, in turn, might have influenced young men of different family structures and socio-economic statuses to a similar degree.

The present study has some limitations. The study requires the adolescent young men to recall sensitive personal matter which may be influenced by a recall bias or social desirability. The reading comprehension ability of the participants may influence their responses to the questionnaire which in turn may affect the results. The study relies on the honesty of the participants' response but some students may be duplicitous in responding.

Conclusion

We provided a base in the investigation of wide array of behaviours in sexual violence perpetration by delineating four exclusively distinct forms of sexual violence: sexual offense, sexual assault, sexual coercion and sexual aggression. We also were the first to make a distinction between and measure the frequency of sexual coercion and

sexual aggression in an African setting. However, future research across additional samples, regions and age groups is needed to establish the prevalence.

This study has the following implications for intervention in secondary schools of Eastern Ethiopia. Considerable numbers of adolescent and young men are perpetrating sexual offense, sexual assault, sexual coercion and sexual aggression. Given the high rates of victimization, integrating information about sexual violence, its distinct forms and the negative consequences of such behaviour has on victims into schools' biology, and civics and ethical education curricula may contribute to the mitigation of sexual violence. The integration of sexual violence information and its negative consequence into schools' curricula may contribute to the development of responsible sexual behaviour: abstinence, condom use and respecting a partner's decision to say no. It may also help the young men to foresee the negative consequences perpetrating sexual violence have on young women. Moreover, issues on men's socialization respect for opinion of others and free consent can be integrated in the school's co-curricular clubs' activities. This will allow discussions of the issues in small groups, convincing the men to take responsibility for their potentially victimizing behaviours (Berkowitz, 2003). The implementation of such small group discussions on culturally sensitive matters in the schools might facilitate the development of social norms that promote respectful social and sexual relationships. Moreover, those young men who have never perpetrated any forms of sexual violence could also be mobilized to change the attitudes and behaviours of perpetrating young men. Fabiano, Perkins, Berkowitz, Linkenbach, and Stark (2003) have suggested the effectiveness of reducing the occurrence of sexual violence through the involvement of male peers who are opposed to perpetration of sexual violence. They further indicated that peers who oppose sexual violence perpetration can help perpetrating young men in changing their mistaken beliefs that other males have similar positive attitudes towards perpetration of sexual violence.

The majority of sexual coercion and sexual aggression perpetrators have never used a condom during intercourse. This calls school officials to allow discussion on condom issues in school mini-media and school co-curricular clubs as one means of HIV prevention apart from abstinence. Lagaa et al. (2001) have also suggested consistent condom use as a reduction strategy for the prevention of new HIV infection among young people. Just over half (55%) of the study population has never had sexual intercourse. Hence, school sexual reproductive health and HIV prevention clubs can promote delaying the initiation of sexual intercourse as another mechanism to avoid HIV infection among young people. Delaying sexual intercourse to a later age has also been found as one strategy in the prevention of new HIV infection among young people (Lagaa et al., 2001).

On top of these, the expansion of the sexual reproductive health services of the existing Kebele (smallest government administrative structure) youth centres also help young men to develop respectful relationships with their female friends. This could be done by deploying the existing trained peer counsellors to village level to help change the unsafe and undesired sexual attitudes and behaviours of some young men.

CHAPTER 4

Risk Factors for Sexual Violence Perpetration among Male Secondary School Students in Eastern Ethiopia²

² This chapter currently has a revise-resubmit status at the Journal of Sexual Aggression.

Abstract

Few studies have been conducted on sexual violence perpetration in an African context and even fewer have included multiple risk factors simultaneously. Using a random sample of 774 male secondary school students from Eastern Ethiopia, we found multiple sexual partners, frequent pornography and substance use as the leading risk factors for sexual violence perpetration. In addition, narcissism, positive attitude towards sexual violence, violence in the parental home and fearful parental attachment were also significant risk factors. Positive attitudes towards sexual violence enhanced narcissistic young men's perpetration of sexual violence on young women. Neither age, socio-economic status, peer pressure nor dismissive attachment were related to perpetration. School intervention programs need to target multiple risk factors when attempting to reduce sexual violence perpetration.

Introduction

Sexual violence perpetration among peers has become a serious problem in schools and the wider society. It has been recognized as a major concern and problem in secondary schools both nationally (in Ethiopia) (Gorfu & Demisse, 2007; Mulugeta, Kassaye, & Berhane, 1998; Worku & Addisie, 2002) and internationally (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Maxwell, Robinson, & Post, 2003; Krahe, Bieneck, & Moller, 2005). Sexual violence perpetration includes any actions of unwanted sexual behaviours ranging from verbal pressures (unwanted sexual comments, sexual jokes, sexual discussion) through unwanted body contacts (embracing, fondling, kissing, petting) to forced sexual intercourse (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).

Several studies, mainly in developed countries, have found factors related to the individual and/or relationship characteristics as risk factors for sexual violence perpetration (Bushman, Bonacci, Dijk, & Baumeister, 2003; Carr & VanDeusen, 2004; Casey, Beadnell, & Lindhorst, 2009; Maxwell et al., 2003; Schwartz & DeKeseredy, 2000; Vega & Malamuth, 2007). However, few studies have been done on the risk factors for sexual violence perpetration in Africa (Abrahams, Jewkes, Hoffman, & Laubsher, 2004; Jewkes et al., 2006; Magojo & Collings, 2003) including Ethiopia (Philpart, Goshu, Gelaye, Williams, & Berhane, 2009). The present study investigates several risk factors using self report data from the perpetrators' (young men) perspective including variables related to childhood experiences, attitudes, beliefs, behavioral, and situational factors (Casey et al., 2009). Research focused on risk factors that increase men's sexual violence perpetration rather than the victims characteristics is needed in order to develop interventions to effectively reduce the occurrence of sexual violence (Casey, et al, 2009; Loh, Gidycz, Lobo, & Luthra, 2005; Patel, Andrews, Pierre, & Kamat, 2001; Rozee & Koss, 2001).

Sexual violence is caused by multiple factors (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001) and therefore identifying the strongest risk factors is important for making interventions cost effective. However, few studies have focused on multiple risk factors for sexual perpetration (Casey et al., 2009; Vega & Malamuth, 2007; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003) and to date, only one study has done so in Ethiopia (Philpart et al., 2009). The purpose of the present study is, therefore, to investigate multiple risk factors for sexual violence perpetration in an Ethiopian context.

Several factors may contribute to sexual violence perpetration. In the present study we investigate individual and relationship factors which were found in previous investigations across a wide range of cultures to be linked to sexual violence perpetration. In addition, we also investigate whether attitude towards sexual violence (because of its

consistent link to violent behavior) interact with other individual characteristics in strengthening or weakening the link with sexual violence perpetration.

Individual Factors

Attitude

Young men who have a favorable attitude towards sexual violence are more likely to perpetrate sexual violence than those who do not have such an attitude (Carr & VanDeusen, 2004; Magojo & Collings, 2003; Maxwell et al., 2003). Men with such an attitude think of women as unfaithful and desire to control them in relationships (Malamuth, Addison, & Koss, 2000). These men also feel that they are justified in using force in a relationship to assert their dominance (Malamuth, Linz, Heavy, Barnes, & Acker, 1995). Thus, men's hostile and dominant attitude toward women has been consistently found to predict sexual violence perpetration (Hines, 2007; Malamuth et al., 2000; Malamuth et al. 1995; Malamuth, Sockloskie, Koss, & Tanaka, 1991).

Narcissism

The American Psychiatric Association defines narcissism as an exaggerated sense of self-importance/self entitlement, a quest for excessive admiration, a belief that one is special and unique, a lack of empathy and seeking exploitation of others (American Psychiatric Association, 1994). A narcissistic man has an inflated sense of self importance and entitlement which makes it difficult for him to accept sexual refusal from a woman he desires (Bushman et al., 2003). According to narcissistic reactance theory, a narcissistic man who has been refused sex by the woman of his choice exhibits three forms of behaviors (Baumeister, Catanese, & Wallace, 2002). First, the narcissistic man desires the woman much more than before her refusal. Secondly, he does all that he can to negotiate and convince her to have sex with him. Thirdly, if this is not successful, he will forcefully have sexual intercourse with her. The narcissistic man, however, does not become aggressive towards some women (e.g., a virgin girl), who react similarly to other men. He realizes that such women have done the same to other men. The reaction, however, is primarily aggressive towards those women who have accepted other men's sexual requests but has declined his (Baumeister et al., 2002).

This theory has also been confirmed by subsequent research by Bushman et al. (2003) on three independent samples of college male students. In their first study with 405 students, they found that narcissistic men are more likely to have a supportive attitude towards rape than non-narcisctic men. The narcissists are less empathetic to the victim and place much responsibility on the victim. In their second study with 300 students, they found that narcissistics men were more entertained, enjoyed and sexually aroused by watching a filmed depiction of rape, and especially so when the rape scene was preceded

by consensual sexual activities. In their third study with 120 students, they found a negative reaction from narcissistic young men to sexual refusal of a female confederate than other men. Their study showed that the narcissistic young men have more supportive attitude towards sexual violence and feel less empathy to the victims of sexual violence than other men (Bushman et al., 2003).

Taken together, these studies show that narcissistic men are more likely to perpetrate sexual violence towards women and have more favourable attitudes towards sexual violence. In the present investigation we not only examine the main effects of narcissism and attitudes towards sexual violence but also investigate whether these effects moderate each other. That is, we expect that the link between attitudes and behaviour will be stronger for narcissistic men compared to less narcissistic men, because narcissist will be more likely to act on their desires given their higher sense of entitlement.

Risky Behaviors

We included frequent substance and pornography use, and having multiple sexual partners as risky behaviors in this study. These factors were previously found as strong risk factors contributing to sexual violence perpetration (Abbey et al., 2006, Jewkes et al., 2006; Philpart et al., 2009; Vega & Malamuth, 2007).

Substance Use

Substance use among young men has been found by several studies worldwide as a risk factor for sexual violence perpetration (Abbey, BeShears, Clinton-Sherrod, & McAuslan, 2004; Borowsky, Wagman, & Irland, 1997; Philpart et al., 2009). Substance use in Ethiopia was also found to be linked with committing risky sexual behaviours among youth (Kebede et al., 2005). In Ethiopia the most common substances used among young people are khat, shisha and alcohol (Kebede et al., 2005; Meressa, Mossie, & Gelaw, 2009). Khat (*Catha edulis*) is an evergreen leave mainly cultivated in the eastern and southwestern part of Ethiopia. It creates a mild level of stimulation and mood change (Kebede et al., 2005; Philpart et al., 2009). It is used among the youth to enhance excitement and alertness (Meressa et al., 2009). The link between khat chewing and perpetration of sexual violence, however, is the least researched although one study found that khat chewing is significantly associated with sexual violence perpetration (Philpart et al., 2009).

Shisha, traditionally called “Gaya” in Ethiopia, is a sweetened and flavoured substance (tobacco) smoked through a water pipe pot (Anjum, Ahmed, & Ashfaq, 2008). It is commonly smoked among older people. Currently, shisha has become a common accompaniment of khat chewing among young people (Maziak, 2008). Shisha is smoked for pleasure and relaxation (Salameh, Waked, & Aoun, 2008). The social setting and

friendly atmosphere surrounding the use of shisha attracts more young people to get involved (Maziak, 2008). When regularly consumed, however, shisha results in addiction (Anjum et al., 2008; Maziak, 2008). The link between shisha smoking and perpetration of sexual violence has never been investigated.

Alcohol drinking is another form of substance use that has been found to be linked with perpetration of sexual violence in Ethiopia (Philpart et al., 2009) and elsewhere (Abbey et al., 2004; Abbey, McAuslan, & Ross, 1998; Zawacki et al., 2003). Philpart et al. (2009) found that those young men who chew khat and drink alcohol were 3.1 times more likely to perpetrate sexual violence than those who neither chew khat nor drink alcohol. Some young men think that alcohol drinking enhances sexual desire (Abbey et al., 1998; Zawacki et al., 2003). They also think that women who use alcohol enjoy sex and are better at it (George, Stoner, Davis, Lindgren & Norris, 2006), and often dismiss women's cues of unwillingness to have sex. In addition, some men who use alcohol interpret women's friendly or ambiguous cues as signals for sexual interest (Abbey et al., 2004) and may use their misperception as an excuse for their perpetration of sexual violence (Abbey, 2002; Abbey et al., 2004). However, Noel, Maisto, Johnson, and Jackson (2009) and Ullman, Karabatson, and Koss (1999) suggested that frequent substance use (alcohol drinking) contributes to sexual violence perpetration when accompanied by supportive attitude towards sexual violence. Thus, in the present study we not only investigate the direct link between a combined substance use scale (khat, shisha and alcohol), we also investigate whether the link between substance use and sexual violence perpetration is stronger depending on sexual violence attitudes.

Pornographic film consumption

The link between pornographic films consumption and sexual violence perpetration has received mixed support in the literature. An early review by Allen, D'Alessio, and Brezgel (1995) concluded that exposure to both non-violent and violent pornography lead men to develop an increased supportive attitude towards sexual aggression and to increase actual aggression. A recent review by Ferguson and Hartley (2009), however, revealed that exposure to pornographic films does not cause perpetration of sexual aggression may even serve as a means to alleviate sexual aggression. On the other hand, Hald, Malamuth, and Yuen (2010) with their review on non-experimental studies have also shown a significant positive association between pornography consumption and having a supportive attitude towards violence against women. These conflicting findings may be resolved by considering whether it is the combination of attitudes and pornography that contribute to sexual violence perpetration.

Multiple Sexual Partners

Individuals vary in their desire to engage in multiple sexual relations or to be involved with only one close partner. Large numbers of individuals develop intimate and committed relationships before having sexual intercourse. In intimate relationships, the persons involved are concerned about the reactions, feelings, and pleasures of their partner. These individuals are usually called restricted individuals. In this orientation, gratification from having sex is based on the feedback both receive from one another (Malamuth et al., 1995). The unrestricted individuals, on the other hand, are those who start sex early in relationships, have more than one concurrent partner, many one-time sex partners, and foresee many sex partners in the future (Simpson & Gangestad, 1991). They are not concerned about the choice and feelings of their partner (Malamuth et al., 1995). They want to have uncommitted and casual sexual relationships and are more likely to perpetrate sexual violence than those who do not (Jewkes et al., 2006; Maxwell et al., 2003). On the other hand, Malamuth et al. (1991) argued that engagement with multiple sexual partners alone does not necessarily lead to high sexual violence perpetration. Men who engage with multiple sexual partners highly perpetrate sexual violence when they have hostile and dominant attitudes toward women.

Relationship factors

Violent family experience

A childhood with violent family experience has been strongly associated with sexual violence perpetration among young men (Borowsky et al., 1997; Wolf & Foshee, 2003). Compared to their peers who have not witnessed family violence, young men who witnessed parental violence have been found to be 2.3 times more likely to perpetrate sexual violence (Philpart et al., 2009) and 2.7 times more likely to physically abuse their intimate partners (Abraham & Jewkes, 2005). Hence, exposure to such experiences may likely be generalized by the young men as a normal way of interacting in a romantic relationship (Foshee, Bauman, & Linder, 1999; Johnson & Knight, 2000).

Attachment

An insecure parental attachment is also linked with perpetration of sexual violence. Young men who have had both fearful and dismissive parental attachment were more likely to perpetrate sexual violence (Baker, Beech, & Tyson, 2006; Smallbone & Dads, 2000; Stirpe, Abracen, Stermac, & Wilson, 2006). Young men who have fearful attachment desire closeness in their relationship yet are also highly concerned about rejection. They use coercive sexual tactics to control their female friend and thereby minimize the anxiety of being rejected (Feeney, Peterson, Gallois, & Terry, 2000; Malamuth, Feshback, & Jaffe, 1977). On the other hand, those young men with a

dismissive parental attachment avoid close emotional relations and prefer casual sexual relations instead (Schachner & Shaver, 2004). This, in turn, may result in sexual relations with many partners without an intimate and loving relationship (Malamuth et al., 1995) which may also lead to more coercion in the relationship.

Peer pressure

Young men who associate themselves with sexually active peer groups and are easily influenced by them are more likely to commit sexual violence (Schnurr & Lohman, 2008; Schwartz & DeKeseredy, 2000). If the peer group norm encourages skills of sexual conquest, the use of force to have sex on an unwilling female friend may be encouraged (DeKeseredy & Kelly, 1995). Moreover, young men who perceived their friends are using coercive tactics to obtain sex from their partner are more likely to use similar tactics to conform to the peer norm (Berkowitz, 2003). Thus, young men with a strong need for acceptance from their peers may feel pressured to perpetrate sexual violence (Abbey et al., 2006).

Present Investigation

Few studies have investigated sexual violence perpetration from multiple risk factors in the same study, particularly in Africa or Ethiopia. Studying multiple risk factors, however, can help in the identification of the strongest risk factors for sexual violence perpetration. This information, in turn, can help to prioritize risk factors for intervention in countries of limited resources such as Ethiopia. Previous investigation in in-school Ethiopian youth has rated Eastern Ethiopia (the study area) the highest in risk behaviors involvement. Eastern Ethiopia in-school young men have been found to engage in risky behaviors (khat chewing, shisha smoking, having multiple sexual partners) more than Ethiopia's other regions in-school young men (Mitike et al., 2007). Thus, based on the literature reviewed, we aimed to identify the most important risk factors for sexual violence perpetration out of several individual characteristics and relationship factors. We also aimed to investigate whether attitudes toward sexual violence moderated the link between the other individual characteristics (narcicism, pornography and substance use, and having multiple sexual partners) in leading to high levels of sexual violence perpetration.

Method

Participants

Participants were male secondary school students in the towns of Dire Dawa, Harar, and Jijiga in Eastern Ethiopia. Twelve secondary schools in Dire Dawa, six in Harar and three in Jijiga were operational in the year 2008/2009. The twenty one schools have 21,393 (7,896 female, 13,497 male) students. Six schools were randomly drawn from the

twenty one schools. The six schools have a total of 12,337 (4,669 female, 7,668 male) students. Based on power calculations, a random sample of over 10% of the male students (793) ranging in age 14 to 24 years was targeted for the present study. After a slight drop-out, the final sample consisted of 352 (45.5%) male students from Dire Dawa, 261 (33.7%) from Harar and 161 (20.8%) from Jijiga.

Procedure

The participants were chosen through a multistage sampling technique. Six schools (three from Dire Dawa, two from Harar and one from Jijiga) were randomly drawn from the twenty-one schools of the three towns. Out of 187 total classes of the six schools, 105 classes were taken via a non-proportional to size allocation technique. This was done in order to ensure a reasonable number of students from all grades even though there were fewer students in grade 11 and 12 (preparatory grades for university education). Then, a simple random sampling technique was used to select the target classes and students from each class. All participants in the target sample completed the questionnaire prepared in the Amharic language. The original items of the questionnaire were all in English. They were translated into Amharic in a way that fits the cultural background of the area, maintaining contextual meaning. Three assistant professors from Haramaya University (Eastern Ethiopia) and the first author were involved in translating the questionnaire. The questionnaire was first translated to Amharic language and back translated to English to maintain the original meaning of the questionnaire. Following this, the translated questionnaire was pre-tested on 32 male secondary school students (not part of the larger sample). The comments from the students on the wording of the questionnaire were also incorporated into the final version of the survey.

The administration of the questionnaire was performed after getting approval from respective education bureaus' and schools' officials. Following this, informed verbal consent was obtained from all participants before the administration of the questionnaire. The participants were also informed to skip item/s or totally decline from filling the questionnaire if they wanted. The administration was conducted in classrooms and halls with the help of seven teachers and two supervisors. The administration of the questionnaire lasted on average 1 hour and 10 minutes.

The total response rate of the study was 98% (774 out of 793). About 14 males declined from filling the questionnaire on the outset and 5 males did not complete all parts of the questionnaire. The anonymity of the survey instrument, the face to face administration of the questionnaire in quiet and conducive rooms, detailed explanation on the intent and use of the results of the survey, along with soft drink services at the middle of survey session might have contributed to this high response rate.

Measures

Dependent Variable

Sexual violence perpetration was measured through 21 items adapted from Koss and Gidycz (1985) and Koss and Oros (1982). These items had dichotomous, “Yes”, “No” response options. A sample item is “Were there situations where you had sex forcing your female school friend?” The total sexual violence score was calculated by summing the 21 items. Cronbach's alpha of the scale is .89.

Independent Variables

The **current age** of the young men was measured for the analysis. Moreover, perceived **family socio-economic status** was measured with one item:” How do you rate the socio-economic status of your family in comparison to your neighbors?” rated on a 5-point Likert type scale ranging from (1) very low to (5) very high.

Sexual violence attitude was measured through 15 items adapted from Sapp, Farrell, Johnson, and Hitchcock (1999) and Fischer and Chen (1994). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I believe that young men often have forced sex with young and sexy women”. Cronbach's alpha of the scale is .81.

Narcissism was measured through 10 items adapted from Thomaes, Stegge, Bushman, Olthof, and Denissen (2008). The items are rated on a 4-point Likert type scale ranging from (1) not at all true to (4) completely true. A sample item is “I think it is important to stand out.” Cronbach's alpha of the scale is .80.

Risky Behaviors

Risky behaviors were measured through 5 items developed by the authors. Four of the items dealt with the frequency of risky behaviors and are rated on a 6-point Likert type scale ranging from (0) never to (5) every day. The items are: “How often have you chewed khat?”, “How often have you smoked shisha?”, “How often have you drunk alcohol?”, and “How often have you watched pornographic films?” The fifth item is: How many sexual partners have you had since your first sexual intercourse? The first three items: khat chewing, shisha smoking and alcohol drinking were summed to get score on substance use (Banyard, Cross, & Modecki, 2006). Cronbach's alpha of the scale is .76. The fourth (Carr & VanDeusen, 2004) and fifth (Jewkes et al., 2006) items were separately used because they were independently and strongly linked to sexual violence perpetration in past research.

Relationship factors

Peer pressure was measured through 13 items adapted from Santor, Messervey, and Kusumakar (2000). The items are answered in a yes or no type response. A sample item is “I felt coerced to have sex because a lot of my peers have already had sex”. Cronbach's alpha of the scale is .78.

Violent family experience was measured through 3 items adapted from Foshee et al. (1999). The items are rated on a 7-point Likert type scale ranging from (0) never to (6) ten or more times per month. A sample item is “How often have you ever witnessed your father hitting your mother?” Cronbach's alpha of the scale is .78.

Fearful attachment was measured through 4 items adapted from Van Oudenhoven, Hofstra, and Bakker (2003). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I would like to be open to my family but I feel that I cannot trust them”. Cronbach's alpha of the scale is .96.

Dismissive attachment was measured through 4 items adapted from Van Oudenhoven et al. (2003). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “It is important to be independent of my family”. Cronbach's alpha of the scale is .93.

Method of Analysis

Hierarchical regression was used to examine the main and interaction effects the risk factors on sexual violence perpetration. The risk factors were categorized into groups based on their similarity in characteristics. The demographic variable current age and socioeconomic status were entered as control variables on the first step. Sexual violence attitude and narcissism were entered as the second group on step 2. The high risk behaviors of frequent substance and pornography use, and engagement with multiple sexual partners were entered as the third group. Social factors including peer pressure, violent family experience, fearful and dismissive parental attachments were entered as the fourth group. The interaction terms were entered as fifth group. The interactions were obtained by centering all the interacting risk factors (sexual violence attitudes interacted with narcissism, substance use, pornography use and multiple sexual partners) and then running the product term. Centering of the variables was used to minimize multicollinearity. Significant interactions were interpreted using ANOVA plots. All the data were analyzed using SPSS version 16.

Table 4.1

Intercorrelations, mean and standard deviation scores of sexual violence perpetration and the risk factors

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	Mean	SD
Sexual violence perpetration														4.00	4.00
Age of students	.31**													17.17	1.85
socio-economic status	-.04	-.12***												2.68	.75
Sexual violence attitude	.67**	.18**	-.09*											40.60	11.64
Narcissism	.45**	.22**	.02	.46**	-.12**									23.77	5.75
Frequent substance use	.61**	.33**	-.08	.45**	-.03	.32**								2.45	3.21
Frequent pornography use	.58**	.14	.02	.43**	-.07*	.30**	.40**							1.53	1.21
Multiple sexual partners	.76**	.35**	-.03	.66**	-.13**	.41**	.54**	.44**						1.12	1.65
Peer Pressure	.69**	.28**	-.04	.69**	-.07	.49**	.57**	.50**	.64**					5.45	3.05
Violent family experience	.38**	.10**	-.04	.33**	-.02	.20**	.33**	.27**	.32**	.36**				3.52	5.88
Fearful parental attachment	.53**	.22**	.01	.51**	-.11**	.32**	.42**	.32**	.50**	.52**	.26**			9.16	5.34
Dismissive parental attachment	.12**	-.03	-.04	.19**	.01	.12**	.04	.16**	.15**	.14**	.04	.17**		15.52	4.85

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

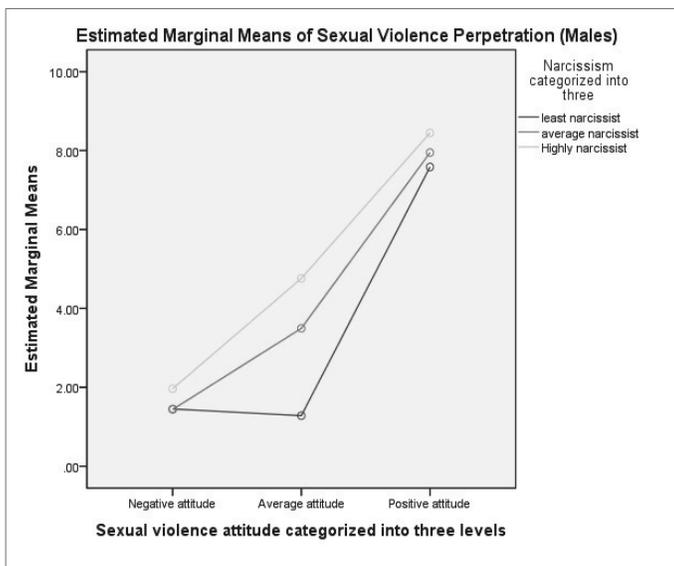
Results

Regression Results

Zero-order correlations between the variables used in the regression are presented in Table 4.1. Most of the risk factors were significantly related to sexual violence perpetration. Tests revealed that both multicollinearity and outliers were not problematic. Out of the five hierarchical entries into the hierarchical regression model, attitude and narcissism altogether accounted for 41.4% ($F(4, 767)=195.29, p<.000$), risky behaviors 21% ($F(7, 767)=273.93, p<.000$), age and socio-economic status 9.2% ($F(2, 767)=38.71, p<.000$), relationship factors 1% ($F(11, 767)=181.93, p<.000$), and interaction effects .5% ($F(15, 767)=136.11, p<.000$) of the variability in sexual violence perpetration. All the risk factors in combination accounted for 72.5% ($adj.R^2=.725, p<.008$) of the variability in sexual violence perpetration. The results are presented in Table 4.2.

Figure 4.1

The association of narcissism with sexual violence perpetration as a function sexual violence attitude



Sexual violence perpetration, and individual and relationship factors

Engagement with multiple sexual partners ($\beta = .39, p<.000$); frequent pornography ($\beta = .22, p<.000$) and substances use ($\beta = .18, p<.000$) were strongly and significantly associated with sexual violence perpetration. Supportive attitude toward sexual violence ($\beta = .13, p=.000$) and narcissism ($\beta = .07, p=.002$) were also significantly associated with sexual violence perpetration. The young men's current age and perceived family

socioeconomic status were not significantly related with sexual violence perpetration. With regard to relationship factors, violent family experience ($\beta = .04, p = .033$), and fearful parental attachment ($\beta = .07, p = .004$) were significantly linked with sexual violence perpetration. However, peer pressure and dismissive parental attachment did not show significant association with sexual violence perpetration.

Interactions

As the interactions of the risk factors depict, sexual violence attitude significantly interacted with narcissism ($\beta = .09, \Delta R^2 = .015, p < .000$) but not substance use, pornography use nor multiple partners. Young men who are highly narcissist and with supportive attitude towards sexual violence reported higher sexual violence perpetration score (mean value from 9 to 10) than those who are highly narcissist but with negative attitude towards sexual violence (mean value from 6 to 7). Figure 4.1 shows the association of narcissism with sexual violence perpetration as a function of sexual violence attitude. For men with low levels of narcissism, high levels of sexual violence are found only when they endorse violence against women.

Table 4.2
Results from Hierarchical regression analyses predicting Sexual Violence Perpetration (Males) from risk factors and interaction effects.

Factors	Sexual Violence Perpetration (Males)		
	Adjusted R2	R2 Change	Beta
Model 1	.090	.092	
Age			.30***
SES			.00
Model 2	.503	.414	
Age			.17***
SES			.03
Sexual violence attitude			.58***
Narcissism			.15***
Model 3	.714	.210	
Age			.03
SES			.01
Sexual violence attitude			.20***
Narcissism			.07**
Frequent substance use			.20***
Frequent Pornography use			.23***
Multiple sexual partners			.38***

Model 4	.722	.010	
Age			.02
SES			.00
Sexual violence attitude			.15***
Narcissism			.06*
Frequent substance use			.16***
Frequent Pornography use			.21***
Multiple sexual partners			.36***
Peer Pressure			.08**
Violent family experience			.05*
Fearful parental attachment			.07**
Dismissive parental attachment			-.03
Model 5	.725	.005	
Age			-.01
SES			.00
Sexual violence attitude			.13***
Narcissism			.07**
Frequent substance use			.18***
Frequent Pornography use			.22***
Multiple sexual partners			.39***
Peer Pressure			.06
Violent family experience			.04*
Fearful parental attachment			.07**
Dismissive parental attachment			-.04
Pornography * sexual violence attitude			.02
Multiple sex partners* sexual violence attitude			-.03
Substance use* sexual violence attitude			.02
Narcissism* sexual violence attitude			.07***

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

Discussion

Using a random sample of male secondary school students in Eastern Ethiopia, we investigated known individual and relationship factors that were linked with sexual violence perpetration in other research. Through multivariate analysis, we found that having multiple sexual partners, frequent pornography and substance use are the strongest risk factors for sexual violence perpetration. We also found that a supportive attitude towards sexual violence and narcissism were significantly associated with sexual violence perpetration and these two factors interacted with each other with the highest levels of sexual violence occurring among men who highly narcissistic and who endorse sexual violence against women. The relationship factors like violent family experience and fearful parental attachment were also significantly associated with sexual violence perpetration.

Having multiple sexual partners was the strongest risk factor for sexual violence perpetration of all the risk factors. Jewkes et al. (2006) have also found having multiple

sexual partners as the strongest risk factor for sexual violence perpetration. Their finding further suggested that young men who engage with multiple sexual partners are more likely to perpetrate sexual violence since they lack the emotional intimacy for having consensual relationship. Malamuth et al. (1995) also argued that young men who engage with multiple sexual partners are not concerned with the choice and feelings of their partners. They further suggested that they want to have uncommitted and casual sexual relationships. Contrary to the findings of Malamuth and colleagues we did not find that this link was moderated (strengthened) by attitudes towards sexual violence.

Frequent pornography use was the second strongest risk factor linked with sexual violence perpetration confirming the results of Carr and VanDeusen (2004), and Vega and Malamuth (2007) that found pornography as a strong risk factor for perpetration of sexual violence. Contrary to expectations, a positive attitude towards sexual violence did not enhance the level of sexual violence perpetration among frequent pornographic film consumers, thereby not confirming the results of Seto, Maric, and Barbaree (2001). It could be that pornographic video viewing in an Ethiopian context may have a stronger impact on youth than elsewhere. This could be because either the nature of the pornography itself may be different (more or less hard core) and how it is used (viewed individually or viewed in groups) that is linked with this effect. Additional research is needed to clarify this effect.

Substance use was found as the third most significant risk factor for sexual violence perpetration and confirms previous findings on this link among Ethiopia youth (Philpart et al., 2009) as well as in other samples. However, all young men who frequently use substance may not perpetrate high levels sexual violence unless accompanied by the predisposition towards sexual violence (Noel et al., 2009; Ullman et al., 1999). The interaction analysis between sexual violence attitude and substance use in the present study, however, did not show significant results. This may be because all the frequent substance users may hold male dominant views towards sexual relationships (Gossaye et al., 2003). Young men who use substances frequently also interpret the young women behaviors as per their own expectations (Zawacki et al., 2003). These young men believe that alcohol drinking increase sexual desire (Abbey et al., 1998; Zawacki et al., 2003) and may misperceive women's friendly behavior as sexual. Thus, they may perpetrate sexual violence considering their substance consumption as an excuse for their victimizing behavior (Abbey et al., 2004). Those frequent substance users may also base on coercive sexual fantasy in their sexual relation with their partner which ultimately lead to perpetration of non-consensual intercourse (Drieschner & Lange, 1999; Malamuth et al., 2000).

Supportive attitudes towards sexual violence (Carr & VanDeusen, 2004; Magojo & Collings, 2003; Maxwell et al., 2003) and narcissism (exaggerated feeling of entitlement) (Bushman et al., 2003) were significantly associated with sexual violence perpetration. Moreover, there was a significant interaction between these two factors. Men who were high on narcissism had strong links between attitudes towards violence and sexual perpetration. Young men with supportive attitude towards sexual violence most often hold male dominant view in the determination of when and how to have intercourse (DeGue & DiLillo, 2004) and when combined with narcissistic traits may be more likely to perpetrate more extreme forms of sexual violence, including forced intercourse (Baumeister et al., 2002). Thus, supportive attitude towards sexual violence may enhance highly narcissistic men's perpetration of sexual violence.

Early childhood family experience is also related to sexual violence perpetration. Those young men who have had violent family experience reported higher levels of sexual violence than those who did not. Studies made in southern Ethiopia (Philpart et al., 2009), and in South Africa (Abrahams & Jewkes, 2005) have also shown that witnessing parental violence contributes to sexual violence perpetration. Those young men who have been exposed to violent family experience may learn that the use of force in relationship as an acceptable behavior of dealing with romantic partner (Foshee et al., 1999; Johnson & Knight, 2000). In addition, fearful parental attachment was also found to be positively linked with sexual violence perpetration confirming results found in Western cultures (Feeney et al., 2000; Smallbone & Dads, 2000, Stirpe et al., 2006). Contrary to our expectations we did not find that dismissive parental attachment was linked to sexual violence perpetration. With respect to the remaining variables we did not find peer pressure, current age and socioeconomic status to be associated with sexual violence perpetration.

Our findings, however, need to be interpreted with some limitations in mind. The study was a cross sectional study design and temporal relationships among the variables are difficult to establish. Future longitudinal research in the area can establish the temporal relationship of the variables involved. In addition, the measures required the students to recall their experience with sexual violence; hence there may be recall bias or a social desirability effect. Our study used single-item assessments of risky behaviors.

Conclusion

The present research investigated several individual and social risk factors in relation to sexual violence perpetration and used multivariate analyses that consider the effects of several variables simultaneously. Despite adding a number of variables to the model almost all risk factors were still significant. Having multiple sexual partners,

frequent pornography use and substance use were the strongest risk factors for sexual violence perpetration. We also found that positive attitudes towards sexual violence enhanced narcissistic young men's perpetration of sexual violence on young women.

Interventions, therefore, should focus on integrating several of these factors into curricular and co-curricular programs of the schools. School curricula like biology, and civics and ethical education (have topics on learned behaviors, responsible behaviors, and HIV/AIDS prevention) could be used to integrate the risk factors. Schools can also use anti-AIDS and sexual reproductive health clubs to initiate small group discussion among students on the link between substance use, pornography consumption and multiple sexual partners and their contribution to sexual violence perpetration. Such initiatives may help the young men to discern appropriate from inappropriate sexual relationships and how involvement in risky behaviors largely contribute to inappropriate sexual behaviors. Abbey et al. (2006) have suggested conducting school educational programs on appropriate attitudes and behaviors in relationships and sexual intimacy to mitigate sexual violence.

CHAPTER 5

Sexual Violence Victimization among Female Secondary School Students in Eastern Ethiopia³

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Abstract

Behavioral, life style and relationship factors have all been identified as risk factors that increase a woman's vulnerability to sexual violence victimization. However, it remains unclear which risk factors most strongly increase young women's vulnerability to sexual violence victimization since most studies only examine a few factors simultaneously. Using a cross-sectional sample of 764 female secondary school students from eastern Ethiopia, multivariate analyses revealed that high rejection sensitivity, having multiple sexual partners, the frequent watching of pornography and use of alcohol or other soft drugs (Khat or shisha) are factors associated with higher levels of sexual violence victimization. The overall rates of victimization is high in this group with 68% of the young women studied having experienced at least one instance of sexual violence victimization. Based on type of sexual perpetration, 52% of the young women were victimized by at least one instance of sexual offense, 56% by sexual assault, 25% by sexual coercion and 15% by sexual aggression. Qualitative data gathered from interviews of co-curricular club members and school officials and focus group discussion with students were used to further augment and illustrate results from the quantitative data. Several suggestions for intervention are presented in light of these results.

Introduction

Adolescence and young adulthood are the periods in which more than 50% of the sexual violence towards women occurs (Molla, Ismail, Kumei, & Kebede, 2002; Mulugeta, Kassaye, & Berhane, 1998; Tjaden & Thoennes, 2000). Sexual violence victimization refers to experiencing any sexual acts ranging from unwanted verbal comments, nonverbal behaviors and actions to sexual intercourse through the use of psychological intimidation or physical force (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). The majority of sexual violence victimizations among young women occurs in friendly and acquainted relationships with peers (Dibaba, 2007; Forke, Myers, Cattalozzi, & Schwarz, 2008; Tjaden & Thoennes, 2000). Potentially perpetrating young men exploit young women's behavioral, lifestyle and relationship vulnerabilities to commit sexual violence victimization (Impett & Peplau, 2002; Livingston, Testa, & Tamsen, 2007; Testa, Tamsen, & Livingston, 2007). Identifying these vulnerabilities can be used to develop preventive interventions to preclude young male perpetrators from taking advantage of these women. The present study focuses on risk factors that increase young women's vulnerability to sexual violence victimization with young males who are either peers, friends, partners or acquaintances using both quantitative and qualitative approaches. In the first part of the paper, we use quantitative analyses to identify risk factors that predict sexual violence victimization; in the second, we use qualitative data derived from interviews with co-curricular club members and school personnel and focus group discussion with female students to illustrate and contextualize these risk factors.

The lifetime prevalence of sexual violence victimization among young women ranges from 5% to 73% worldwide (Ellis, Widmayer, & Palmer, 2009; Gomez, Speizer, & Beauvais, 2009; Gross, Winslett, Roberts, & Gohm, 2006; King et al., 2004; Rickert, Wiemann, Vaughan, & White, 2004) and from 5% to 74% in Ethiopia (Arnold, Gelaye, Goshu, Berhane, & Williams, 2008; Dibaba, 2007; Gorfu & Demisse, 2007; Mulugeta et al., 1998; Worku & Addisie, 2002). The highest prevalence rate is documented for non-penetrative sexual violence victimization (such as, unwanted verbal sexual expressions- 74% Mulugeta et al., 1998, and unwanted sexual bodily contacts- 73% Ellis et al., 2009). The lowest rate is indicated for physically forced sexual intercourse victimization (5% - 13% Gorfu & Demisse, 2007; King et al., 2004; Rickert et al., 2004).

The consequences of sexual violence on the mental and physical health of women can be devastating. A recent AIDS report of the Ethiopian ministry of health revealed that sexually active young women (aged 15 to 24 years) show the highest prevalence of HIV (8.6%) compared with any other age group (FMH, 2004). Sexual violence victimization and sexually transmitted infections including HIV have been linked (Lampthey, Johnson &

Khan, 2006; Upchurch & Kusunoki, 2004). Moreover, sexual violence victimization results in psychological distress (e.g. depression, shame, hopelessness, social withdrawal) (de Visser, Rissel, & Richters, 2007; Lacasse & Mendelson, 2007). Hence, it is relevant to investigate risk factors that contribute to young women's sexual violence victimization, to mitigate its health related and psychological aftermath. We investigated individual (age, attitudes, personality, risky behaviors) and relationship (attachment style to parents, peer relations) factors.

Risk factors for sexual violence victimization

Individual factors

Age

A younger age at first sexual intercourse exposes adolescent girls to increased vulnerability to sexual violence victimization (Upchurch & Kusunoki, 2004). Koenig et al. (2004) suggested that girls' sexual initiation below the age of 15 years puts them at risk of forced sexual intercourse. During these ages, girls may not be psychosocially mature and experienced enough to be able to enforce clear boundaries for sexual activities with men (Young & Furman, 2008). Moreover, the low levels of maturity and sexual experience may also hinder them from realizing the unacceptability of the use of psychological pressure and force by their male peers in sexual activities (Johnson, Morgan, & Sigler, 2007). Hence, men who perceive that younger girls would show little or no resistance to their sexual advances may target these girls more readily.

Attitude

A tolerant attitude towards sexual permissiveness and male supremacy in sexual relationships among young women may also increase their vulnerability to sexual violence victimization (Lacasse & Mendelson, 2007; Lewin, 1985). Having a positive attitude towards sexual violence typically co-occurs with having traditional and stereotypic attitude towards women, dating and sexual behaviors (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001). Young women who are tolerant of traditional and stereotypic male supremacy in sexual relations may give priority to the satisfaction of men's sexual desire in order to conform to societal norms (Lewin, 1985). Such an attitude, in turn, may influence these women to become more submissive to men's sexual advances, even if they are unwanted (Enosh, 2007). Men who support traditional stereotypes of male dominance in sexual relations, may expect young women to submit to their sexual advances as an obligation of being in a relationship (Muehlenhard & Falcon, 1990).

Personality

Personality characteristics such as self esteem and rejection sensitivity have also been linked with sexual victimization, often as a result of sexual violence victimization,

but sometimes also as a trigger for further victimization. Young women with low self-esteem are more likely to be vulnerable to males' victimizing behavior than those who feel better about themselves (Lacasse & Mendelson, 2007; Zweig, Barber, & Eccles, 1997). Young women with low self-esteem may be less well-adjusted in a relationship (Zweig, et al., 1997) and may not effectively object to their partner's unwanted sexual advances. Sexually aggressive men may be more likely to perceive these young women as appropriate targets for their sexual advances (Testa & Dermen, 1999). Young women with high sensitivity to social rejection are also more likely to be vulnerable to sexual violence victimization. These women are either fearful of upsetting their friend or scared of being replaced by someone more willing to have sex with their partner (Downey & Feldman, 1996; Young & Furman, 2008). In such a situation, more rejection sensitive young women may be more compliant to non-consensual sex (Downey, Freitas, Michaelis, & Khouri, 1998).

Young women who are poor at being assertive in refusing sexual advances in general may be more vulnerable to sexual violence victimization (Livingston et al., 2007). These women may have difficulty in refusing their partner's unwanted sexual advances because of poor communication or a lack of negotiation skills concerning sexual behavior (Testa et al., 2007). Moreover, they may also feel obligated to comply with their partner's sexual demands in order to avoid conflict or harassment (Livingston, Buddie, Testa, & VanZile-Tamsen, 2004).

Risky Behavior

Risky behaviors like frequent substance use (i.e., chewing khat, shisha and alcohol use) may expose young women to situations where unwanted sexual interactions are more probable (Arnold et al., 2008; Champion, Robert, Rebecca, & Mark, 2004; Dibaba, 2007; Yeater & Lenberg, 2008). Khat chewing, shisha smoking and alcohol drinking are the most common substances used among young people of Ethiopia (Kebede et al., 2005; Meressa, Mossie, & Gelaw, 2009). These substances are commonly used in heterosocial get-togethers (Maziak, 2008). The use of substances in mixed gender groups increases women's vulnerability in a number of possible ways. First, men who attend these parties are more likely to be involved in other deviant activities including sexual aggression (Buzy, et al., 2004; Mustaine & Tewksbury, 2002; Testa & Parks, 1996). Second, any woman who attends these parties and uses one of these substances may be perceived by the men as being more interested in or available for sexual activity, particularly by men who themselves use alcohol or other substances (George, Stoner, Davis, Lindgren, & Norris, 2006). These men may also think that the perpetration of non-consensual sexual

intercourse is excusable because they are under the influence of substances (Abbey, BeShears, Clinton-Sherrod, & McAuslan, 2004).

Frequent pornographic films consumption has also been found to increase young women's vulnerability to sexual violence victimization (Yimin et al., 2002). By engaging in this activity with males, women are more likely to encounter men who may view sexual fantasy as reality (Dines & Jensen, 2004). In addition, viewing pornography might influence the young woman's perception of what is normal and appropriate sexual behaviour through a depiction of women having different types of sexual intercourse even with many partners (Zillmann, 2000; Zillmann & Bryant, 1988). Such scenes may implicitly transmit permissive attitudes towards intercourse and engagement with multiple sexual partners. The more sexual partners a woman has, the more likely it is that she will encounter sexually coercive young men (Mustaine & Tewksbury, 2002; Testa & Dermen, 1999; Testa & Parks, 1996). Sexual engagement with multiple partners has been identified as the most prominent risk factor for sexual violence victimization (Howard, Wang, & Yan, 2007). In our own research on Ethiopian males, involvement in substance and pornography use and engagement with multiple sexual partners were identified as the strongest risk factors for sexual violence perpetration (Bekele, van Aken, & Dubas, 2011). Therefore, we expect these factors to also be relevant in our sample of women, given that they are interacting with these men.

Relationship Factors

Peer Relations

Relationship factors such as the pressure to have sex from female friends may make young women more vulnerable to sexual violence (Wood, Maforah, & Jewkes, 1998). Girls give greater weight to their female peers' norms on sexual behavior and may be more likely to comply with their peers' norms to avoid exclusion (Bauermeister, Elkington, Brackis-Cott, Dolezal, & Mellins, 2009; Sheeran, Abraham, & Orbell, 1999). Sexually active female peers approve sexual intercourse by labeling those involved as popular (Bauermeister, et al., 2009). Moreover, often female peer group norms approve silence and submission in sexual interactions as appropriate behavior (Wood, et al., 1998). Thus, young females may engage in sexual activities (including sexual intercourse) in order to conform to peer group norms.

Attachment

Young women's insecure attachment can be classified based on two main dimensions: anxiety and avoidance. Both dimensions are expected to play a role in increasing a woman's risk for sexual violence victimization. Anxious young women worry about being accepted or rejected by others. Avoidant young women feel uncomfortable

with intimacy and closeness with others (Bartholomew & Horowitz, 1991; Schachner & Shaver, 2004). Fearfully attached (with high anxiety) young women desire to be closer to their partner but as they get closer they feel that they will be abandoned (Bartholomew & Horowitz, 1991). These young women may give in to the unwanted sexual advances of their partner even if they themselves do not have the desire in order to avoid conflicts and preserve the relationship (Impett & Peplau, 2002 ; Tracy, Shaver, Albino, & Cooper, 2003).

Dismissively attached (with high avoidance) young women, on the other hand, tend to avoid relationships that result in intimacy (Bartholomew & Horowitz, 1991). These women are less willing to comply with unwanted sexual advances of their partner and feel less committed than their partner to the relationship (Impett & Peplau, 2002). These young women may give in to uncommitted and casual sex in order to conform to their peer group (Schachner & Shaver, 2004) or to satisfy relationship obligations without having to experience intimacy (Impett & Peplau, 2002).

Present Study

The investigations on sexual violence victimization conducted so far have focused on a limited number of risk factors within the same study, although as noted above a variety of individual and social characteristics have been identified as increasing a woman's chance of experiencing sexual victimization and many of these factors are inter-correlated. It is unclear which of these factors are most prominent. Moreover, most of the sexual violence victimization studies done in Ethiopia have focused primarily on showing the pattern and magnitude of the problem, and dealt with prevalence and consequences of sexual violence victimization (Garoma, Belachew, & Wondafrash, 2007; Gorfu & Demsse, 2007; Molla et al., 2002; Mulugeta et al., 1998; Worku & Addisie, 2002) with very few studies focusing on which of these factors apply to Ethiopian women. The work of Dibaba (2007) and Arnold et al. (2008) are notable exceptions and these studies identified involvement in risky behaviors (khat chewing, alcohol drinking, and multiple sexual partners) as risk factors for forced sexual intercourse victimization.

In the present study we extend these studies by examining a full range of sexual violence victimization experiences (ranging from unwanted verbal remarks to psychological manipulation and physically forced intercourse) and by investigating a broader range of risk factors. Our research focuses on the eastern part of Ethiopia because this region has been identified as having a high prevalence of risk behaviors (shisha smoking, khat chewing, multiple sexual partners) among school youth compared with other regions of Ethiopia (Mitike et al., 2007). Based on the literature reviewed above, we

therefore hypothesised that involvement in risky behaviors is an important predictor of sexual violence victimization, in addition to attitudinal, personality or relationship factors.

Method

Participants

Participants in the study were female secondary school students in the towns of Dire Dawa, Harar, and Jijiga in Eastern Ethiopia. Twelve secondary schools in Dire Dawa, six in Harar and three in Jijiga were operational in the academic year 2008/2009. The twenty one schools have 21,393 (7,896 female, 13,497 male) students. Six schools were randomly drawn from the twenty one schools. The six schools have a total of 12,337 (4,669 female, 7,668 male) students. Based on power calculations, a random sample of 17% of the female students (793) ranging in age from 14 to 24 years was targeted for the present study. After a slight drop-out, the final sample consisted of 341 (44.6%) female students from Dire Dawa, 251 (32.9%) from Harar and 172 (22.5%) from Jijiga.

Procedure

The participants were chosen through a multistage sampling technique (Kebede et al., 2005; Molla et al., 2002). Six schools (three from Dire Dawa, two from Harar and one from Jijiga) were randomly drawn from the twenty one schools of the three towns. Out of 187 total classrooms of the six schools, 105 classes were taken via a non-proportional to size allocation technique. This was done in order to ensure a reasonable number of students from all grades even though there were fewer students in grades 11 and 12 (preparatory grades for university education). Then, a simple random sampling technique was used to select the target classes and students from each class. All participants in the target sample completed the questionnaires, prepared in the Amharic language. The original items of the questionnaires were all in English. They were translated into Amharic in a way that fits the cultural background of the area, maintaining contextual meaning. Three assistant professors from Haramaya University (Eastern Ethiopia) and the first author were involved in translating the questionnaire. The questionnaire was first translated to Amharic language and back translated to English to maintain the original meaning of the questionnaire. Following this, the translated questionnaire was pre-tested on 38 female secondary school students (not part of the larger sample). The comments from these students on the wording of the questionnaire were also incorporated into the final version of the survey.

The administration of the questionnaire was performed after getting approval from respective education bureaus and school officials. Following this, informed verbal consent was obtained from all participants before the administration of the questionnaire (Gorfu & Demsse, 2007; Kebede et al., 2005). The participants were also told that they could skip items or totally decline from filling in the questionnaire if they wanted. The administration

was conducted in classrooms and halls with the help of seven teachers and two supervisors. The administration of the questionnaire lasted on average 1 hour and 20 minutes.

The total response rate of the study was 96% (764 out of 793). Only 11 females declined from filling in the questionnaire and an additional 8 females did not complete all parts of the questionnaire. The anonymity of the survey instrument, the face-to-face administration of the questionnaire in quiet and comfortable rooms, the detailed explanation of the intent and use of the results of the survey, along with soft drink services at the middle of survey session might have contributed to this high response rate.

Measures

Sexual violence victimization was measured through 21 items adapted from Koss and Gidycz (1985) and Koss and Oros (1982). The items are answered in a yes or no response. Using the system developed by Degue and DiLillo (2005), we classified sexual victimization prevalence in four different forms: sexual offense (verbal/psychological pressure for sexual activity), sexual assault (unwanted sexual bodily contacts), sexual coercion (intercourse because of verbal/psychological pressure), and sexual aggression (intercourse because of physical force). Each of these items is presented in Table 5.1. Cronbach's alpha for the sexual offense scale is .69, sexual assault is .65, sexual coercion is .50 and sexual aggression is .60. A total sexual violence victimization score, on the other hand, was calculated by summing across the 21 items with Cronbach's alpha for the total scale being .83.

Independent Variables

Age and socio-economic status. The current age of the adolescent girls and their family socio-economic status (SES) were assessed as control variables. SES was measured with one item ('How do you rate the socio-economic status of your family in comparison to your neighbors?'), rated on a 5-point Likert type scale ranging from (1) very low to (5) very high).

Sexual activity. Involvement in sexual intercourse, condom use, age at sexual debut, and age of the female's partner who pressured/forced them to have sex in their first unwanted intercourse encounter were assessed with four items. The items are: "Have you ever had sexual intercourse". It was responded with a "yes" or "no" option. Condom use was assessed with the question: "How often have you used a condom during intercourse?" It was rated using five options (never had intercourse, not used condom, used sometimes, many times, and every time). Sexual debut was assessed with the question: "How old were you when you first had sexual intercourse?" Those respondents who reported unwanted sexual intercourse were also asked to report the age of their partner in their first unwanted

sexual encounter. For these two questions the respondent were given option to select from age 12 to 24 years or fill in the age if the options did not include their answer.

Sexual violence attitude was measured through 15 items adapted from Sapp, Farrell, Johnson, and James (1999) and Fischer and Chen (1994). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I believe that it is not good to refuse intercourse to a sexually active young man in a relationship”. Cronbach's alpha of the scale is .73.

Self esteem was measured through 10 items adapted from Rosenberg (1965). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “On the whole, I am satisfied with myself”. Cronbach's alpha of the scale is .78.

Rejection sensitivity was measured through 10 items adapted from Downey and Feldman (1996). The items are rated on a 4-point Likert type scale ranging from (1) never to (4) very often. A sample item is “Would you be worried if you do not conform to the sexual request of your male school friend?” Cronbach's alpha of the scale is .69.

Sexual assertiveness was measured through 10 items adapted from State University of New York at Buffalo (2007). The items are rated on a 3-point Likert type scale ranging from (1) never to (3) always. A sample item is “I make decisions regarding sex regardless of my male school friend’s desire”. Cronbach's alpha of the scale is .67.

Risky behaviors (substance and pornography use and engagement with multiple partners) were measured through five items developed by the authors. Four items dealt with the frequency of a risky behavior and were rated on a 6-point Likert type scale ranging from (0) never to (5) every day. The items are: How often have you chewed khat? How often have you smoked shisha?, How often have you drunk alcohol? and How often have you watched pornographic films? The fifth item was on engagement with multiple sexual partners and was assessed with the question: “How many sexual partners have you had since your first sexual intercourse?” It was responded by options: never had intercourse, 1, 2, 3, 4, 5, 6, 7, 8 and above. The first three items: khat chewing, shisha smoking and alcohol drinking were combined into one scale to get a score on substance use (Arnold et al., 2008). Cronbach's alpha of the scale is .68. The fourth and fifth items were used separately because pornography use (Yimin et al., 2002) and engagement with multiple partners (Howard et al., 2007) have been strongly linked to sexual violence victimization in previous studies and represent different kinds of risk behaviors.

Influence of female friends was measured through 2 items developed by the authors. The items are rated on a 4-point Likert type scale ranging from (1) never to (4) very often. The items are: “Did your female school friends urge you to have sex?”, and

“Did you have sex as a result of pressure from your female friends?” Cronbach's alpha of the scale is .72.

Fearful attachment was measured through 4 items adapted from Van Oudenhoven, Hofstra, and Bakker (2003). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I would like to be open to my family but I feel that I can not trust them”. Cronbach's alpha of the scale is .79.

Dismissive attachment was measured through 3 items adapted from Van Oudenhoven et al. (2003). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “It is important to be independent of my family”. Cronbach's alpha of the scale is .67.

Qualitative data

Qualitative data were gathered by using focus group discussion (FGD) and interviews to obtain additional information. The FGD was held in groups of five to seven female students after ensuring their prior informed consent. A total of six sessions were conducted by giving a brief introduction on the intent of the study, importance of the data to be gathered and the procedure of participation in the FGD. Semi-structured questions on opposite sex relationship, sexual initiation, involvement in risky behaviors, and perceived factors for experiencing non-consensual sex were used as a guide to lead the FGD. All the sessions were held in Amharic language by three professionals from the Family Guidance Association of Ethiopia Eastern Branch and the first author. A half day orientation session on the purpose of the study, the concept of sexual violence and on how to lead FGD sessions was provided to the professionals by the first author. On average, each FGD session lasted 40 minutes.

The interviews were held with twelve informants: female Anti-HIV/AIDS club members, school teachers, school guidance counselors and school directors. A total of twelve interview sessions (one interview session with one informant) were held with the informants. The issues discussed were the same as in the FGD: opposite sex relationships, sexual initiation, involvement in risky behaviors, and perceived factors for experiencing non-consensual sex. The interview sessions were conducted by four persons in Amharic language. On average one interview session lasted 25 minutes. All sessions (both FGD and interview) were recorded through writing and audiotape and later transcribed by the first author.

Table 5.1

Lifetime prevalence rates of sexual violence victimization

Incidence of sexual violence	Victimized		Not victimized		Mean	SD
	Freq.	%	Freq.	%		
Sexual violence	520	68.1	244	31.9	2.96	3.32
Sexual offense	398	52.09	366	47.9	1.23	1.56
Received unwanted sexual comments from a male school friend	144	18.8	620	81.2	.19	.39
Encountered unwanted sexual jokes from a male school friend	181	23.7	583	76.3	.24	.43
Had an unwanted and persistent sexual discussion from a male school friend	202	26.4	562	73.6	.26	.44
Listened pornographic film sexual acts narration urged by a male school friend	124	16.2	640	83.8	.16	.37
Watched pornographic films pressured by a male school friend	131	17.1	633	82.9	.17	.38
Drunk alcohol pressured by a male school friend	93	12.2	671	87.8	.12	.33
Verbally threatened to have sex (but sex did not occur) by a male school friend	61	8.0	703	92.0	.08	.27
Sexual Assault	426	55.76	338	44.2	1.13	1.29
Fondled by a male school friend without consent	215	28.1	549	71.9	.28	.45
Embraced by a male school friend without consent	350	45.8	414	54.2	.46	.50
Kissed by a male school friend without consent	101	13.2	663	86.8	.13	.34
A male school friend attempted to force to have sex (but sex did not occur)	80	10.5	684	89.5	.10	.31
A boyfriend attempted to force to have sex (but sex did not occur)	120	15.7	644	84.3	.16	.36
Sexual coercion	192	25.13	572	74.9	.37	.75
Have had sexual intercourse as a result of persistent sexual discussion	94	12.3	670	87.7	.12	.33
Have had sexual intercourse as a result of pornography film narration	46	6.0	718	94.0	.06	.24
Have had sexual intercourse as a result of watching pornographic film	65	8.5	699	91.5	.09	.28
Have had sexual intercourse as a result of drinking alcohol	49	6.4	715	93.6	.06	.25
Have had sexual intercourse as a result of being threatened	28	3.7	736	96.3	.04	.19
Sexual aggression	112	14.7	652	85.3	.23	.62
Have had sexual intercourse forced by a male school friend	57	7.5	707	92.5	.07	.26
Have had sexual intercourse forced by a boyfriend	38	5.0	726	95.0	.05	.22
Have had sexual intercourse forced by a young man in neighbourhood	62	8.1	702	91.9	.08	.27
Have had sexual intercourse forced by a young man do not know well	17	2.2	747	97.8	.02	.15

Results

Section A: Quantitative Findings

Descriptive Statistics

The mean age of the respondents was 16.81 with a standard deviation of 1.43. Descriptive statistics are presented in detail in Table 5.1. The majority of the study participants (526, 68.8%) were below 18 years old. About one third of the respondents (238, 31.2%) have had sexual intercourse at the time of data collection. Their mean age for sexual debut was 15.9 years with a standard deviation of 1. The majority of these 238 sexually active young women had their first sex below 18 years old (216, 90.8%). Most of these sexually active young women had their sexual intercourse with men aged 18 years and above (212, 89.1%). Out of these sexually active young women, only 54 (22.7%) reported using a condom at least once and only 20 (8.4%) women reported that they have used condom every time they had sexual intercourse.

About 520 (68%) of the total sample of young women experienced at least one instance of sexual violence in their life time. Specifically, over half of the respondents have experienced at least one instance of sexual offense (398, 52%) and sexual assault (426, 55.8%). About 192 (25%) of the students have experienced at least one instance of sexual coercion and 112 (14.7%) sexual aggression.

Regression Results

Zero-order correlations between the variables used in the regressions are presented in Table 5.2. This table shows that the risk factors were significantly related to sexual violence victimization. Tests revealed that both multicollinearity and outliers were not problematic. Multiple regression analysis in which all risk factors and the control variables (age and SES) were entered simultaneously (on the same step) and was used to determine which of the factors were the strongest predictors of sexual violence victimization. These analyses were conducted for the total victimization score and for the four subtypes of sexual violence: sexual offense, sexual assault, sexual coercion and sexual aggression. Results are presented in Table 5.3. We first present results concerning overall sexual violence victimization and then discuss where predictors differ for the specific forms of victimization.

Predictors of Overall Sexual Violence Victimization

Participants' current age and socioeconomic status were unrelated to sexual violence victimization. However, those young women who start having sexual intercourse at an early age ($\beta = -.08, p = .001$) and who form sexual relationships with older young men ($\beta = .05, p = .026$) reported more sexual violence victimization. With respect to attitude and personality characteristics, young female students who have a tolerant attitude towards

Table 5.2

Inter-correlation, mean, and standard deviation among risk factors and sexual violence victimization

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Mean	SD
Sexual violence victimization																	
Age of female students	.14**															2.96	3.32
Family socio-economic status	-.10**	-.08*														16.81	1.43
Age at sexual debut	-.11**	.34**	-.02													3.00	1.00
Age of partner	.08*	.16**	-.05	.14**												15.85	1.31
Sexual violence attitude	.60**	.08*	-.06	-.06	-.01											20.72	2.98
Rejection sensitivity	.63**	.17**	-.05	.03	.05	.68**										13.86	3.07
Sexual Assertiveness	-.36**	-.02	.11**	.02	-.01	-.47**	-.39**									17.43	3.93
Self-esteem	-.57**	-.11**	.09*	.01	-.03	-.72**	-.64**	.50**								33.35	8.13
Frequent substance use	.57**	.17**	-.07	.01	.02	.44**	.46**	-.25**	-.41**							1.00	2.00
Frequent pornography use	.61**	.08*	-.09**	-.07	-.03	.39**	.44**	-.29**	-.40**	.39**						.63	.91
Multiple sexual partners	.74**	.19**	-.12**	-.10**	.08*	.66**	.65**	-.40**	-.62**	.60**	.54**					.57	1.1
Female friends pressure	.54**	.12**	-.11**	.01	.09*	.54**	.61**	-.31**	-.56**	.30**	.37**	.55**				2.41	.83
Fearful attachment	.25**	-.02	-.11**	-.02	-.05	.23**	.18**	-.13**	-.21**	.24**	.14**	.19**	.15**			8.78	3.96
Dismissive attachment	-.11**	.03	.02	.14**	.03	-.13**	-.11**	.10**	.10**	-.10**	-.08*	-.08*	-.10**	-.08*		12.46	2.78

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5.3
Multiple regression of risk factors to sexual violence victimization measures

Variables	Overall sexual violence measure			Sexual offense measure			Sexual assault measure			Sexual coercion Measure			Sexual aggression measure		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Age of female student	.05	.05	.02	.01	.03	.01	.04	.03	.04	.01	.01	.02	-.02	.01	-.04
Family socio-economic status	.00	.08	.00	.01	.05	.01	.00	.05	.00	-.01	.02	-.01	-.01	.02	-.02
Age at sexual debut	-.36	.11	-.08**	-.08	.06	-.04	-.17	.06	-.10**	-.04	.03	-.04	-.07	.02	-.08**
Age of partner	.10	.04	.05*	-.04	.03	-.05	.07	.02	.09**	-.04	.01	.08***	.11	.01	.29***
Sexual violence attitude	.03	.01	.08*	.01	.01	.04	.01	.01	.09	.00	.00	.04	.01	.00	.12**
Rejection Sensitivity	.14	.04	.13***	.07	.02	.13**	.05	.02	.11*	.02	.01	.10**	.00	.01	.02
Sexual Assertiveness	.01	.02	.01	.01	.01	.02	.00	.01	.00	-.01	.01	-.03	.01	.01	.05
Self-esteem	-.01	.01	-.03	-.01	.01	-.04	.00	.01	-.01	-.01	.00	-.08*	.00	.00	.05
Frequent substance use	.25	.05	.15***	.12	.03	.16***	.08	.03	.12**	.03	.01	.08**	.02	.01	.07*
Frequent pornography use	.94	.09	.26***	.44	.06	.25***	.39	.05	.28***	.07	.02	.08**	.05	.02	.07*
Multiple sexual partners	.86	.12	.27***	.25	.07	.17***	.01	.06	.01	.33	.03	.47***	.27	.03	.47***
Female friends pressure	.34	.11	.09**	.17	.07	.09*	.09	.06	.06	.04	.03	.04	.04	.03	.06
Fearful attachment	.06	.02	.07**	.02	.01	.06*	.03	.01	.08*	.00	.00	.02	.00	.00	.02
Dismissive attachment	-.01	.03	-.01	.02	.02	.03	-.01	.01	-.01	-.01	.01	-.03	-.01	.01	-.05
Adjusted R²	.663			.451			.304			.613			.523		

* $p < .05$, ** $p < .01$, *** $p < .001$

sexual violence ($\beta = .08, p = .019$) and with high sensitivity to their male friend's rejection ($\beta = .13, p = .000$) experienced more sexual violence victimization. However, self esteem and sexual assertiveness were not associated with sexual violence victimization. As expected, risky behaviors were linked to increased sexual violence victimization. Substance use ($\beta = .15, p = .000$), watching pornography ($\beta = .26, p = .000$) and engagement with multiple partners ($\beta = .27, p = .000$) were associated with sexual violence victimization. The kinds of relationships that the young women have with others around them were also significantly associated with sexual violence victimization. Those young women who are pressured by their female friends to have sex ($\beta = .09, p = .003$) and have a fearful parental attachment ($\beta = .07, p = .003$) were more likely to report sexual violence victimization. However, dismissive parental attachment did not show a significant association with sexual violence victimization.

Predictors of Specific Forms of Victimization

Similar to what was found for overall victimization; neither student age nor socioeconomic status was linked to any specific form of sexual violence victimization. Sexual assertiveness and dismissive parental attachment were also not linked with the four forms of sexual violence victimizations. Both substance use and watching pornography were risk factors positively associated with all four forms of sexual violence victimization. Having an older sexual partner and a high number of sexual partners were also linked to three of the four types of victimization. When examining the other risk factors and the type of victimization, for personality characteristics, rejection sensitivity was positively related to the three less severe forms of sexual violence victimization (sexual offense, assault, and coercion), whereas sexual violence attitude was only linked to the most serious offense (sexual aggression or rape). Self-esteem was found to be negatively linked with sexual coercion (having intercourse as a result of psychological pressure). With respect to the relationship factors, friends' pressure was positively linked to the mildest forms of sexual victimization (sexual offense). Fearful parental attachment was linked to the mildest forms of sexual victimization (sexual offense and sexual assault) but not with sexual coercion or sexual aggression).

Section B: Qualitative Results based on the Focus Group Discussion (FGD) and Interviews

Age of relationship partner and female friends' pressure

The results from the FGD with students and interviews with female anti-AIDS club members, teachers, guidance counselors and leaders revealed that it is common for older young men to establish friendships with adolescent girls who are 3 to 5 years younger than

their age. They further reported that most of the relationships are established by the persistent pressure of the males where the adolescent girls do not even know why the male keeps insisting that they establish a relationship and that their motivation is to get the young women to have sex with them. One discussant stated the following: “older males pressure adolescent girls to form a relationship since they perceive that it is easy to persuade young ones into sexual activities without the girls realizing their unwanted moves” [16 year old girl, Dire Dawa]. It was also reported from both the discussants and interviewees that it has become the rule, not the exception, for males to use the adolescent girls’ female friends to convince the females to have a romantic (sexual) relationship with them. They further indicated that sexually active female friends often encourage other adolescent girls by promoting the satisfaction they draw from the love making relationship. One discussant said the following: “females’ teen age period is an enjoyable moment of life and many young men also desire to have them” [16 year old girl, Dire Dawa].

Sensitivity to having relationships with males

The FGD results revealed that the female adolescents are much more concerned about maintaining amiable relationships with their male friends. They further noted that young men seem to regard maintaining the relationship as the responsibility of the female. Most young men do not maintain the momentum they had in forming the relationship. On the other hand, the young women do all they can, as reported by the discussants, to maintain the relationship. One discussant in this respect stated the following: “some female adolescents want to avoid doing anything that would disappoint their male friends, even if it means giving in to unwanted sexual moves of their friends” [15 year old girl, Harar].

Risky Behaviors

FGD and interview results indicated that leisure activities like group alcohol drinking and having khat and shisha (mild drugs) in a rented room have become regular weekend practices of many young men and women. They further reported that these behaviors appear to have increased among both males and females with the opening of shisha/khat houses near the schools. One discussant stated the following: “both young women and men involved in khat chewing, shisha smoking and alcohol drinking think that such involvement increases their ability to socialize” [16 year old girl, Harar]. The discussions and interviews further revealed that watching pornographic films have become follow-up activities after khat chewing and shisha smoking. The films are usually initiated as entertainment but later are used as a means to trigger sexual desire from females. The discussions also revealed that most males have a strong desire to have short-term sexual relationships. One discussant said the following: “some young women have more than one

lifetime sexual partner not because of their desire to do so but because most males end the relationship within a short period of having intercourse” [17 year old girl, Jijiga].

Discussion

We studied the frequency of sexual violence victimization using a random sample of female Eastern Ethiopia secondary school students. The victimization covered a wide range of behaviors varying from experiencing unwanted sexual comments to physically forced sexual intercourse. We also investigated what individual and relationship factors were linked with vulnerability to sexual violence victimization.

Our results revealed that 68% of the young women have experienced at least one instance of sexual violence. Specifically, 52% of the young women have experienced at least one instance of sexual offense (unwanted comments, jeers, etc), 56% sexual assault (unwanted physical contact), 25% sexual coercion (intercourse due to psychological pressure) and 15% sexual aggression (rape). The results on sexual offense (Mulugeta et al., 1998) and sexual aggression (Dibaba, 2007; Garoma et al., 2007) are consistent with previous findings reported in Ethiopia. The prevalence on sexual assault, however, is greater than the prevalence previously reported in Ethiopia (Gorfu & Demisse, 2007; Molla et al., 2002). This may be due to the trivialization of the unwanted bodily contacts relative to sexual coercion and rape. This is consistent with Gross et al. (2006) who argued that many young women consider unwanted sexual body contacts as less serious. However, this might lead to an eventual increase in the prevalence of more severe forms of sexual violence victimization (including sexual coercion and sexual aggression) by creating a precedence for sexual interaction (Raghavan, Bogart, Elliott, Vestal, & Schuster, 2004) where over time increasing amounts of sexual behaviours expected by male perpetrators.

Our research is the first to report sexual coercion on an Ethiopian sample (Dibaba, 2007; Garoma et al., 2007; Gorfu & Demisse, 2007; Mulugeta et al., 1998) and even on an African sample for that matter (King et al., 2004; Moore, Awusabo-Asare, Madise, John-Langba, & Kumi-Kyereme, 2007; Reza et al., 2009; Rwenge, 2000). The use of psychological tactics and persuasion might have been considered consensual since physical force is not involved. Alternatively, the use of threats or other psychological methods for obtaining unwanted sexual intercourse may have been included under sexual aggression. Given that our sexual aggression rates here are similar to those of previous studies, this latter explanation suggests that at best only a small portion of sexual coercion has been previously reported. Thus, future studies are needed that focus on the distinction between sexual coercion and sexual aggression especially since different factors related to their etiology (discussed below) may be involved.

In addition to the high rates of sexual violence victimization reported herein, the fact that roughly 77% of sexual coercion and sexual aggression victims have never used a condom during intercourse is another area of concern. In non-consensual intercourse, most young women have very little options to negotiate for safe sex (Koenig et al., 2004). Howard et al. (2007) also reported that most non-consensual intercourses happen without the use of condom. Thus, sexual coercion and sexual aggression victimization may increase young women's vulnerability to STI and HIV (Lamptey et al., 2006; Upchurch & Kusunoki, 2004) in addition to an unwanted pregnancy.

Consistent with past research, all risk factors examined in this study were significant in a one-to-one association with sexual violence victimization. However, when all variables were included in the multivariate model, only risky behaviors, rejection sensitivity and factors related young women's social relationships contributed significantly to vulnerability to sexual violence victimization. Contrary to our expectations, sexual assertiveness and dismissive attachment were unrelated to victimization of any kind when risk factors were simultaneously analyzed. Substance use and watching pornography were positively associated with total victimization and each form of sexual violence victimization. In addition, women with older sexual partners and a higher number of sexual partners were also more likely to experience overall sexual violence victimization and three of the four types of victimization.

The results in our Ethiopian sample are consistent with other research that has identified early sexual debut (Koenig, et al., 2004; Upchurch & Kusunoki, 2004), engagement with multiple sexual partners (Dibaba, 2007; Howard & Wang, 2005), frequent pornography use (Yimin et al., 2002) and substance use (Arnold et al., 2008; Buzy et al., 2004; Dibaba, 2007; Young & Furman, 2008) as risk factors that increases young women's likelihood of experiencing sexual violence victimization. Females who have sex at an early age usually have relations with relatively older young men. This age difference might give males both physical and psychological advantages in coercing young women to have sex. This relationship might stem from the Ethiopian traditional belief that a male companion should be a bit older than his partner to care for and protect her. This traditional view may influence the adolescent girls to surrender to persistent relationship pressure coming from older males as she may lack the experience to realize that the use of psychological pressure and force by their male friend in sexual activities is unacceptable (Johnson et al., 2007). Engagement with multiple partners was also linked to increased sexual victimization probably by increasing the chance of encountering sexually aggressive young men (Mustaine & Tewksbury, 2002; Testa & Dermen, 1999; Testa & Parks, 1996).

The FGD and interview results revealed that group parties are usually the contexts in which these risky behaviours occur. The parties are usually held on the weekends and sometimes extend into the late hours of the evening. The students reported that the young women who attend the parties often go for the sake of socializing and friendly interactions and is consistent with past research on university students that find that some women have the expectation that alcohol will facilitate and enhance their social interactions (Corbin, Bernat, Calhoun, McNair, & Seals, 2001). The parties begin with soft drinks followed by alcohol and group dancing. The alcohol drinking and group dancing make the young women interact closely with several males, often including body contact. Such party activities may also socialize the young women to accept stereotypical beliefs concerning male-female relationships (Minow & Einolf, 2009), including the acceptance of males' offers for sexual activity. The young men who attend these parties, on the other hand, may perceive the women who drink as sexually permissive (George et al., 2006) and may use this (mis)perception as an excuse for sexually victimizing these women (Abbey et al., 2004).

These parties may also serve as a meeting ground for heterosexual relations. Once acquainted with the females from these parties, some young men may later invite the females to khat chewing. It was also reported by both the discussants and interviewees that khat chewing and shisha smoking are traditional substances for social get-togethers. These practices, however, usually increase both males' and females' excitement levels and may even change their mood (Kebede et al., 2005). Moreover, as revealed in the FGD, the khat and shisha sessions are usually followed with watching pornographic videos. The pornographic films, in turn, may act to enhance sexual interest and desire and may also influence the perceptions of both young men and women about what is acceptable or normative sexual behavior. In the pornographic films women are often depicted having different kinds of sex (Barron & Kimmel, 2000; Zillmann & Bryant, 1988), with multiple partners (Barron & Kimmel, 2000; Zillmann & Bryant, 1988) and as being submissive to men even for unwanted sexual behaviors (Norris, Davis, George, Martell, & Heiman, 2004). Hence, such instances may implicitly transmit male sexual coercion and aggression as normative, condoning men's perpetration of sexual violence against women. Our results are consistent with past research that have found alcohol (Gross et al., 2006), and khat combined with alcohol (Arnold, et al., 2008) to strongly increase young women's vulnerability to sexual victimization and that the use of these substances coincides with other activities that increase the likelihood for sexual victimization. It should be noted that among Ethiopian males, drawn from the same schools where the females in this study attend, substance use, pornography use and engagement with multiple sexual partners were

the strongest risk factors for males' sexual violence perpetration (Bekele et al., 2011). Thus, group parties or social get-togethers involving substances use are the contexts in which multiple risk factors combine to set the stage for an increased vulnerability of young women to men's victimizing behavior. Such participation may put females in a situation where they will be exposed to a higher number of sexual violence perpetrators. Hence, females need to be made aware of the possible negative consequences of attending these kinds of activities.

Factors related to females' social relationships were linked to sexual violence victimization. Women with low self esteem were found vulnerable to sexual coercion but not to the overall sexual violence, sexual offense, assault and aggression. Testa and Dermen (1999) and Zweig et al. (1997) in their examination of risk factors for sexual coercion and sexual aggression have found a link between self-esteem and sexual coercion but not to sexual aggression. This may be because low self-esteem may expose the young women to men's psychological intimidation and the use of physical force in men's attempt to have unwanted sex is not necessary. Women's rejection sensitivity was positively related to overall sexual violence victimization and to the three less severe forms of sexual violence victimization (sexual offense, assault, and coercion) and women with fearful parental attachment were also more likely to experience overall sexual violence, sexual offenses and sexual assault. Both groups of women might not want to offend their male friends and may even comply with their unwanted sexual demands (Prudie & Downey 2000; Turchik, Probst, Chau, Nigoff, & Gidycz, 2007) especially given the traditional Ethiopian view of male dominance in the determination of when and how to have intercourse (Gossaye et al., 2003). Such views might induce young men to enforce female submission to their sexual demands in a relationship (Muehlenhard & Falcon, 1990) and females may not resist out of fear that they will be rejected or replaced (Downey et al., 1998). During the focus group discussion it was revealed that many males discontinue a relationship when minor disagreements occur with the female, even if the couple had already had sexual intercourse. Females who are sensitive to rejection or who are insecure in their relationships may be more likely to tolerate unwanted sexual acts. Moreover, the young women's desire for acceptance might be perceived by male perpetrators as a vulnerability marker and therefore perpetrators may target these women.

Although we did find that a tolerant attitude towards sexual violence was related to experiencing overall sexual violence victimization and sexual aggression, it was not related to the minor forms of sexual victimization. The cross-sectional nature of the data makes it difficult to disentangle direction of effects in the link between sexual violence attitude and sexual aggression. Longitudinal studies that control for attitudes concerning sexual

violence victimization prior to experiencing sexual aggression are needed but are practically impossible to carry out. The Ethiopian traditional view of male dominance in the determination of when and how to have intercourse (Gossaye et al., 2003) might induce young men to enforce female submission to their sexual demands in a relationship (Muehlenhard & Falcon, 1990).

Consistent with other work that some female peer group's may pressure girls to establish a sexual relationship (Bauermeister et al., 2009), our results suggest that female encouragement of sexual behavior was linked to overall sexual violence and sexual offenses but not to sexual assault, coercion and aggression. It could be that friends' pressure is evident in the early stages of heterosexual interactions and that as a young woman gets more involved in these social contexts other factors such as using alcohol becomes more important, particularly for victimization. Moreover, additional research in other samples is needed to make firm statements on differential correlates to the various forms of sexual violence that we found here.

Our findings should be interpreted with certain cautions in mind. To begin with, the study is a cross sectional survey, and causal interpretations between risk factors and sexual violence victimization are difficult to establish. Future studies, either longitudinal or intervention-based, are needed to be able to make firm conclusions about the sequence and developmental course of processes contributing to vulnerability to sexual violence victimization. Secondly, the survey requires the respondents to recall their sexual experiences and hence might have a recall bias or a social desirability effect. Thirdly, our study used single items to measure risky behaviors since a scale of multiple items would have further lengthened an already long survey. Fourth, the missing values on age at sexual debut were imputed by the mean value.

Conclusion

This study has enhanced sexual violence research endeavors in Ethiopia and Africa by distinguishing between psychological processes used to achieve unwanted sexual intercourse (sexual coercion) and physical force (sexual aggression or rape). Earlier studies on non-consensual intercourse in Ethiopia and Africa have only focused on physically forced intercourse (sexual aggression). Here we found that many young Ethiopian women have experienced sexual coercion. Moreover, we found engagement with multiple sexual partners, frequent pornography and substance use, and rejection sensitivity as the strongest risk factors for sexual violence victimization. Young women's problematic relationships also increase their vulnerability to sexual violence victimization. Thus, involvement in risky behaviors and young women's problematic relationships (that we measured in this

project) may place the young women at a disadvantage, increasing their vulnerability to males' victimizing behaviors.

The results of this study may also have implications for intervention. Schools need to educate both young men and women on the consequences that even less serious forms of sexual violence has on the physical and mental health of young women. School mini-media (instant messages and entertainment broadcasting through the megaphone) can also openly challenge norms that trivialize sexual offense and assault. These messages should discourage young men from perpetrating such acts, and young women should be encouraged to establish boundaries of interaction both in casual social situations as well as at the initial stage of a relationship. School mini-media along with co-curricular clubs could also educate students about the psychological and health aftermath of sexual coercion and sexual aggression. Sexual coercion and sexual aggression may lead to STI and HIV since most non-consensual intercourse occurs without the use of condoms. Hence, policy makers need to consider sexual violence in the formulation of HIV/AIDS prevention policy (Moore et al., 2007).

Incorporating risky behaviors and factors of problematic heterosexual relationships into schools' violence prevention program may minimize the occurrence of sexual violence. Our results confirm the suggestion made by Daigle, Fisher, and Stewart (2010) that young women's lifestyle, alcohol and drug use behaviors need to be included in sexual violence deterrence programs. Most important, of course, is to focus on changing the attitudes and behaviors of potentially perpetrating young men towards sexual violence towards women since, afterall, men are the ones committing these acts.

CHAPTER 6

Type of Perpetrators and Victims of Sexual Violence among Secondary School Students⁴

⁴ This chapter currently has a revise-resubmit status at the Journal of Social and Personal Relationships.

Abstract

This study used Degue and DiLillo's (2005) two dimensional conceptual framework to investigate typologies of sexual violence perpetrators and victims among 1538 (774 males and 764 female) Eastern Ethiopian secondary school students. We found three perpetrator and victim types. Among males we found serious offenders (engaged in all forms of sexual contact ranging from fondling to intercourse using physical and verbal tactics), minor offenders (non-coital sexual contact using verbal and physical tactics) and non-offenders. Among females we found severe victims (experienced all forms of unwanted sexual acts), minor victims (non-coital sexual advances) and non-victims. Most risk factors discriminated the 3 groups from each other. The serious offenders were older than minor offenders who were older than non-offenders. Similarly this same ordering of the perpetrators groups was found on supportive attitude towards sexual violence, greater involvement in pornography and substance use, having multiple sexual partners and peer pressure; that is, the serious offenders were highest, the minor offenders intermediate and the non-offenders the lowest. Most risk factors also discriminated the victim types, with severe victims reporting the highest levels of each risk factor, the minor victims intermediate, and the non-victims showing the lowest levels. Intervention, therefore, should target minimizing these risk factors and further enhance young men's respect for a woman's right to say no and to enhance young women's capacity to assert themselves in declining unwanted sexual behaviors.

Introduction

Sexual violence encompasses a broad range of sexual misconducts ranging from unwanted sexual comments to forced sexual intercourse (Crown & Roberts, 2007; DeGue & Dillo, 2005). Yet drawing conclusions from the literature is often difficult given that the same behavior has been represented differently across investigators. For example, unwanted sexual comments, jokes, or arguments are referred to as sexual offense by some (DeGue & Dillo, 2005) whereas others regard it as sexual harassment (Testa, VanZile-Tamsen, Livingston, & Koss, 2004). Some investigators refer to unwanted sensitive body contacts as sexual assault (DeGue & Dillo, 2005) and others regard it as sexual coercion (Hartwick, Desmarais, & Hennig, 2007). Sexual intercourse through the use of verbal manipulation or psychological pressure is regarded as sexual coercion (DeGue & Dillo, 2005; Katz, Moore, & Tkachuk, 2007; Koss, Leonard, Beezley, & Oros, 1985) or as sexual aggression (O'Donohue, McKay, & Schewe, 1996). Even sexual intercourse through the use of physical force (commonly known as rape) is regarded as sexual aggression in some studies (DeGue & Dillo, 2005; Enosh, 2007; Muehlenhard & Falcon, 1990) while in others it is referred to as sexual assault (Koss et al., 1985). Thus, it appears that one concept is represented by different working definitions and labels, creating misunderstanding and inconsistencies in the use of concepts across the sexual violence literature.

Conceptual inconsistency has created difficulties in determining distinct prevalence, risk factors and consequences in the different types of sexual violence (Crown & Robert, 2007). However, a recent review of DeGue and Dillo (2005) has shown four distinct types of sexual violence: sexual offense, sexual assault, sexual coercion and sexual aggression. Thus, investigation of these four distinct forms of sexual violence and their risk factors should add clarity to the forms of sexual violence. In the following review, we describe each of these forms of sexual violence and summarize several risk factors that have been linked to sexual violence perpetration and victimization.

Forms of sexual violence and their respective risk factors

Sexual offense (verbal pressure for unwanted sexual activities)

Sexual offense is perpetrating or experiencing unwanted verbal manipulation or psychological pressure to engage in any unwanted sexual activity that does not include sexual intercourse.

Risk factors for perpetration and victimization

Many adolescents consider sexual offense as normative and acceptable behavior in peer relations (Finerant & Bennett, 1999). Young men who hold male supremacy beliefs, however, are more likely to perpetrate sexual offenses against young women and girls than those who do not hold such beliefs (Finerant & Bennett, 1999). Many young men may also

learn perpetrating sexual offenses from the abusive family relations they have had (Borowsky, Hogan, & Ireland, 1997). They may often use sexual offenses as a means to control their female friends (Fineran & Bolen, 2006). Drug and alcohol use were also found to enhance both young men's perpetration of and young women's vulnerability to sexual offenses (Fineran & Bolen, 2006; Goldstein, Malanchuk, Davis-kean, & Eccless, 2007). Most young women are highly vulnerable to sexual offense in their late adolescence period. Foster, Hagan, and Brook-Gunn (2004) found adolescent girls aged 15-17 years more vulnerable to verbal violence than girls younger than this age. This may be because of the high level of social interactions between males and females at this age and the misperception that verbal offenses are more tolerable than physical offense (Getachew & Sintayehu, 2007). Thus, with respect to these infractions other than age and exposure to males there are no known risk factors that increase young women's vulnerability to these experiences.

Sexual Assault (physical pressure for unwanted sexual activities)

Sexual assault refers to perpetrating or experiencing unwanted sensitive body contacts (e.g., fondling, kissing, and petting), with the exception of sexual intercourse, through the use of physical means.

Risk factors for perpetration and victimization

Young men who hold masculine beliefs in their relationship with their female friends are more likely to perpetrate sexual assault than those who do not (Abbey, McAuslan, & Ross, 1998; Malamuth, Sockloskie, Koss, & Tanaka, 1991). Young women who have tolerant attitudes toward male dominance in male-female relationships are also more vulnerable to sexual assault than those who do not hold such attitudes (Lacasse & Mendelson, 2007). Moreover, young women's frequent drug and alcohol use also increase their vulnerability to sexual assault as compared to those who do not consume either drugs or alcohol (Davis, George, & Norris, 2004). Their involvement in drug and alcohol use may diminish their judgment of unwanted sexual activities of their male friends (Gowen, Feldman, & Yisrael, 2004; Howard, Griffin, & Boekeloo, 2008).

Sexual Coercion (sexual intercourse through the use of verbal pressure)

Sexual coercion refers to perpetrating or experiencing sexual intercourse through the use of verbal manipulation/psychological pressure.

Risk factors for perpetration

As for sexual offense and sexual assault, young men's endorsement of male supremacy in relationships increases their likelihood of perpetrating sexual coercion (Hines, 2007; O'Donohue et al., 1996). These men consider a woman's refusal to have sex as token resistance. They think that women resist sex not because of real refusal but rather

not to appear 'easy going' (Osman, 2003). Moreover, most societies' male-female sexual socialization gives more weight to male sexuality than female sexuality, condoning males' persistence of sexual advances (Lewin, 1985) in spite of the women's opposition.

Peers also influence young men to engage in sexual activity. Some young men engage in unwanted sex in an attempt to gain acceptance (Schwartz & DeKeseredy, 2000). Others perpetrate sexual coercion as a result of perceived peer support to have sex (DeKeseredy & Kelly, 1995) thinking that coercion is a peer approved response to refusal. Feelings of insecurity also pressure young men to perpetrate sexual coercion in attempt to gain acceptance. Fearfully attached young men, for example, engage in non-consensual intercourse when they feel that the acceptance they receive from their female partner is threatened (Davis, 2006; Davis, Shaver, & Vernon, 2004). Dismissively attached young men, on the other hand, engage in sexual intercourse to be accepted by their peer groups (Schachner & Shaver, 2004). However, they are uncomfortable with the intimacy that sexual relations may result in (Davis et al., 2006; Ward, Hudson, Marshall, & Siegert, 1995) and try to avoid it through having uncommitted and short term sexual relations (Davis, 2006). This, in turn, results in engagement with multiple sexual partners without commitment with a high likelihood of having sex through coercion (Oliver & Hyde, 1993).

Risk factors for victimization

Young women who have tolerant views of male's supremacy in relationships are more vulnerable to sexual coercion than those who do not hold such views (Lacasse & Mendelson, 2007; Rosenthal, 1997). These women feel obligated to maintain relationships with their male friends and may comply with unwanted intercourse to protect their relationship from breakdown (Katz, May, Sorensen, & Deltosta, 2010; O'Sullivan & Allgeier, 1998). Young women with a high fear of rejection also enhance their vulnerability to sexual coercion since they fear that their friend may replace them by a more willing partner (Edwards & Barber, 2009; Harper, Dickson, & Welsh, 2006; Purdie & Downey, 2000). The young women's view of themselves may also contribute to their vulnerability to sexual coercion. Young women with low self esteem were found to be more vulnerable to sexual coercion than those with high self-esteem (Messman-Moore, Coates, Gaffey, & Johnson, 2008; Testa & Derman, 1999; Zweig, Barber, & Eccles, 1997). Their poor self image may weaken their resistance to males' psychological pressure to engage in unwanted sexual activities (Lewin, 1985). The women may not effectively communicate their opposition to the unwanted intercourse increasing their vulnerability to sexual coercion (Testa & Derman, 1999).

Female peer group norms also increase young women's vulnerability to sexual coercion. The sexually active peer group norms encourage young women to be in sexual

relationships by giving higher status to those who are romantically involved with males (Bauermeister, Elkington, Brackis-Cott, Dolezal, & Mellins, 2009; Wood, Maforah, & Jewkes, 1998). Involvement in such relationships, however, may obligate young women to have sexual intercourse (Katz & Myhr, 2008, Livingston, Buddie, Testa, & VanZile-Tamsen, 2004). In addition, peer norms to have sex increase across adolescence. Thus, young women are pressured to have sex by their female peers in order to avoid exclusion from their peers. The need for acceptance by peers and friends may also enhance vulnerability to sexual coercion when girls have an insecure attachment. For example, fearfully attached young women comply with unwanted intercourse to protect their romantic relationships (Impett & Peplau, 2002; Tracy, Shaver, Albino, & Cooper, 2003). These women may unwillingly accept sex in order to please their partner (Collins & Read, 1990). Dismissively attached young women, on the other hand, engage in unwanted sexual intercourse to be accepted by their peer groups (Schachner & Shaver, 2004). However, they are displeased by the emotional closeness of the sexual relation, and engage in a short term and multiple sexual relations to avoid the emotional closeness (Davis et al., 2006). This in turn, increases their chance of encountering coercive men (Testa & Derman, 1999).

Involvements in drug and alcohol use also enhance the opportunities of encountering coercive men. Most often, young women who drink are unrealistically optimistic about their risk assessment in an acquaintance situation (Gidycz, McNamara, & Edwards, 2006). The use of drugs and alcohol also lowers their perception of threat and refusal for unwanted sexual intercourse increasing their vulnerability (Testa & Derman, 1999; Testa & Livingston, 1999). Moreover, young men consider women who drink as sexually available for them (George, Gournic, & McAfee, 1988). They also use their own drinking as an excuse for their misperception of the women's friendly cues and their own perpetration of sexual coercion (Abbey, 2002; Abbey, Ross, McDuffie, & McAuslan, 1996). Thus, both the use of drugs or alcohol by women and the cues that the use of drugs and alcohol give to potential perpetrators increase a woman's chances for victimization.

Sexual Aggression (sexual intercourse through the use of physical force)

Sexual aggression is perpetrating or experiencing sexual intercourse through the use of physical force.

Risk factors for perpetration

Young men who are supportive of the use of force in relationships are more likely to perpetrate sexual aggression than those who do not possess such an attitude (Hersh & Gray-Little, 1998; Malamuth, 2003; Voller, Long, & Ausved, 2009). Young men's extreme feeling of supremacy (narcissism) also contribute to an increased likelihood of perpetrating sexual aggression (Bushman, Bonacci, Dijk, & Baumeister, 2003; Malamuth,

2003; Widman & McNulty, 2009). These young men strongly feel that their sexual requests would be accepted by sexually active young women. When their request is turned down, however, they opt for forceful means to fulfill their desires (Baumeister, Catanese, & Wallace, 2002). A violent family experience that the young men may have had may also have a strong link with perpetration of sexual aggression (Arriaga, 2004; Malamuth, 2003; Malamuth et al., 1991). Young men may learn through witnessing their father's perpetration of violence against their mother that physical force is as an acceptable and normative behavior and thus they may apply violent behavior in their romantic relationships (Borowsky et al., 1997).

Situational factors also have links with sexual aggression perpetration. For example, young men's heavy drinking of alcohol and drug use were found to be linked with perpetration of sexual aggression (Ryan, 1998; Zablotska et al., 2009). Men who are under the influence of alcohol may be more likely to dismiss women's unwillingness to have sex. They misinterpret woman's friendly cues as sexual desire and use force to have sex when the woman refuses (Abbey, BeShears, Clinton-Sherrod, & McAuslan, 2004). Frequent exposure to pornographic films (Seto, Maric, & Barbaree, 2001; Vega & Malamuth, 2007) and engagement with multiple sexual partners also increase violently predisposed young men to perpetrate sexual aggression (DeGue & DiLillo, 2004; Koss et al., 1985; Malamuth, 2003).

Risk factors for Victimization

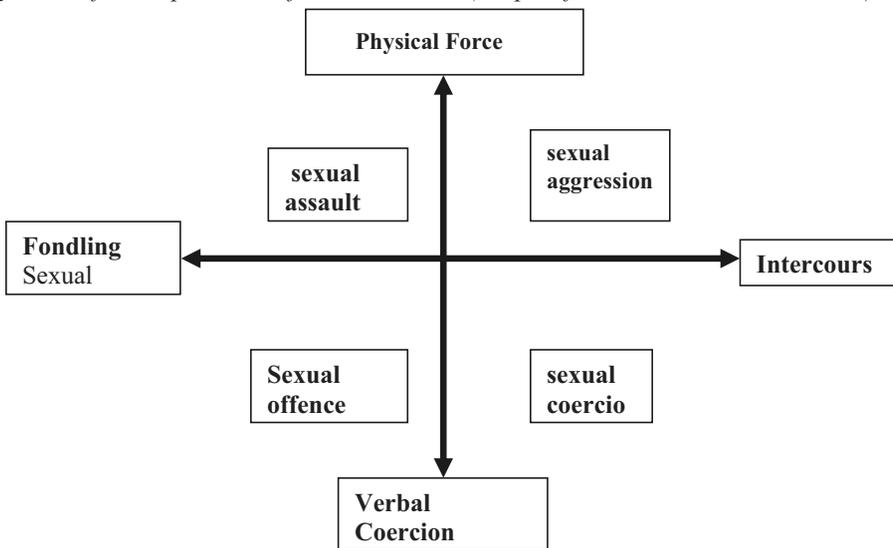
Early age (14-15 years) at sexual initiation among girls is associated with vulnerability to sexual aggression (Johnson, Morgan, & Sigler, 2007, Upchurch & Kusunoki, 2004). At an early age, girls may not realize the use of force in sexual initiation as an unacceptable behavior (Johnson et al., 2007). Tolerant attitudes towards the use of force in intimate relationships among girls also may increase their vulnerability to sexual aggression (Krahe, Bieneck, & Olwing, 2007; Ryan & Jorski, 1998). When this is accompanied by heavy drug and alcohol use, young women may become incapacitated to detect eminent danger and are physically unable to resist perpetration of sexual aggression (Abbey et al., 2004; Livingdton, Testa, & VanZile-Tamsen, 2007). The alcohol taken may impair their judgment of the situation increasing their vulnerability to sexual aggression (Howard, Wang, & Yan, 2007; Messman-Moore et al., 2008). In addition to drug and alcohol use, frequent exposure to pornographic films (Yimin et al., 2002) and engagement with multiple sexual partners (Howard et al., 2007; Howard & Wong, 2005; Zablotska et al., 2009) may also increase their vulnerability to sexual aggression. The pornographic films may normalize the non-consensual intercourse that is often depicted in these films such as an initially unwilling woman cooperating in different kinds of sexual behaviors

(Zillmann, 2000). The engagement with multiple sexual partners among young women increases the opportunity of meeting sexually aggressive men increasing their vulnerability to forced sex (Testa & Dermen, 1999).

Present Study

Studies so far have mainly investigated the broader concept of sexual violence or one or the other forms of sexual violence separately. Very few studies have investigated the distinction between sexual coercion and sexual aggression (Abbey et al., 2004; Muuehlenhard & Falcon, 1990; Testa et al., 2004). Moreover, only a handful of studies have investigated the associated risk factors for sexual coercion and sexual aggression in the same study (Messman-Moore et al., 2008; Testa & Dermen, 1999; Zweig et al., 1997). However, the review of DeGue and Dillo (2005) has demonstrated a two dimensional conceptual framework of four typologies of sexual violence. DeGue and Dillo (2005) displayed the types of sexual violence on a continuum of X-Y coordinates with sexual contact placed on the X-coordinate and sexual tactics on the Y-coordinate (see Figure 6.1). The X-coordinate represents the various forms of sexual contacts ranging from fondling, kissing, petting to sexual intercourse. The Y-coordinate portrays the sexual tactics (used to obtain contacts) ranging from verbal manipulation/psychological pressure (lies, guilt, false promises, continual arguments, threat to end relationship) to use of physical force (twisting arms, holding down, undressing).

Figure 6.1
Quadrant form explanation of sexual violence (adapted from DeGue & DiLillo, 2005)



In the present study, this conceptual model was used to investigate sexual violence perpetrator and victim types and their respective risk factors. Recently, typology (person-oriented) approaches have also gained importance over variable-oriented approaches in explaining patterns of behaviors across subgroups (von Eye, Bogat, & Rhodes, 2006). The present study, therefore, investigates whether or not the conceptual four typologies of sexual violence are distinctly found among male sexual violence perpetrators and female victims. It also examines whether risk factors found to be related to sexual violence using a variable-centered approach can be used to identify and distinguish the different typologies of sexual violence perpetrators and victims. Given that this research is the first of its kind we make no specific hypotheses about the subtypes of perpetrators and victims but we do assume that non-offenders and offenders should differ from each other on the perpetrator variables and that women who have experienced sexual violence should differ from non-victims on these variables.

Method

Participants

The participants of the study were male and female secondary school students in the towns of Dire Dawa, Harar, and Jijiga in Eastern Ethiopia. Twelve secondary schools in Dire Dawa, six in Harar and three in Jijiga were operational in the year 2008/2009. The total number of students in these twenty one schools was 21,393 of which 13,497 were male and 7,896 were female. Six schools were randomly drawn from the twenty one schools. The six schools have 12,337 students of which 7,668 were male and 4,669 were female. Based on power calculations, a random sample of over 10% of the 7668 male (793), and 17% of the 4669 female students (793) ranging in age 14 to 24 years were targeted in six schools in the present study. After a slight drop-out, the final sample consisted of 352 (45.5%) male and 341 (44.6%) female students from Dire Dawa, 261 (33.7%) males and 251(32.9%) females from Harar and 161 (20.8%) males and 172 (22.5%) females from Jijiga.

Procedure

The participants were chosen through a multistage sampling technique. In the multistage sampling, six schools (three from Dire Dawa, two from Harar and one from Jijiga) were randomly drawn from the twenty one schools of the three towns. Out of 187 total classes of the six schools, 105 classes were taken via a non-proportional to size allocation technique. This was done in order to ensure a reasonable number of male and female students from all grades even though there were fewer students in grade 11 and 12 (preparatory grades for university education). Then, a simple random sampling technique was used to select the target classes and students from each class. All participants in the

target sample completed questionnaires prepared in Amharic language. The original items of the questionnaires were all in English. They were translated into Amharic in a way that fit the cultural background of the area, maintaining contextual meaning. Three assistant professors from Haramaya University (Eastern Ethiopia) and the first author were involved in translating the questionnaire. The questionnaire was first translated to Amharic language and back translated to English to maintain the original meaning of the questionnaire. Following this, the translated questionnaire was pre-tested on 32 male and 38 female secondary school students (not part of the larger sample). The comments from the students on the wording of the questionnaire were also incorporated into the final version of the survey.

The administration of the questionnaire was performed after getting approval from respective education bureaus' and schools' officials. Following this, informed verbal consent was obtained from all participants before the administration of the questionnaire. The participants were also informed to skip item/s or totally decline from filling the questionnaire if they wanted. The administration was conducted in classrooms and halls with the help of fourteen teachers and four supervisors. The administration of the questionnaire lasted on average 1 hour and 45 minutes.

The total response rate of the study was 98% (774 out of 793) for males and 96% (764 out of 793) for females. About 14 male and 11 female students declined from filling the questionnaire on the outset, and 5 males and 18 females did not complete all parts of the questionnaire. The anonymity of the survey instrument, the face to face administration of the questionnaire in quiet and conducive rooms, detailed explanation on the intent and use of the results of the survey, along with soft drink services at the middle of survey session might have contributed to this high response rate.

Measures

Forms of sexual violence

We used several sexual violence items, derived from Koss and Gidycz (1985) and Koss and Oros (1982) and classified them into the different forms of sexual violence based on the two dimensions given by DeGue and DiLillo (2005): the type of sexual contact and tactic used by the perpetrator to obtain the contact. All items are presented in the form that were given to males asking about their sexual perpetration but in the female version the same item was reworded to reflect whether the female had ever experienced the behavior as a victim. For the first category (sexual offense) an example of the male and female version of the item is presented. All items were answered using a yes (1) / no (0) format.

Sexual offense perpetration (male) and victimization (female) (unwanted sexual remarks or jokes, or verbal manipulation for non-penetrative unwanted sexual contact) was

measured through 7 items. A sample item is “Were there situations where you repeatedly made unwanted sexual comments to your female school friend?” (Female: Were there situations where your male friend repeatedly made unwanted sexual comments to you?) A total sexual offense perpetration/victimization score was calculated by summing the 7 items. Cronbach's alpha of the scale is .77 for males and .69 for females.

Sexual assault perpetration and victimization (unwanted non-penetrative sexual contact obtained through physical means) was measured through 5 items. A sample item is “Have you ever kissed your female school friend even though she expressed that she did not want to?” Cronbach's alpha of the scale is .75 for males and .65 for females.

Sexual coercion perpetration and victimization (unwanted sexual intercourse obtained through verbal manipulation/psychological pressure) was measured through 5 items. A sample item is “Were there situations where you have sex with your female school friend as a result of your repeated unwanted sexual discussions?” Cronbach's alpha of the scale is .68 for males and .50 for females.

Sexual aggression perpetration and victimization (Sexual intercourse obtained through physical force) was measured through 4 items. A sample item is “Were there situations where you had sex physically forcing your female school friend?” Cronbach's alpha of the scale is .66 for males and .60 for females.

Risk factors for perpetrator and victim types

Risk Factors for Perpetration

Narcissism was measured through 10 items adapted from Thomaes, Stegge, Bushman, Olthof, and Denissen (2008). The items are rated on a 4-point Likert type scale ranging from (1) not at all true to (4) completely true. A sample item is “I think it is important to stand out”. Cronbach's alpha of the scale is .80.

Peer pressure was measured through 13 items adapted from Santor, Messervey, and Kusumakar (2000). The items are answered in a yes or no type response. A sample item is “My friends push me to do many things that I don't favor”. Cronbach's alpha of the scale is .78.

Violent family experience was measured through 3 items adapted from Foshee, Bauman, and Linder (1999). The items are rated on a 7-point Likert type scale ranging from (0) never to (6) ten or more times per month. A sample item is “How frequent have you ever witnessed your father hitting your mother?” Cronbach's alpha of the scale is .78.

Risk factors for Victim

Self esteem was measured through 10 items adapted from Rosenberg (1965). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5)

strongly agree. A sample item is “On the whole, I am satisfied with myself”. Cronbach's alpha of the scale is .78.

Rejection sensitivity was measured through 10 items adapted from Downey and Feldman (1996). The items are rated on a 4-point Likert type scale ranging from (1) never to (4) very often. A sample item is “Would you be worried if you do not conform to the sexual request of your male friend?” Cronbach's alpha of the scale is .69.

Sexual assertiveness was measured through 10 items adapted from State University of New York at Buffalo (2007). The items were rated on a 3-point Likert type scale ranging from (1) never to (3) always. A sample item is “I make decisions regarding sex regardless of my male friend’s desire”. Cronbach's alpha of the scale is .67.

Influence of female friends was measured through 2 items developed by the authors. The items are rated on a 4-point Likert type scale ranging from (1) never to (4) very often. The items are: “Did your female school friends urge you to have sex?”, and “Did you have sex as a result of pressure from your female friends?” Cronbach's alpha of the scale is .72.

Risk factors for perpetrator and victim

Age of participants was used to examine age disparity among the different perpetrators and victims types.

Sexual violence attitude was measured through 15 items adapted from Sapp, Farrell, Johnson, and James (1999) and Fischer and Chen (1994). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I believe that young men often have forced sex with young and sexy women”. Cronbach's alpha of the scale is .81 for males and .73 for females.

Risky behaviors were measured through 5 items developed by the authors. Four of the items dealt with the frequency of a risky behavior and are rated on a 6-point Likert type scale ranging from (0) never to (5) every day. The items are: “How often have you chewed khat?”, “How often have you smoked shisha?”, “How often have you drunk alcohol?”, “How often have you watched pornographic films?” The fifth item is: How many sexual partners have you had? The first three items: khat chewing, shisha smoking and alcohol drinking were summed to create a score on substance use (Arnold, Gelaye, Goshu, Berhane, & Williams, 2008; Banyard, Cross, & Modecki, 2006). Cronbach's alpha of the scale is .76 for male and .68 for females. The fourth and fifth items were separately used because they were independently and strongly linked to sexual violence perpetration in previous studies (Carr & VanDeusen, 2004; Jewkes et al., 2006; Howard et al., 2007; Yimin et al., 2002).

Fearful parental attachment was measured through 4 items adapted from Van Oudenhoven, Hofstra, and Bakker (2003). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I would like to be open to my family but I feel that I can not trust them”. Cronbach's alpha of the scale is .96 for males and .79 for females.

Dismissive parental attachment was measured through 4 items for the males and 3 items for females adapted from Van Oudenhoven et al. (2003). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “It is important to be independent of my family”. Cronbach's alpha of the scale is .93 for males and .67 for females.

Derivation of the sexual violence perpetrator and victim types

We used hierarchical and K-means clustering techniques to assign individuals into the different forms of sexual violence perpetrators (males) and victims (females) as per the recommendation of Chen, Tai, Harrison, and Pan (2005) and Ghwanmeh (2007). The same general procedure was used for males and females separately. First, we subjected the four forms of sexual violence (sexual offense, sexual assault, sexual coercion, and sexual aggression) to hierarchical cluster analysis to determine the number of clusters. We generated five random samples representing 25% of the original sample (approximately 193 males and 191 females in each sample) and ran separate hierarchical cluster analyses on each. We then examined the agglomeration schedule and dendritic structure of each. These analyses revealed three clusters for both males and females. Then the total sample was randomly classified into two non-overlapping halves and K-means cluster analysis was ran. The analysis generated three clusters for both males and females for each sub-sample. Next, k-means clustering analysis was also run on the entire sample of males and females yielding three clusters for both male and female total sample. We then calculated the degree of correspondence between the cluster assignment based on the whole sample and the random 50 percent of the sample using kappa coefficient (Cohen, 1960). The kappa coefficient for the whole sample with the first 50% random sample was 0.95 for the males and 0.79 for females. The kappa coefficient of the whole sample with the remaining 50% was 1.00 for the males and .96 for females. The total kappa coefficient for the whole sample, therefore, was .98 for males and .88 for females. Thus, we are reasonably confident that our cluster types in both male and female cases are replicable. As a result, the subsequent analysis was made based on the cluster assignments based on the total sample of males and females.

Method of Analysis

Descriptive statistics multivariate analysis of variance (MANOVA) and discriminant analysis were used to analyze the perpetrator and victim types and their respective risk factors. Scheffe post hoc tests were also used to examine the mean difference across the perpetrators and victims types, and their respective risk factors that characterize them. Discriminant analysis was used to identify the most discriminating risk factors across the perpetrators and victims' types (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Koss et al., 1985). All the data were analyzed using SPSS version 16.

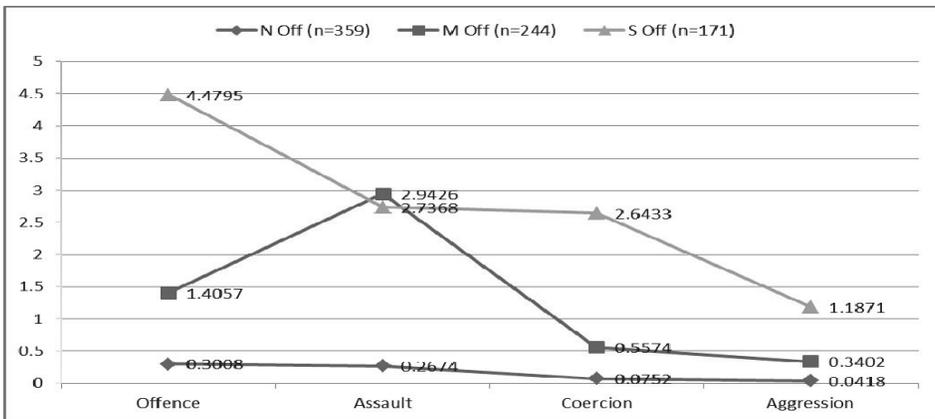
Results

Descriptive Statistics for Perpetrator and Victim Types

As noted above results of the cluster analyses revealed three perpetrator (male) and victim (female) types. Among the males, 46.4 % ($n=359$) were non-perpetrators of any forms of sexual violence, 31.5% ($n= 244$) were perpetrators of sexual offense and sexual assault (minor offenders), and 22.1% ($n=171$) of the entire male sample were perpetrators of sexual offense, sexual assault, sexual coercion and sexual aggression (serious offenders). Among the females, 60.1% ($n=459$) were non-victims of any forms of sexual violence, 22.4% ($n=171$) were victims of sexual offense and sexual assault (minor victims) and 17.5 % ($n=134$) were victims of sexual offense, sexual assault, sexual coercion and sexual aggression (severe victims).

Figure 6.2

Mean scores of perpetration on forms of sexual violence across perpetrator types.

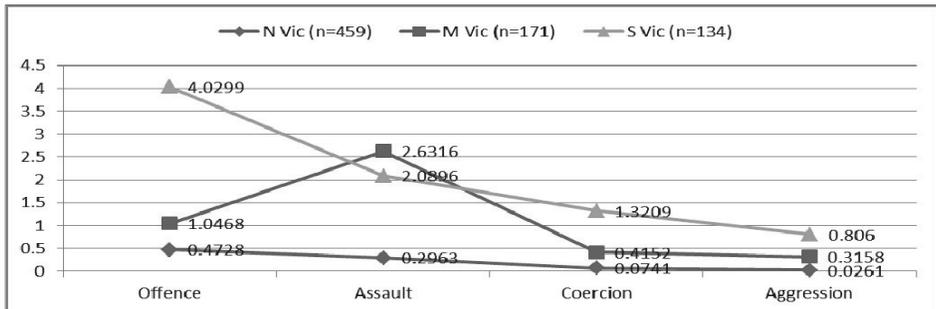


Note: Post hoc Scheffe tests revealed that the perpetrator types differed from each other on all four forms of sexual violence. N Off= non-offenders, M Off= minor offenders, S Off= serious offenders

We then examined whether the means of perpetrators and victims types significantly differ on the different forms of sexual violence. The multivariate analysis of variance (MANOVA) and Scheffe post hoc test have shown that perpetrator and victim types significantly differ across all forms of sexual violence ($P < .001$). The means of the perpetrator and victim types on the forms of sexual violence and number of individuals in each cluster are presented in Figures 6.2 and 6.3, respectively.

Figure 6.3

Mean scores of victimization on forms of sexual violence across victim types.



Note: Post hoc Scheffe tests revealed that the victim types differed from each other on all four forms of sexual violence. N Vic= non-victims, M Vic= minor victims, S Vic= severe victims

As figure 6.2 depicts the serious offenders have perpetrated sexual offense, sexual coercion and sexual aggression to a greater degree than minor offenders or non-offenders. The minor offenders have perpetrated sexual assault significantly higher than the serious offenders or non-offenders. As shown in Figure 6.3, severe victims have experienced sexual offense, sexual coercion and sexual aggression to a greater extent than the minor victims or non-victims. The minor victims have experienced sexual assault significantly higher than the severe victims or the non-victims.

Multivariate Analysis

Risk factors for Perpetrator Types

In order to examine the risk factors of perpetrator types, we next conducted a MANOVA on the dependent variables with perpetrator type as the between subjects factor. Means for each of the risk factors by perpetrators' types are presented in Table 6.1. With the exception of dismissive attachment, we found that the three perpetrator types significantly differed from each other on all of the risk factors. That is, we found that serious offenders were significantly older than minor offenders and non-offenders and minor offenders were significantly older than non-offenders. Similar significant differences were found for attitudes towards sexual violence, narcissism, substance use, pornography

Table 6.1

Three perpetrators' types and the mean and standard deviation of the risk factors that characterise them

Risk Factors	Non-offenders(NO)		Minor offenders (MO)		Serious offenders (SO)		F-value
	Mean	SD	Mean	SD	Mean	SD	
Individual							
Age	16.63 _a	(1.71)	17.42 _b	(1.87)	17.93 _c	(1.75)	34.70***
Sexual violence attitude	33.48 _a	(7.51)	42.79 _b	(11.54)	52.37 _c	(7.31)	265.88***
Narcissism	21.46 _a	(5.49)	24.58 _b	(5.51)	27.53 _c	(4.20)	81.14***
Risky Behaviours							
Substance use frequency	.81 _a	(1.58)	2.77 _b	(3.01)	5.41 _c	(3.75)	172.97***
Pornography use frequency	.77 _a	(.92)	2.01 _b	(1.05)	2.44 _c	(.98)	209.46***
Multiple sexual partners	.16 _a	(.60)	1.17 _b	(1.35)	3.05 _c	(1.81)	325.36***
Relationship							
Peer pressure	3.51 _a	(2.26)	6.11 _b	(2.75)	8.55 _c	(1.60)	288.62***
Violent family experience	1.71 _a	(4.38)	3.65 _b	(5.86)	7.12 _c	(6.93)	55.37***
Fearful parental attachment	6.93 _a	(3.49)	9.31 _b	(5.58)	13.43 _c	(5.55)	109.02***
Dismissive parental attachment	15.01 _a	(5.16)	15.58 _{ab}	(4.96)	16.58 _b	(3.60)	6.07**

** $p < .01$, *** $p < .001$

Note: Scheffe post hoc tests revealed that across almost all risk factors of the three perpetrators' types significantly differed from each other. Means with different subscripts per row are significantly different from each other. However the means of serious offender and minor offender, minor offender and non-offender for dismissive parental attachments are not significantly different. MANCOVA, with age as the covariate has yield result similar to the result by MANOVA

use, having multiple sexual partners, peer pressure, witnessing family violence, and fearful parental attachment. That is, serious offenders were significantly higher on these variables than minor offenders and non-offenders and minor offenders were significantly higher than non-offenders. With respect to dismissive attachment, the serious offenders were significantly more dismissively attached to their parents than non-offenders but they did not differ from the minor offenders. The minor offenders did not differ from the non-offenders in dismissive attachment. The discriminant analyses, however, indicated that five of the risk factors highly discriminated the perpetrators' types: pornography use (.41), having multiple sexual partners (.35), sexual violence attitude (.30), substance use (.22) and peer pressure (.20).

Risk factors for victim type

Means and standard deviations of the risk factors by victims' types are presented in Table 6.2. Significant differences across all variables except dismissive parental attachment were found. With the exception of age and sexual assertiveness, we found that the three victim types significantly differed from each other on the risk factors. That is, we found that serious victims had a significantly more positive attitude about sexual violence than minor victims and non-victims, and minor victims had a significantly more positive attitude about sexual violence than non-victims. Similar significant differences were found for rejection sensitivity, substance and pornography use, having multiple sexual partners, female friends' pressure, and fearful parental attachment. In addition, the reverse order of means was found on self-esteem. That is, severe victims showed the lowest self-esteem, non-victims had the highest, and minor victims were in between.

For age we found that severe victims were also relatively older than non-victims but not from that of minor victims. With respect to sexual assertiveness the non-victims were the most assertive and were more assertive than the minor and severe victims, while the minor and severe victims did not differ from each other. The discriminant analyses, however, indicated that four of the risk factors highly discriminate victim types (see table 6.3): pornography use (.49), substance use (.29), having multiple sexual partners (.18), and rejection sensitivity (.16).

Discussion

The present study used Degue and DiLillo's (2005) two dimensional conceptual framework for investigating typologies of sexual violence perpetrators (males) and victims (females) among Eastern Ethiopian secondary school students. In contrast to finding a four group typology, we found three clusters for both perpetrators and victims. Among males the three types identified are: serious offenders (engaged in all forms of sexual contact

Table 6.2

Three victims' types and the means and standard deviations of the risk factors that characterise them

Risk factors	Non-Victims		Minor Victims		Serious Victims		F
	Mean	(SD)	Mean	(SD)	Mean	(SD)	
Individual							
Age	16.67 _a	(1.31)	17.02 _b	(1.76)	17.04 _b	(1.29)	
Sexual violence attitude	33.57 _a	(6.90)	41.10 _b	(10.21)	45.29 _c	(10.00)	124.99***
Self-esteem	36.38 _a	(6.36)	30.64 _b	(8.30)	26.50 _c	(7.89)	115.71***
Rejection sensitivity	12.64 _a	(2.31)	14.87 _b	(3.08)	16.69 _c	(3.03)	137.52***
Sexual assertiveness	18.39 _a	3.86)	16.26 _b	(3.80)	15.68 _c	(3.26)	37.79***
Risky behaviours							
Substance use	.44 _a	(1.03)	1.42 _b	(2.03)	2.99 _c	(2.84)	117.18***
Pornography use	.25 _a	(.56)	.97 _b	(.93)	1.51 _c	(1.06)	162.41***
Multiple sexual partners	.13 _a	(.45)	.84 _b	(1.05)	1.71 _c	(1.48)	181.33***
Relationship							
Female friends pressure	2.13 _a	(.45)	2.64 _b	(.94)	3.05 _c	(1.17)	89.10***
Fearful parental attachment	8.18 _a	(3.78)	9.21 _b	(4.01)	10.36 _c	(3.98)	17.73***
Dismissive parental attachment	12.16 _a	(2.65)	12.33 _a	(2.85)	12.60 _a	(3.09)	1.38

*** $p < .001$, ** $p < .01$

Note: Scheffe post hoc tests revealed that across almost all risk factors of the three victims' types significantly differed from each other. Means with different subscripts per row are significantly different from each other. MANCOVA, with age as the covariate has yield result similar to the result by MANOVA

Table 6.3

Risk factors that most discriminate the perpetrators' and victims' types

Risk Factors	Discriminating perpetrator types		Discriminating victim types	
	Coefficient	<i>r</i> with function	Coefficient	<i>r</i> with function
Age	.09	.23	.01	.12
Sexual violence attitude	.30	.65	.14	.62
Narcissism	.07	.36		
Self Esteem			.12	-.60
Rejection Sensitivity			.16	.65
Sexual assertiveness			.02	-.33
Substance use	.22	.52	.29	.60
Pornography use	.41	.56	.49	.75
Multiple sexual partners	.35	.70	.18	.75
Peer pressure	.20	.67	.14	.52
Violent family experience	.09	.29		
Fearful parental attachment	.05	.41	.10	.23
Dismissive parental attachment	.04	.10	.05	-.07

Note: *The standardized canonical discriminant function coefficients have two functions for both perpetrators' and victims' types. The first function for perpetrator types accounted 94.4% of the total discriminating power of the analysis, and the first function for victim types accounted 96.3%, hence the above table display the first function coefficient.*

ranging from fondling to intercourse using verbal and physical tactics), minor offenders (engaged in non-coital sexual contact using verbal and physical tactics) and non-offenders (who reported no perpetration of any form of sexual violence). The serious offenders have frequently perpetrated sexual offense, coercion and aggression than the other types whereas the minor offenders have committed non-coital physical assaults to a greater extent than the serious offenders.

Among females the three types are: severe victims (experienced all forms of unwanted sexual acts), minor victims (experienced non-coital sexual advances) and non-victims (who have not experienced any forms of sexual violence). The severe victims have experienced high levels of sexual offense, coercion and aggression compared to non-victims with the minor victims in between. However, the minor victims have experienced higher sexual assault than the severe victims. This and the similar finding in perpetrator types warrant further study to establish whether there is a progression from minor to serious offending or whether these types of offenders and the victims they target are qualitatively different from each other. Additional risk factors might serve to discriminate these groups further.

These classifications of perpetrators' and victims' types vary from the four forms of sexual violence classification by DeGue and Dillo (2005). The difference may be DeGue and Dillo explanation of types of sexual violence is based on review of previous sexual violence studies. It focused on conceptual clarification of the distinct types of sexual violence. The present study, however, found the types from the empirical investigation conducted on male and female secondary school students through person-centered approach. The samples of the present study were adolescents who are on the beginning stage of romantic relationship and sexual activities. The majority of the sexually active adolescents might not have enough years of sexual experiences to develop distinct forms of sexual behavior. The focus of DeGue and Dillo's review were on adult men of different ages.

Risk factors for perpetrator types

We found 46% of the adolescent males being non-offenders of any form of sexual violence and 32% minor offenders who are engaged in non-coital sexual violence. About 22% were serious offenders who perpetrated sexual offense, sexual assault, sexual coercion and sexual aggression. The serious offenders were highly characterized by almost all the risk factors studied. However, the discriminant analysis revealed five of the risk factors strongly discriminating the perpetrator types: pornography use, having multiple sexual partners, sexual violence attitude, substance use and peer pressure.

Pornography use highly discriminated the serious offenders, minor offenders and non-offenders. The serious offenders were highly characterized by pornography use than the other types. This may be because they were relatively older than the other two types and might have more experience and access to sexually explicit material. A high degree of pornography use may push the serious offenders to more likelihood of practicing the scenes that they have observed on their female partners (Bergen & Bogle, 2000), however, experimental or longitudinal studies are needed to determine causal links

Engaging with multiple sexual partners also highly characterized the serious offenders than the other types. Since the serious offenders are older than the other offenders it is likely that they have had more sexual partners than the minor offenders and non-offenders. But over and above the effect of age, it could be that engagement with multiple sexual partners is linked with having sexual relations that lack emotional attachment (Braun-Courville & Rojas, 2009). Sexual relationships without emotional attachment are usually short term and with high likelihood of perpetrating sexual violence (Malamuth, Lintz, Heavey, Barnes, & Acker, 1995).

The serious offenders were also found highly involved in substance use than the other types. The environment of substance consumption allows meeting women who also consume or they may more likely invite female friends to consume substance as a form of get together. The frequent substance use may create a situation where they consider the women friendly cues in the interaction as sexual desire. Using this misperception of the women signals, they may perpetrate sexual violence considering their behavior under the influence of substance as excusable (Abbey et al., 1996).

Having more favorable attitude towards sexual violence was also found characterizing the serious offenders than the other types. This attitude may promote supremacy feeling in the determination of having sexual intercourse (DeGue & DiLillo, 2004). The more dominant patriarchal culture may also condone the male supremacy beliefs of these young men (Gossaye et al., 2003). However, such belief may deter free and mutual decisions between young men and women over conflict on when and how to have sex.

Peer pressure influences the serious offenders to a greater extent than the minor offenders or non-offenders. The peers with whom the serious offenders spent might also have high proclivity to sexual violence and might have been involved risky behaviors. Involvement with such peer group may influence the serious offenders to behave in similar manner with the rest of the peers to get acceptance (DeKeserdy & Kelly, 1995, Schwartz & DeKeseredy, 2000). Thus, the serious offenders may perpetrate sexual violence to get acceptance.

Risk factors for victim types

In almost all the risk factors investigated, the severe victims showed higher levels of all the characteristics than the minor victims and the non-victims. The discriminant analysis, however, showed four risk factors highly discriminating the victim types. They were pornography consumption, substance use, having multiple sexual partners and rejection sensitivity.

Like the perpetrators' types, severe victims are characterized by frequent pornographic films consumption than the minor victims or non-victims. Such pornography consumption mostly happens with male peers where the males use the scene to trigger the sexual desire of the females (Dines & Jensen, 2004). The film may also influence both the young women and men that what is being displayed on the film as acceptable sexual behaviors (Zillmann & Bryant, 1988).

Substance use was also found highly discriminating the victims types. The severe victims were found highly consuming substance than the minor victims and the non-victims. This high substance use may influence the young women to unrealistically appraise the situation (Gidycz et al., 2006) and also impair their verbal as well as physical resistance of the unwanted sexual moves of the young men (Abbey et al., 2004; Testa & Livingston, 1999). Substance use also exposes victims to partners who also consume substances. The men who are using substance themselves may also have impaired judgement when interacting with women (George et al., 1988; George, Stoner, Davis, Lindgren, & Norris, 2006). Finally, as was found in previous studies severe victims often have had sex with multiple partners.

Rejection sensitivity also highly characterized the severe victims from the minor victims or non-victims. This sensitivity may make them to comply with their partner unwanted requests for fear of being replaced (Edwards & Barber, 2009; Harper, Dickson, & Welsh, 2006; Purdie & Downey, 2000). In addition, these young women may also be concerned that sexual refusal might hurt their friend's feeling (Lewin, 1985). This behavior, however, may make them more vulnerable to the victimizing behaviors of their partner(s).

The foregoing discussions show that both the serious offenders and severe victims are characterized by high degree of pornography and substance use and engagement with multiple partners. These risk behaviors also found by previous studies as increasing both sexual violence perpetration (DeGue & DiLillo, 2004; Vega & Malamuth, 2007; Zablotska et al., 2009) and victimization (Howard et al., 2007; Messman-Moore et al., 2008; Yimin et al., 2002; Zablotska et al., 2009). The involvement in these risky behaviors may impair the judgments of both the serious offenders and severe victims about what is realistic and

acceptable and unrealistic and unacceptable behaviors. This in turn may increase the repeated sexual violence perpetration by the serious offenders, and repeated sexual violence victimization of the severe victims. The low level of involvement of the minor offenders and victims on these risky behaviors, however, might have prevented their engagement or victimization in more severe forms of sexual violence (sexual coercion and sexual aggression). The almost no involvement of the non-offenders and non-victims on risky behaviors, might have contributed to no sexual violence perpetration and victimization. These findings suggest that sexual violence prevention programs should focus on reducing or preventing involvement in risky behaviors in order to minimize or mitigate the occurrence of sexual violence. Both the serious offenders and severe victims are relatively older than the other types, these findings suggest that they might have started with the less severe form of sexual violence, beginning with sexual offense and sexual assault and progressing to more severe forms of sexual violence. Thus, intervention at an early age will prevent both serious offenders and severe victims from getting engaged in or victimized by even the less severe form of sexual violence. The tactics being used by the serious offenders are from verbal manipulation through non-consensual contacts, intercourse through psychological intimidation and through the use of force. These tactics are not learned at once, they are a series of behaviors that the serious offenders experience them through time. The minor offenders are relatively young in age, and they also use less severe tactics (sexual messages and physical contacts) to engage in non-coital sexual activity, yet touching a woman without her permission should also be recognized as inappropriate. These findings emphasize the importance of intervening at an early age to minimize the occurrence of sexual violence.

The serious offenders are highly influenced by the male supremacy beliefs in sexual relations. They believe that they are the ones to decide when, where and how to have sex. This might have emanated from the dominant patriarchal culture of male-female relationship in Ethiopia (Gossaye et al., 2003). The serious offenders also seem to perpetrate sexual violence to get along with their peer groups. Their interactions with the sexually active peer groups might have made them to behave the same way. Intervention, therefore, should focus on changing peer groups' norms towards consensual relationships to take advantage of the serious offenders respect to peer group's norms.

The vulnerability of the severe victim towards sexual violence may be enhanced by the young women's personality characteristics. The severe victims' high degree of sensitivity to their male partner's rejection enhances their sexual violence victimization. These young women may stay in a relationship even though it is an abusive one. The young woman may think that her refusal to his sexual advances may harm his feeling. This

calls for intervention to work on modifying individual personality characteristics or by enhancing coping skills to deal with rejection.

The minor offenders and victims are also characterized by these risk factors but to a lesser degree. The non-offenders and non-victims are characterized by low involvement with these risk factors and hence, intervention needs to focus on reducing the extent of these risk factors in the lives of both young men and women.

The interpretation of these findings, however, should be made with the following cautions in mind. To begin with, the clustering of both perpetrators and victims on forms of sexual violence was the first of its kind and requires further studies to establish the replicability of the types on other samples. Secondly, the data is obtained through a cross sectional study design; the stability of the types across time could be checked through a longitudinal study design. It is expected that as females mature they may be more likely to engage in sexual relations with males as a normative experience. Whether this also increases their sexual violence experiences also needs to be investigated with a consequent change in types. Moreover, longitudinal analyses are needed to determine whether several of the risk factors investigated here are indeed a cause, correlate or consequence of sexual violence victimization. Similarly, several of the risk factors for sexual violence perpetration might not be causally related to perpetration. Experimental and intervention studies are needed to test these associations. Thirdly, the self-administered questionnaire required recall of issues related to sexuality that might have been influenced by recall bias and social desirability effects. Fourth, the reliability of sexual coercion scale is low for the female sample and therefore effects could be masked. Fifth, our focus has been on sexual violence perpetration of males on females although we do acknowledge that the reverse direction of effects could occur and even same sex sexual violence is also a possibility.

Conclusion

We identified three perpetrator and victim types. Among perpetrator types, the serious offenders perpetrated a large degree of sexual offenses, sexual coercion and sexual aggression compared to the other types. They were older than minor offenders or non-offenders. Supportive attitude towards sexual violence, greater involvement in pornography and substance use, having multiple sexual partners, peer pressure highly characterize the serious offenders with minor offenders showing intermediate levels and non-offenders engaging in the lowest levels. Out of the victim types, the severe victims experienced high levels of sexual offense, sexual coercion and sexual aggression compared to the minor victims (who were intermediate) or non-victims. High sensitivity for male partner's rejection, greater involvement in pornography and substance use and having

multiple sexual partners characterized the severe victims compared to minor victims (who again were intermediate) or non-victims (who were very low on risk factors).

Our study has given insight on whether or not Degue and DiLillo's (2005) two dimensional conceptual framework on forms of sexual violence can be tested on perpetrator and victim types. The result revealed three perpetrators and victims types indicating that the types do not exactly fit Degue and DiLillo's conceptual model. The types embrace either zero forms of sexual violence, two forms (sexual offense and sexual assault) and all four forms sexual violence (sexual offense, sexual assault, sexual coercion and sexual aggression). The most severe perpetrators are those that force women to have sexual intercourse against their will either through psychological or physical means. Even the minor offenders are using both verbal and physical means to victimize women.

Intervention, therefore, should be tailored on the basis of perpetrator and victim types. The majority of females (60%) and sizeable proportion of males (46%) have not been involved in any form of sexual violence. The social norms (attitude, language and behaviors of interaction towards women) of this group could be used to change the attitudes and behaviors of the serious offenders (Berkowitz, 2003). Schools could mobilize the non-offenders to reduce the occurrence of sexual violence. Such an intervention would illustrate situations whereby the non-offenders display social norms that contradict perpetration of sexual violence, in turn, discouraging perpetration (Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003).

Schools' co-curricular clubs small group discussions could be tailored to focus on the consequences of unwanted sexual advances of young men including non-coital comments and gestures. Prevention efforts directed at non-coital sexual violence may preclude the progression of sexual violence to more severe forms: sexual coercion and sexual aggression (Gross, Winslett, Roberts, & Gohm, 2006). The fact that minor offenders have often touched women against their will, suggests this as a specific topic to cover. On the other hand, the serious offenders have perpetrated all forms of sexual violence: sexual offense, sexual assault, sexual coercion and sexual aggression. The majority of the serious offenders might have been involved in perpetration of sexual violence mistakenly believing that the way they behave towards their female friend is acceptable by peers. However, such misperception of the unacceptable behavior as justifiable behavior of peers may perpetuate perpetration of sexual violence. Berkowitz (2003) and Fabiano et al. (2003) have suggested correcting the misperception of perpetrating young men about peers attitude and behavior toward sexual violence in order to reduce the occurrence of sexual violence.

The risk factors that characterized the serious offenders and severe victims should be included in schools' curricula and co-curricular activities. This raises young men's awareness on the potential roles of the risk factors in the perpetration of sexual offense, sexual assault, sexual coercion and sexual aggression, and the consequences of committing the acts. Young women will also be capacitated to avoid situations that may expose them to different forms of sexual violence. In addition, assertiveness training may enhance the capacity of the young women to express their disagreements firmly and consistently. It should also allow women to examine whether their relational link with their partner is based on consent or imposition. Training on consensual relationships, free consent and respect for the opinion of partners for both young men and women should help to improve the relationships between them. It may also help the men to relearn that women have the right to say no when they disagree and unlearn their beliefs of male superiority in romantic or sexual relationships.

CHAPTER 7

Parental and Environmental Protective Factors that Moderate Risk Factors for Sexual Violence Perpetration and Victimization

Abstract

The purpose of this study was to investigate the moderating role of parental and environmental protective factors on the association between risk factors and sexual violence perpetration and victimization. We used a cross-sectional sample of 1,538 (774 male, 764 female) students from Eastern Ethiopia Secondary Schools. Our results indicated that the risk factor index was positively and strongly associated with both sexual violence perpetration and victimization. The protective factor index was negatively related to both sexual violence perpetration and victimization. The protective factor index buffered the association between the risk factor index for both sexual violence perpetration and victimization. When specific protective factors were examined, school connectedness attenuated the association between the risk factor index and sexual violence perpetration. Secure attachment, school connectedness, and religiosity moderated the relation between the risk factor index and sexual violence victimization. In all the moderated relationships, the relations between risk factor index and sexual violence perpetration and victimization were weaker for individuals with a high level of protective factors. Implications of results for schools in identifying and targeting at-risk youth for interventions and for future research are addressed.

Introduction

Many young people aged 15-24 years around the world are at increased risk of sexual violence perpetration and victimization (Carr & VanDeusen, 2004; Hines, 2007; Maxwell, Robinson, & Post, 2003; Testa, Tamsen, & Livingston, 2007; Young & Furman, 2008). In Ethiopia this risk is especially high, with estimates ranging from 3% to 70% for sexual violence perpetration and from 5% to 74% for sexual violence victimization (Bekele, Van Aken, & Dubas, 2011; Gorfu & Demisse, 2007; Mulugeta, Kassaye, & Berhane, 1998; Philpart, Goshu, Gelaye, Williams, & Berhane, 2009). In order to develop effective intervention programs targeted at reducing sexual violence, a two-pronged approach is necessary. Not only do risk and protective factors need to be identified, but the examination of whether similar factors (particularly protective factors) operate for both victims (predominantly females) and perpetrators (predominantly males) is also essential. Moreover, the determination of the protective factors for both would aid in developing interventions that could be used in mixed-gender settings such as schools. Most studies on adolescent sexual violence either focus on samples of victims or perpetrators with few dwelling on both (e.g., Krahe, Bieneck, & Olwing, 2007; Maxwell et al., 2003). In doing so it is difficult to assess whether differences in risk and protective factors are due to the fact that the samples of victims and perpetrators are drawn from different communities or subsamples. The current study was conducted in mixed-gender high schools in 3 towns located in Eastern Ethiopia. It focuses on the sexual violence experiences of males (as perpetrators) and females (as victims) and investigates whether the same protective factors operate for both or not.

Several risk factors have been linked with sexual violence perpetration and victimization. For example, positive attitudes towards sexual violence, an exaggerated sense of sexual self-entitlement, involvement in alcohol, drugs and pornographic film use, and engagement with multiple partners have been linked to sexual violence perpetration (Bushman, Bonacci, Dijk, & Baumeister, 2003; Carr & VanDeusen, 2004; Maxwell et al., 2003; Vega & Malamuth, 2007). Experiencing violent family life experiences, having insecure attachment and involvement with violent peer groups were also found to contribute to perpetration of sexual violence (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Borowsky, Hogan, & Ireland, 1997; Schwartz & DeKeseredy, 2000; Smallbone & Dads, 2000). Studies in Ethiopia have also confirmed the link between alcohol and drug use, and violent family experiences with sexual violence perpetration (Philpart et al., 2009).

For victims a similar host of risk factors have been identified. Involvement in alcohol, drugs and pornography use and having multiple sexual partners also increase

young women's vulnerability to sexual violence victimization (Champion, Robert, Rebecca, & Mark, 2004; Yeater & Lenberg, 2008; Yimin et al., 2002). Young women's lack of sexual assertiveness, low self-esteem, fear of partner's rejection and submission to female friends' pressure or norms for sexual relationships increase the likelihood of experiencing sexual violence (Lacasse & Mendelson, 2007; Livingston, Testa & VanZile-Tamsen, 2007; Young & Furman, 2008; Zweig, Barber, & Eccles, 1997). Rejection sensitivity, submission to female friends pressure to sexual relationships, an attitude supportive of male supremacy in sexual relations, involvement in alcohol, drugs and pornography use and engagement with multiple partners were also found to increase Ethiopian female adolescents likelihood of experiencing sexual violence (Arnold, Gelaye, Goshu, Berhane, & Williams, 2008; Bekele et al., 2011; Dibaba, 2007)

Some investigations have suggested that the reduction of these risk factors might mitigate the problem of sexual violence (Carr & VanDeusen, 2004; Testa et al., 2007). On the other hand, there is growing consensus that both risk and protective factors need to be taken into account. Moreover, most investigations of risk and protective factors look at whether these factors are linked positively or negatively with sexual violence. However, full resolution of the problem of sexual violence requires investigation into protective factors that buffer the association between risk factors and sexual violence (Hall, Teten, DeGarmo, Sue, & Stephens, 2005).

Recent studies have documented the moderating role of protective factors such as parental connectedness, school connectedness, parent-adolescent communication, and religiosity on the relation between risky sexual behavior and health compromising behaviors (Blum & Ireland, 2004; Earl & Burns, 2009; Kliewer & Murrelle, 2007; Parera & Suri's, 2004). Nevertheless, very few studies have investigated the moderating roles of protective factors on the relation between risk factors and sexual violence (Hall et al., 2005) and violence in general (Brookmeyer, Henrich, & Schwab-Stone, 2005; Holt & Espelage, 2005). A study by Hall et al. (2005) found a moderating role of protective factors (perceived minority status, importance of loss of social identity and ethnic identity) on the relation between risk factors (early risk, delinquency, sexual experience, acceptance of violence) and sexual aggression. Brookmeyer et al. (2005) found a buffering role of parental support and prosocial cognitions (the tendency to think about social interactions in a non-hostile way) on the relation between witnessing community violence and perpetration violence among adolescents. Holt and Espelage (2005) found a moderating role of parental social support on the association between dating victimization and depression among American males and females. The present study examined the moderating role of parental (secure parental attachment and parent-adolescent sexual

communication) and environmental (religiosity and school connectedness) protective factors on the association between risk factors and sexual violence perpetration and victimization. These factors were chosen since previous studies have found them to be important protective factors on health compromising behaviors and dating violence. In this review, we summarize the roles of the protective factors on health compromising behaviors and unhealthy-related outcomes. The review is presented based on the three areas of factors investigated in the present study: parental attachment and communication, religiosity and school connectedness.

Secure parental attachment and parent-adolescent communication

High levels of trust and communication between parents and adolescents are important components of creating and maintaining supportive relationships. Adolescent boys and girls who have good family relationships are more likely to delay early onset of sexual intercourse (Anteghini, Fonseca, Ireland, & Blum, 2001). Moreover, young peoples' strong connectedness to parents also reduces their involvement in a number of risky sexual behaviors, such as having multiple sexual partners and contracting a sexually transmitted infection (Blum et al., 2003; Henrich, Brookmeyer, Shrier, & Shahar, 2006; Parera & Suri, 2004) and engaging in or experiencing sexual aggression (Borowsky et al., 1997). Adolescents with a strong or secure parental attachment are more likely to refrain from engaging in violent behaviors (Franke, 2000) and less likely to engage in conflict with their sexual partners (Schwartz, Waldo, & Higgins, 2004). They are less likely to view themselves as superior in their relationship with their partners than the insecure ones. Similarly, young women with higher level of parental attachment were also less likely to experience both verbal and physical victimization from their partners (Earl & Burns, 2009).

Parental monitoring was also found to reduce both dating victimization and relational aggression (Leadbeater, Banister, Ellis, & Yeung, 2008; Galambos, Barker, & Almeida, 2003). For parental monitoring to be effective, however, there should be open communication between the parent and adolescents (Sieverding, Adler, Witt, & Ellen, 2005). Open parent-adolescent communication on sexual matters was also linked with a low level of sexual risk taking in late adolescence (Barnett, Papini, & Gbur, 1991; Pick & Palos, 1995). Particularly among girls, open sexual communication was found to protect them from experiencing sexual intercourse at an early age and frequent engagement in sexual intercourse (Henrich et al., 2006; Hutchinson, Jemmott, Jemmott, Braverman, & Fong, 2003; Sieving, McNeely, & Blum, 2000), although some studies find that open communication is linked to higher involvement in sexual activity, including making an early sexual debut and a higher number of sexual partners (Clawson and Reese-Weber,

2003; Somers & Paulson, 2000). Nevertheless, mothers' open communication with young women on sexual matters might allow a young woman to make more informed and safer sexual decisions (Werner-Wilson, 1998). Moreover, for those not yet involved sexually such parental communication may reinforce a young woman's sexual protective behaviors such as capacity for avoiding early onset of sexual intercourse, abstinence, and safe sexual practices (Aspy et al., 2007; Sionean et al., 2002). For example, adolescent females who frequently communicate about sexual issues with their parents were two times more likely to consistently refuse unwanted sexual intercourse than those who did so less frequently (Sionean et al., 2002). Adolescent males who have frequent communication on sexual issues (including condom use) with their parents were also found having safer sex with their partner than those who do not frequently communicate with their parents about these issues (Hadley et al., 2009). Hence, the results parent-adolescent sexual communication and adolescents' risky sexual behaviours seem to suggest that open communication may help adolescents to be safer in their sexual practices even if they choose to have sex.

Religiosity

Religiosity is an environmental factor that reduces young people's involvement in a host of risky behaviors (D'Onofrio et al, 1999, Kliwer & Murrelle, 2007). It is a personal belief in God and an indication of the degree of youth's internalization of their religious faith (Pearce, Jones, Schwab-Stone, & Ruchkin, 2003). Most religious groups discourage involvement in risky behaviors, premarital sex and dating violence (Howard, Qiu, & Boekeloo, 2003). Religious youth are more likely to delay sexual intercourse to a later age than secular youth (Rostosky, Wilcox, Wright, & Randall, 2004) and are more likely to refuse unsafe sexual intercourse (McCree, Wingood, DiClemente, Davies, & Harrington, 2003). Regular religious service attendance was also found as a protective factor against health compromising behaviors (Blum et al., 2003; Pearce et al., 2003; Scott, Munson, McMillen, & Ollie, 2006) and young people who regularly attend religious services are less likely to perpetrate and experience dating violence than those who do not attend regularly (Borowsky, et al., 1997; Cunrandi, Caietano, & Schafer, 2002; Howard et al., 2003).

School connectedness

School connectedness is another environmental factor deterring youths' involvement in risky behaviours. School connectedness is the belief of the young people that peers and other people in the school care about them and their learning (CDC, 2009). School connectedness protects adolescents from engagement in violent behaviours (Franke, 2000). Adolescents with higher levels of school connectedness had lower levels of aggressive beliefs and higher levels of perceived academic motivation (Frey, Ruchin,

Martin, & Schwab-Stone, 2009). They were also less likely to use cigarettes, marijuana and alcohol, to engage in physical violence (O'Connor, 1998), and to have sex at an early age (DiIorio, Dudley, Soet, & Mccarty, 2004; O'Connor, 1998) or less frequently (Blum et al., 2003; Sabo, Miller, Farrel, Melnick, & Barnes, 1999) than those with low school connectedness. Adolescent males with high school connectedness are also the least likely to perpetrate sexual aggression than those with low school connectedness (Borowsky et al., 1997). Compared with parental connectedness and religiosity, school connectedness was found as the strongest protective factor against young people's involvement in violent behaviour, substance use and early initiation of sexual intercourse (Blum & Ireland, 2004).

Present study

There are a number of studies on the role of protective factors on risky behaviours and unsafe sexual behaviours among adolescents. These studies have indicated that parental (secured attachment and parent-adolescent sexual communication) and environmental (religiosity and school connectedness) factors protect young people from potentially harmful behaviours such as substance abuse, alcohol abuse and sexual risk taking. However, little is known on the contribution of these protective factors on sexual violence perpetration and victimization (Borowsky et al, 1997; Dean & Malamuth, 1997; Leadbeater et al., 2008). The moderating role of protective factors on the relation between risk factors and sexual violence perpetration and victimization is least investigated. A study by Hall et al. (2005), however, has shown the moderating role of protective factors (perceived minority status, importance of loss of social identity and ethnic identity) in the relation between risk factors (early risk, delinquency, sexual experience, acceptance of violence) and sexual aggression. Their study confirmed that protective factors do act as buffers to risk factors in the occurrence of sexual aggression. The present study examined the moderating roles of both parental and environmental protective factors (taken as a combined protective factor and individually) on the relation between a risk factor index and sexual violence perpetration and victimization. Hence, we hypothesized that high parental and environmental protective factors are associated with low levels of both sexual violence perpetration and victimization and that these protective factors moderate the association between risk factors and sexual violence perpetration and victimization.

Method

Participants

The participants of the study were male and female secondary school students in the towns of Dire Dawa, Harar, and Jijiga in Eastern Ethiopia. Twelve secondary schools in Dire Dawa, six in Harar and three in Jijiga were operational in the year 2008/2009. The total number of students in these twenty one schools was 21,393 of which 13,497 were

male and 7,896 were female. Six schools were randomly drawn from the twenty one schools. The six schools have 12,337 students of which 7,668 were male and 4,669 were female. Based on power calculations, a random sample of over 10% of the 7668 male (793), and 17% of the 4669 female students (793) ranging in age 14 to 24 years were targeted in six schools in the present study. After a slight drop-out, the final sample consisted of 352 (45.5%) male and 341 (44.6%) female students from Dire Dawa, 261 (33.7%) males and 251(32.9%) females from Harar and 161 (20.8%) males and 172 (22.5%) females from Jijiga.

Procedure

The participants were chosen through a multistage sampling technique. In the multistage sampling, six schools (three from Dire Dawa, two from Harar and one from Jijiga) were randomly drawn from the twenty one schools of the three towns. Out of 187 total classes of the six schools 105 classes were taken via a non-proportional to size allocation technique. This was done in order to ensure a reasonable number of male and female students from all grades even though there were fewer students in grade 11 and 12 (preparatory grades for university education). Then, a simple random sampling technique was used to select the target classes and students from each class. All participants in the target sample completed a questionnaire prepared in the Amharic language. The original items of the questionnaire were all in English. They were translated into Amharic in a way that fits the cultural background of the area, maintaining contextual meaning. Three assistant professors from Haramaya University (Eastern Ethiopia) and the first author were involved in translating the questionnaire. The questionnaire was first translated to the Amharic language and back translated to English to maintain the original meaning of the questionnaire. Following this, the translated questionnaire was pre-tested on 32 male and 38 female secondary school students (not part of the larger sample). The comments from the students on the wording of the questionnaire were also incorporated into the final version of the survey.

The administration of the questionnaire was performed after getting approval from respective education bureaus and school officials. Following this, informed verbal consent was obtained from all participants before the administration of the questionnaire (Gorfu & Demsse, 2007; Kebede et al., 2005). The participants were also told that they could skip item/s or totally decline from filling in the questionnaire if they wanted. The administration was conducted in classrooms and halls with the help of fourteen teachers and four supervisors. The administration of the questionnaire lasted on average 2 hours.

The total response rate of the study was 98% (774 out of 793) for males and 96% (764 out of 793) for females. About 14 male and 11 female students declined from filling

the questionnaire on the outset, and 5 males and 18 females did not complete all parts of the questionnaire. The anonymity of the survey instrument, the face-to-face administration of the questionnaire in quiet and conducive rooms, the detailed explanation on the intent and use of the results of the survey, along with soft drink services at the middle of survey session might have contributed to this high response rate.

Measures

Sexual violence perpetration/victimization is measured through 21 items adapted from Koss and Gidycz (1985) and Koss and Oros (1982). The items are answered in a yes or no response. A sample item is “Were there situations where you had sex by forcing your female school friend?” for male respondents. The items were worded for males in such a way to assess sexual violence perpetration. The same items were worded for females in such a way to assess sexual violence victimization. A sample item is: “Were there situations where you had sex by being forced by your male school friend?” Total sexual violence perpetration and victimization scores are calculated by summing across the 21 items for both males and females. Cronbach's alpha of the scale is .89 for males and .83 for females.

Risk factor index

The risk factor indices for sexual violence perpetration and victimization were composed from existing scales that were adapted, and some scales developed by the authors. The measures include different scales. A cumulative risk factor was composed by first transforming the separate scales to Z-scores, and then summing the scores to form a risk factor index for both sexual violence perpetration and victimization. The details of how the risk factors were composed to risk factor index are clarified under the analysis section. In the following paragraphs we present the risk factors used in forming the risk factor index under three categories: risk factors’ answered by both males and females, risk factors for perpetration (scales answered only by males) and risk factors for victimization (scales and items answered by females only).

Risk factors for Perpetration and Victimization

Sexual violence attitude was measured through 15 items adapted from Sapp, Farrell, Johnson, and James (1999) and Fischer and Chen (1994). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I believe that young men often have forced sex with young and sexy women”. Cronbach's alpha of the scale is .81 for males and .73 for females.

Risky behaviors were measured through 5 items developed by the authors. Four of the items dealt with the frequency of risky behaviours and are rated on a 6-point Likert type scale ranging from (0) never to (5) every day. The items are: “How often have you

chewed khat?”, “How often have you smoked shisha?”, “How often have you drunk alcohol?”, “How often have you watched pornographic films?” The fifth item is: How many sexual partners have you had so far from the date of your first intercourse?. Cronbach's alpha of the scale is .75 for males and .69 for females.

Risk factors for Perpetration

Narcissism was measured through 10 items adapted from Thomaes, Stegge, Bushman, Olthof, and Denissen (2008). The items are rated on a 4-point Likert type scale ranging from (1) not at all true to (4) completely true. A sample item is “I think it is important to stand out”. Cronbach's alpha of the scale is .80.

Peer pressure was measured through 13 items adapted from Santor, Messervey, and Kusumakar (2000). The items are answered in a yes or no type response. A sample item is “My friends push me to do many things that I don't favour”. Cronbach's alpha of the scale is .78.

Violent family experience was measured through 3 items adapted from Foshee, Bauman, and Linder (1999). The items are rated on a 7-point Likert type scale ranging from (0) never to (6) ten or more times per month. A sample item is “How frequent have you ever witnessed your father hitting your mother?” Cronbach's alpha of the scale is .78.

Risk factors for Victimization

Age of the females at sexual debut was measured through one item.

Rejection sensitivity was measured through 10 items adapted from Downey and Feldman (1996). The items are rated on a 4-point Likert type scale ranging from (1) never to (4) very often. A sample item is “Would you be worried if you do not conform to the sexual request of your male friend?” Cronbach's alpha of the scale is .69.

Self esteem was measured through 10 items adapted from Rosenberg (1965). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “On the whole, I am satisfied with myself”. Cronbach's alpha of the scale is .78.

Sexual assertiveness was measured through 10 items adapted from State University of New York at Buffalo (2007). The items were rated on a 3-point Likert type scale ranging from (1) never to (3) always. A sample item is “I make decisions regarding sex regardless of my male friend's desire”. Cronbach's alpha of the scale is .67.

Influence of female friends was measured through 2 items developed by the authors. The items are rated on a 4-point Likert type scale ranging from (1) never to (4) very often. The items are: “Did your female school friends urge you to have sex?”, and “Did you have sex as a result of pressure from your female friends?” Cronbach's alpha of the scale is .72.

Protective factor Index

Protective factor indices for both sexual violence perpetration and victimization were composed from the adapted scales. The scales are composed by summing scores of the individual items within the scales. The scales have different types of response categories and therefore the total scores per scale were first transformed to Z-scores. The z-scores were summed to yield protective factor indices for both sexual violence perpetration and victimization. The protective factor indices measures include:

Secure attachment was measured through 9 items adapted from Van Oudenhoven, Hofstra, and Bakker (2003). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I find it easy to get engaged in close relationships with my family”. Cronbach's alpha of the scale is .98 for the male and .73 for female.

Parent-adolescent sexual communication was measured through 16 items adapted from Miller, Norton, Fan, and Christopherson (1998). The items are rated on a 4-point Likert type scale ranging from (1) very false to (4) very true. A sample item is “I talk openly about sex with my mother/female foster”. Cronbach's alpha of the scale is .90 for the male and .79 for female.

Religiosity was measured through 11 items adapted from Fiala, Bjorck, and Gorsuch (2002). The items are rated on a 5-point Likert type scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I abide by the commandments of God”. Cronbach's alpha of the scale is .93 for the male and .83 for female.

School connectedness was measured through 15 items adapted from Libbey (2004). The items are rated on a 4-point Likert type scale ranging from (1) very false to (4) very true. A sample item is “I can be successful at this school”. Cronbach's alpha of the scale is .90 for the male and .87 for female.

Method of Analysis

A risk factor index was created by summing the transformed scores of risk factor scales and items. In the female risk factor index, we first recoded the composed scores of self-esteem, sexual assertiveness, and age at sexual debut in a way that high scores reflect risk for victimization, before transforming them into Z-scores. The protective factor index was also formed by summing the transformed scores of the measures. In the descriptive analysis, we divided the score for risk factor index at the median to get high and low scores. We also divided the protective factor index and the separate protective factors (secure attachment, parent adolescent communication on sexual matter, school connectedness, and religiosity) into three levels (low, medium and high) using the top, middle and lower third of the distribution. This was done to examine the extent of

perpetration and victimization between high risk and low risk groups across the levels. Multiple hierarchical regression analysis was used to examine the main and interaction effect of protective factors. The multiple hierarchical regression was done twice: first for the protective factor index and next for the separate protective factors. In the hierarchical regression analyses, age and perceived socioeconomic status were entered on the first step, the centered risk factor index was entered on the second step, the centered protective factor index or the separate protective factors were entered at the third step, and the product term of the centered risk factor index and the protective factor index or the product term of the centered risk factor index and the protective factors were entered at the fourth step. Moreover, analyses of variance (ANOVA) plots were run to examine the extent of sexual violence perpetration and victimization between high risk and low risk groups as a function of protective factor index and protective factors. Scheffé post hoc tests were also run to examine sexual violence perpetration and victimization means across protective factors levels.

Results

Descriptive Statistics

Perpetration and Victimization

Sexual violence perpetration rates significantly differ among young men in the three protective factor index levels. For males, we found a mean perpetration score of 1.60 (*SD* 2.42) at the highest level of the protective factor index, 3.30 (*SD* 3.47) at the medium level of the protective factor index and 8.45 (*SD* 4.13) at the lowest level of the protective factor index. For females, we found mean victimization scores of 1.40 (*SD* 2.03) at the highest level of the protective factor index, 2.39 (*SD* 2.57) at the medium level of the protective factor index and 5.17 (*SD* 3.90) at the lowest level of the protective factor index.

Multivariate Analyses

Analyses for males: Protective factor index

The risk factor index was strongly and positively associated with sexual violence perpetration ($\beta = .67, P = .000$). The protective factor index was negatively associated with sexual violence perpetration ($\beta = -.16, P = .000$). The interaction of the protective factor index with the risk factor index was significant ($\beta = -.07, P = .003, \Delta R^2 = .003, P = .003$). As illustrated in the ANOVA interaction plots shown in Figure 7.1, there were higher declines in the extent of sexual violence perpetrations in the high risk group than the low risk group as a function of the protective factor index. The Scheffé post hoc test also demonstrated that the group with a high protective factor index showed significantly lower mean perpetration scores (1.6) compared with the groups with a protective factor index at either

Figure 7.1
The association of high risk and low risk groups with sexual violence perpetration and victimization as a function of protective factor index

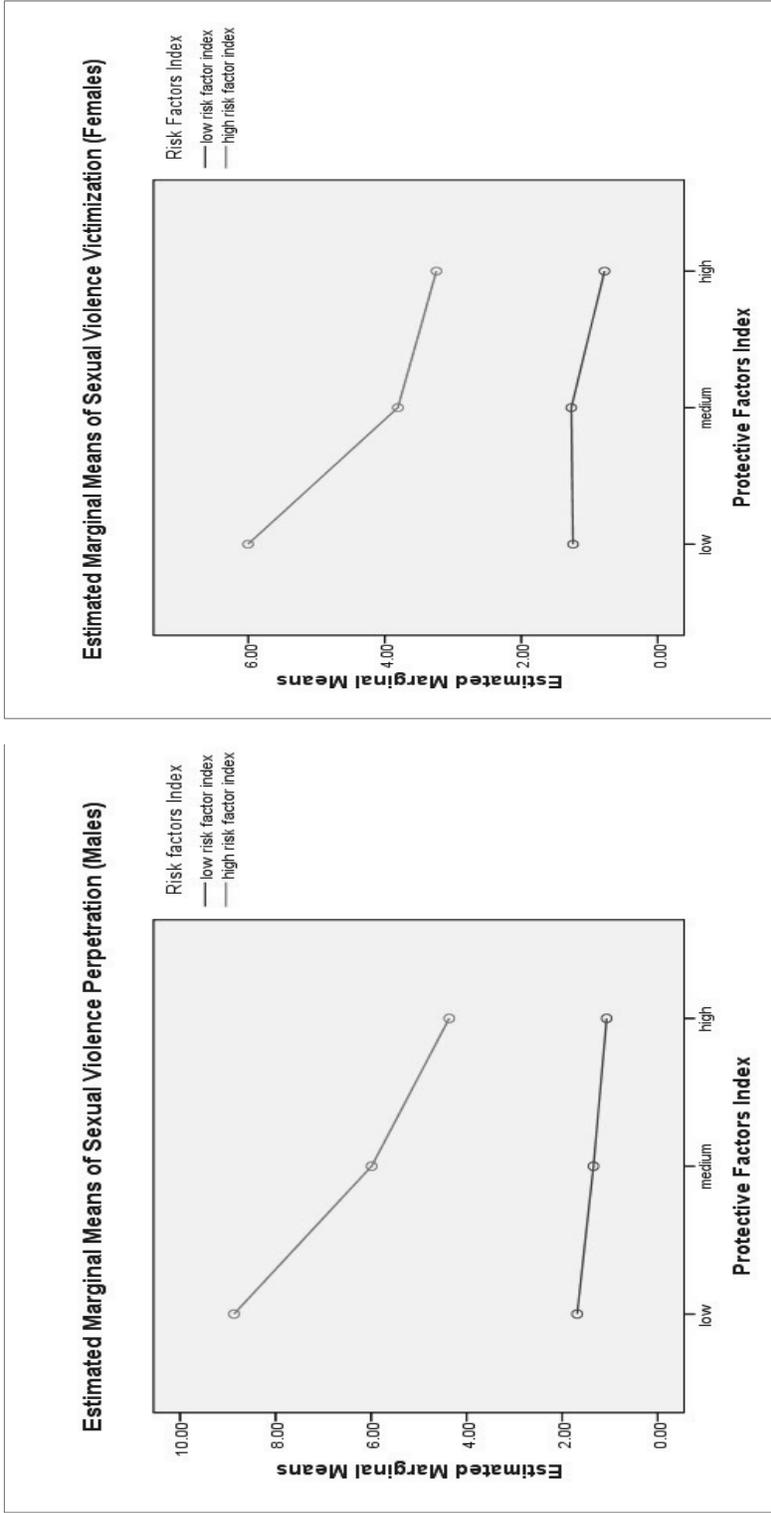


Table 7.1

Results from Hierarchical regression analyses predicting sexual violence perpetration (males) and victimization (females) from risk and protective factor indices on the total sample

Factors	Sexual Violence Perpetration (Males)			Sexual Violence Victimization (Females)		
	Adjusted R ²	R ² Change	Beta	Adjusted R ²	R ² Change	Beta
Model 1	.092	.094		.026	.029	
Age			.31***			.14***
SES			.00			-.09*
Model 2	.684	.591		.605	.578	
Age			.05*			.07*
SES			.01			-.01
Risk Factor Index			.81***			.77***
Model 3	.700	.016		.510	.006	
Age			.05*			.07**
SES			.01			.00
Risk Factor Index			.68***			.71***
Protective Factor Index			-.18***			-.10**
Model 4	.703	.003		.521	.002	
Age			.05*			.07**
SES			.02			.00
Risk Factor Index			.67***			.69***
Protective Factor Index			-.16***			-.09**
Risk * Protective Factors indices			-.07**			-.06*

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

the medium (3.3) or low (8.5) level ($F(2, 759) = 274.26, p=.000$). Table 7.1 presents the main and interaction effects of the protective factor index.

Separate protective factors

In the analyses with the protective factors entered separately (that is, not as a combined index), only school connectedness ($\beta = -.05, p=.044, \Delta R^2 = .006, p=.002$) significantly moderated the association between the risk factor index and sexual violence perpetration. The main effect also shows that only school connectedness was negatively related to sexual violence perpetration ($\beta = -.14, p=.000$). Secure attachment, parent-adolescent communication on sexual matter and religiosity, on the other hand, did not show significantly main as well as interaction effects. Table 7.2 presents the main and interaction effects of the separate protective factors. The ANOVA plots on Figure 7.2 also show a greater decline in the extent of sexual violence perpetration in the high risk group than the low risk group as a function of school connectedness. The Scheffe post hoc subgroup means analyses also depicted significantly lower mean sexual violence perpetration score (1.71) among the high school connectedness group than both medium (3.78) or low (8.95) school connectedness levels ($F(2, 766)=265.62, p=.000$). In both analyses (for the combined and separate protective factors), the control variable age was significantly and positively associated with sexual violence perpetration. Perceived socio-economic status, however, was not significantly linked with sexual violence perpetration.

Analyses for females: Protective factor index

The risk factor index was strongly and positively associated with sexual violence victimization ($\beta = .69, p=.000$), while, as expected, the protective factors index was negatively related with sexual violence victimization ($\beta = -.09, p=.002$). The protective factor index significantly attenuated the association between risk factor index and sexual violence victimization ($\beta = -.06, p=.029, \Delta R^2 = .002, p=.029$). The ANOVA plot in Figure 7.1 shows a high decline in the extent of sexual violence victimization in the high risk factor group than the low risk factor group as a function of protective factor index. The Scheffe post hoc test also demonstrated that the group with a high protective factors index showed significantly lower mean victimization (1.4) scores compared to groups with either the medium (2.4) or low (5.1) protective factors index levels ($F(2, 754) = 102.97, p=.000$). Table 7.1 presents the main and interaction effects of the protective factor index.

Separate protective factors

The analyses with the separate protective factors showed three out of the four factors buffering the association between the risk factor index and sexual violence victimization. Specifically, secure attachment ($\beta = -.07, p=.013, \Delta R^2 = .011, p=.000$), religiosity ($\beta = -.08, p=.007, \Delta R^2 = .011, p=.000$) and school connectedness ($\beta = -.11,$

Table 7.2

Results from Hierarchical regression analyses predicting Sexual Violence Perpetration (Males) and Victimization (Females) from risk factor index and protective factors for the total sample of adolescents.

Factors	Sexual Violence Perpetration (Males)			Sexual Violence Victimization (Females)		
	Adjusted R ²	R ² Change	Beta	Adjusted R ²	R ² Change	Beta
Model 1	.092	.094		.025	.028	
Age			.31***			.14***
SES			.00			-.09*
Model 2	.684	.591		.497	.470	
Age			.05*			.07**
SES			.02			-.01
Risk Factor Index			.81***			.77***
Model 3	.703	.021		.512	.019	
Age			.05*			.07**
SES			.02			.00
Risk Factor Index			.65***			.72***
Secure attachment			-.05 [†]			-.07**
Parent-adolescent communication			-.01			-.03
Religiosity			-.05*			.00
School connectedness			-.14***			-.03
Model 4	.708	.006		.523	.014	
Age			.06**			.07**
SES			.02			.00
Risk Factor Index			.64***			.75***
Secure attachment			.00			-.05 [†]
Parent-adolescent communication			-.02			-.02
Religiosity			-.04			.03
School connectedness			-.14***			-.06 [†]
Secure attachment * Risk factor index			-.06 [†]			-.07*
Parent-adolescent communication * Risk factor index			.03			-.03
Religiosity * Risk factor index			-.02			-.08**
School connectedness * Risk factor index			-.05*			-.11**

+ p < .10 * p < .05 ** p < .01 *** p < .001

Figure 7.2
The association of high risk and low risk groups with sexual violence perpetration and victimization as a function of school connectedness

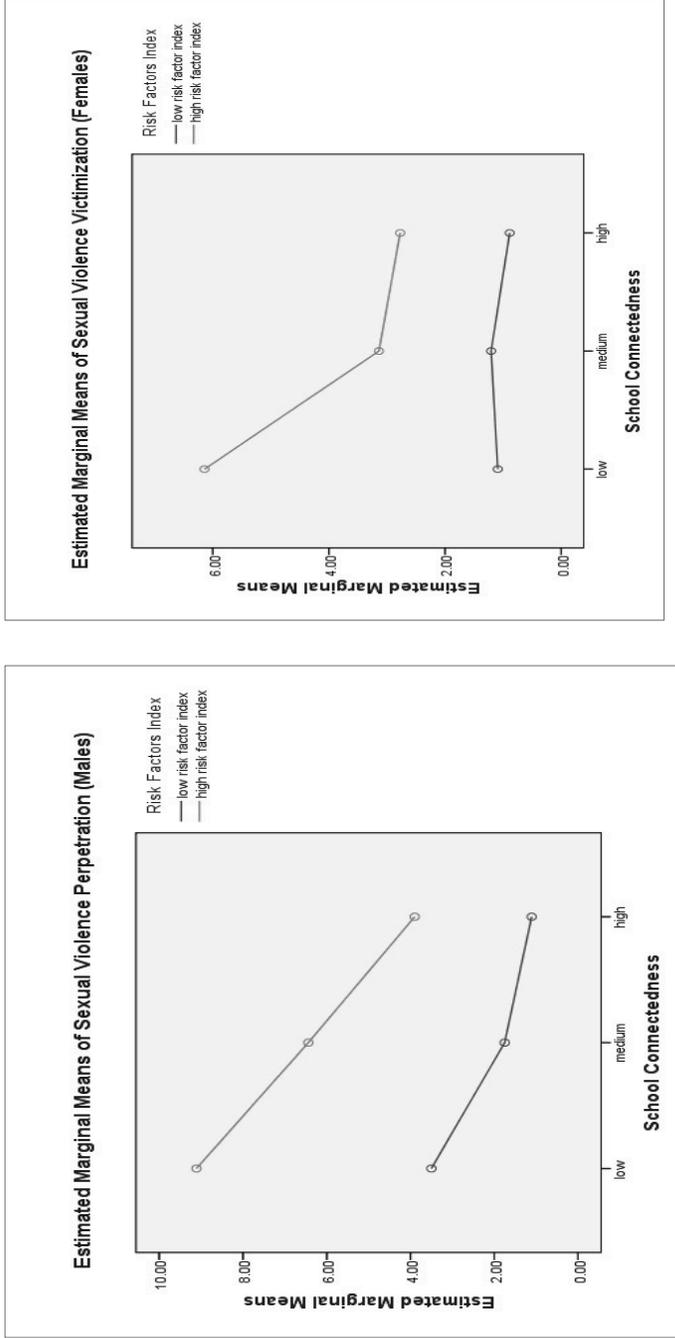
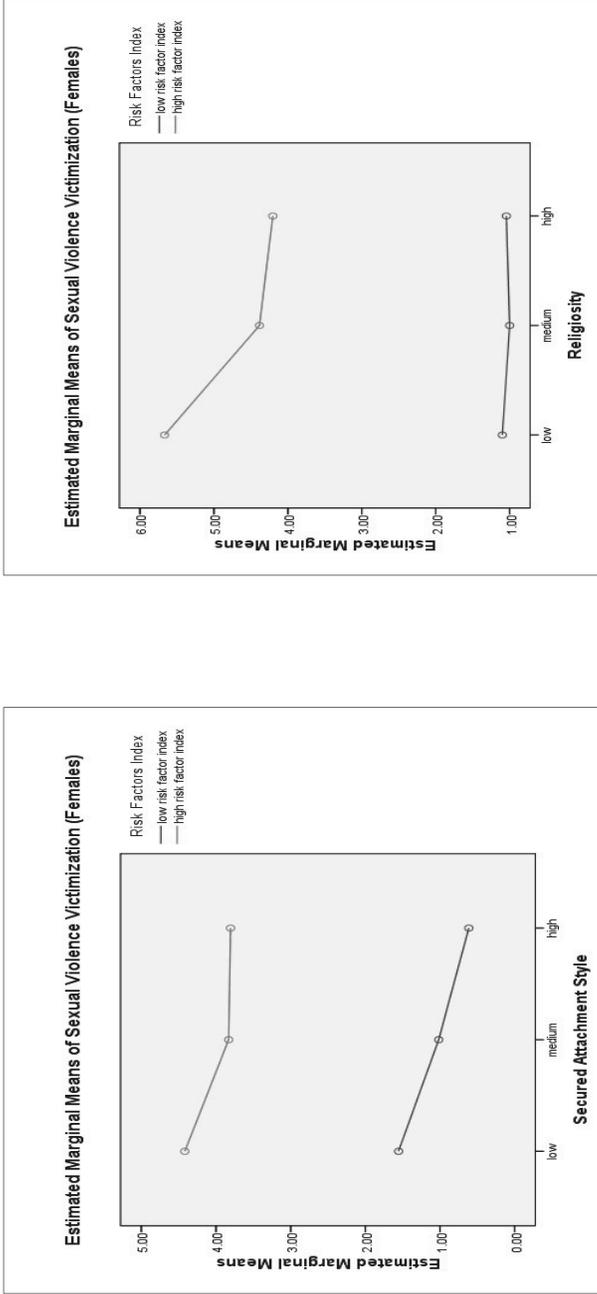


Figure 7.3
The association of high risk and low risk groups with sexual violence victimization as a function of secure attachment and religiosity



$p=.002$, $\Delta R^2=.011$, $p=.000$) significantly attenuated the relation between risk factor index and sexual violence victimization. Parent-adolescent communication on sexual matter, however, did not significantly moderate the association between risk factors and sexual violence victimization. The main effects for all protective factors were also not significant. The ANOVA plots in Figure 7.2 & 7.3 displayed that the high risk group greatly declined in the extent of sexual violence victimization than the low risk group as levels of both religiosity and school connectedness increased. However, such an effect was not found for secure attachment.

The Scheffe post hoc sub-group analyses depicted significantly lower extent of victimization at higher and medium level secure attachment, religiosity and school connectedness than the respective lower level. The mean scores of the high level and medium level did not significantly differ from each other on mean levels of sexual violence victimization. However, the groups that were either high (2.14) or medium (2.54) on secure attachment significantly differed from the lowest group (4.31) that showed the highest level of victimization ($F(2, 758)= 3.31$, $p=.037$). The same holds true for religiosity (high=2.14, medium=2.69, low=4.12) ($F(2, 758)= 3.41$, $p=.034$) and school connectedness (high=1.42, medium=1.86, low=5.68) ($F(2, 758)= 121.94$, $p=.000$). In both the combined and separate protective factors moderation analyses, the control variable age was significantly and positively associated with sexual violence victimization. Perceived socio-economic status, however, was not significantly associated with sexual violence victimization.

Discussion

The purpose of this study was to investigate the moderating role of parental (secure parental attachment and parent-adolescent communication on sexual matter) and environmental (religiosity and school connectedness) protective factors on the relation between risk factors and sexual violence perpetration and victimization. The risk factor index was positively and strongly related to both sexual violence perpetration and victimization. This finding is consistent with previous findings in other countries (Carr & VanDeusen, 2004; Livingston et al, 2007; Maxwell et al., 2003; Vega & Malamuth, 2007; Young & Furman, 2008). The protective factor index was negatively associated with both sexual violence perpetration and victimization. Some of the separate protective factors are negatively related with sexual violence perpetration but not with sexual violence victimization. The subsequent discussion presents this issue separately for perpetration and victimization.

Perpetration

The results for sexual violence perpetration revealed that young men with a higher level of the protective factor index perpetrated sexual violence to a relatively lower extent than those with a medium protective factor index or low protective factor index. The protective factor index also moderated the relation between risk factors and sexual violence perpetration, in which the relationship was weaker for young men with a high protective factor index. Hence, a high level of the protective factor index buffers the effect that risk factors may have on sexual violence perpetration. Those young men who had higher level involvement in school connectedness, religiosity, secure attachment and open communication on sexual matters with parents (or at the very least have a higher combination of these factors than other men) may have a better opportunity to develop respect for differing opinions of partners and for using a non-violent means for the resolution of disagreements. Higher level engagement in these protective factors in combination may also help young men to emulate positive behaviors such as openness, trust and fairness to one's partner. These behaviors might have been learned by the young men from parents, peers, religious fathers, and other adults. Behavioral qualities like open communication, trust and respect have also been suggested by Berkowitz (2003) as important ingredients for the formation of respectful relationships among young men and women. Moreover, Flood, Fergus, and Heenan (2009) have argued that understanding the importance of having a respectful relationship is a buffer for the occurrence of dating violence among young men and women. Further research is needed to determine the mechanism of these effects.

School connectedness, out of the separate protective factors involved, was the only individual factor that moderated the relation between the risk factor index and sexual violence perpetration. Specifically, high levels of school involvement buffered the young men from being sexually violent despite exposure to risks. The main effects also show school connectedness to be the only individual protective factor that was significantly being negatively associated with sexual violence perpetration. Secure parental attachment, parent adolescent communication on sexual matters and religiosity, however, were not significant protective factors nor buffer for the risk factors. This may be because young men at high school age may be more under the influence of peers than parents/adults (Eitle, 2005). During this age schooling and school-related activities may take up more time of the young men than parental connectedness and religiosity. Greater involvement in schooling and school-related activities may also be because schooling is the main road to economic independence for most Ethiopians.

Higher level of engagement with schooling and school-related activities may also minimize young men's opportunities to engage in risky behaviors which trigger sexual violence perpetration (Carr & VanDeusen, 2004; Maxwell et al., 2003; Vega & Malamuth, 2007). Adolescents who have high levels of school connectedness may have strong academic motivation and may invest much time on academic matters (Frey et al., 2009) reducing their likelihood of involvement in risky behaviors (O'Connor, 1998). These young men may also form strong positive bonds with teachers where they emulate positive behaviors for their personal growth instead of being involved in risky behaviors (Kliewer & Murrelle, 2007). They may also have greater involvement in extracurricular activities developing self-management, respect for others and mutually benefiting relationship with peers (McNeely, Nonnemaker, & Blum, 2002).

Victimization

Like perpetration, young women with high levels of the protective factor index experienced relatively lower sexual violence victimization, compared to women with a moderate or low level of the protective factor index. As expected the protective factor index was negatively associated with sexual violence victimization and the women low on protective factors were particularly exposed to high levels of sexual violence. The protective factor index also moderated the relation between the risk factor index and sexual violence victimization in which the relationship was weaker for young women with high protective factors. Hence, the protective factor index acts to buffer the effects that the risk factors may have on sexual violence victimization. This is consistent with what Blum and Ireland (2004) have found for health compromising behaviors and we now extend this to sexual risk as well.

When the protective factors were analyzed separately, secure parental attachment, religiosity and school connectedness were all found to attenuate the association between risk factors and sexual violence victimization. These moderated relationships were weaker for young women with high secure parental attachment, religiosity and school connectedness. Parent-adolescent communication on sexual matters, however, did not moderate the relation between the risk factors index and sexual violence victimization. This may be due to the highly taboo nature of sexual matter discussion between parents and adolescents in the Ethiopian society (Gebre-Yesus & Fantahun, 2010). This, in turn, might have limited the opportunity for open sexual discussion between parents and adolescents.

Secure parental attachment buffered the relation between risk factors and sexual violence victimization in which the relationship was weaker for young women with high levels of secure parental attachment. This is because secure parental attachment may

reduce involvement in risky behaviors (Blum et al., 2003; Henrich et al., 2006), and delay romantic relationship development and age at sexual debut (Anteghini et al., 2001). Since these young women have strong parental support, they may more likely to form a relation with a partner based on healthier norms, respect and mutual decision making, rather than women with insecure attachment (Leadbeater et al., 2008).

Religiosity also buffered the relation between risk factors and sexual violence victimization such that the relation was weaker for young women with high levels of religiosity. Religiosity significantly reduces the involvement of young women in risky sexual behaviors (Kliewer & Murrelle, 2007; McCree et al., 2003). As Smith (2003) forwarded, this may be because young women who are highly religious might have received more moral directives against involvement in risky behaviors. They might have formed strong friendship and relational ties with like-minded young people who condemn involvement in risky behaviors and premarital sex. They might have also received mutually reinforcing messages from adults who also participate in religious services. Religious females regularly attend religious services (Scott et al., 2006) which might give more these females more opportunities to gain spiritual deterrents from involvement in risky behavior from their 'Niseha Abat' (e.g., priest). Further research is needed to determine the mechanism by which religiousness serves as a protective factor.

School connectedness was also found to moderate the relation between risk factors index and sexual violence victimization in which the relationship was weaker for young women with high levels of school connectedness. This may be because young women who are highly interested in school may form friendships with young men who are also pro-schooling and are actively involved in school (Frey et al., 2009). Moreover, high levels of school connectedness may reduce opportunities of these women to encounter potentially perpetrating young men since school connectedness reduces young women's involvement in risky behaviours (Martyn & Martin, 2003; O'Connor, 1998). For both males and females in our sample, school connectedness was found to moderate the relation between the risk factors index and sexual violence perpetration and victimization. This is consistent with the previous finding in which school connectedness is the strongest protective factor (Blum & Ireland, 2004) against involvement in health compromising behaviors. Hence, schools could also be used as important contexts where intervention on protective factors could be made.

The findings of this study have to be interpreted with the following limitations in mind. To begin with, the investigation was a cross-sectional study and firm conclusions on the moderating role of the protective factors in the association between risk factors and sexual violence perpetration and victimization requires longitudinal and intervention

studies. Secondly, the present research requires the recall of sexual experiences which might be prone to recall bias and social desirability effects. Thirdly, our study focused on parental and environmental factors and did not deal with individual characteristics such as empathy, pro-social behavior and interpersonal communication skills that can also be important protective factors. Finally, this study was conducted with youth who are still in school or who attended school on the day of the questionnaire. This may mean that results of the present study might not be generalizable to youth who are even less involved students and/ or no longer attend school.

Conclusion

The protective factor index buffered the relation between risk factor index and sexual violence perpetration and victimization. School connectedness was the only individual protective factor that moderated the relation between risk factors and sexual violence perpetration and victimization. On the other hand, secure parental attachment and religiosity buffered only the relation between risk factors and sexual violence victimization. In all the moderated relationships, the relations between risk factor index and sexual violence perpetration and victimization were weaker for both young men and women who have high level protective factor/s. Therefore, increased level of protective factor/s (school connectedness in males and females, and secure parental attachment and religiosity in females) may reduce the likelihood of engaging in and experiencing sexual violence. By these findings, we add to the the existing few studies (Brookmeyer et al., 2005; Hall et al., 2005) on the moderating roles of protective factors on the relation between risk factors and sexual violence.

Based on the findings, we suggest the following implications for intervention. Promoting protective factors in the life girls and boys in mixed gender schools may be effective in reducing the occurrence of sexual violence. Such higher level of involvement by girls and boys in these protective factors minimizes the possibilities that they will engage in risky behaviors that potentially increase their vulnerabilities. Frey et al. (2009) have also recommended enhancing young people's attachments to school, family and community in combination as a preventive strategy to the occurrence of violence. School guidance and counseling offices can integrate both parental and environmental protective factors in their regular programs.

Emphasizing school connectedness among male and female students may protect them from engaging and experiencing sexual violence by shifting their focus on more academic related activities. School connectedness may also allow both young men and women to benefit more from what schools offer to students. Schools can disseminate (through the mini-media services and club activities) information on tolerance, respect for

the opinion of others, free consent and open communication. These, in turn, may promote opting for peaceful conflict resolution strategies over violent alternatives in cases of disagreements among young people (Frey et al., 2009). Schools can also be used for educating appropriate sexual behaviors for adolescents through biology, and civics and ethical education curricula. Gebre-Yesus and Fantahun (2010) have found schools as main source of information on sexuality for the development of responsible sexual behaviours among young people. For out of school adolescents, more engaging activities (in-door and outdoor games, stocking libraries with variety of fictions, football TV channels) in Youth Centres could protect the adolescents from engaging in risky behaviours that potentially lead to sexual violence.

Promoting secure parental attachment and religiosity can be done in schools' co-curricular clubs. These clubs are managed by the students themselves. Schools could use clubs to promote secure parental attachment (e.g., through inviting parents to schools to share experiences on the creation of warm relationship between parents and their daughters/sons) and religiosity (e.g., school ethics clubs practice morally valued behaviors and relating this with the morally valued behaviors of churches and mosques) in the life of girls since both have the potential to develop deterrent behaviors in girls. School guidance and counseling offices could also encourage girls to become more attached to parents and religious peers and to develop morally valued behaviors. Morally valued behaviors (listening to ones conscience, abstinence, sex after marriage, friendship with those who have morally valued behaviors) minimize the opportunities of involving in risky behaviors (Adamczyk & Felson, 2006; Kliwer & Murrelle, 2007) which in turn reduce the possibility of encountering potentially perpetrating young men.

CHAPTER 8
General Discussion

The purpose of this dissertation was to investigate the determinants of sexual violence among Eastern Ethiopia secondary school students. To this end, we studied risk and protective factors for both sexual violence perpetration and victimization, and the moderating role of protective factors on the relation between risk factors and sexual violence perpetration and victimization. This was accomplished through five empirical studies. The first study (chapter three) addressed the prevalence and patterns of sexual violence perpetration. In the second study (chapter four), we investigated risk factors for sexual violence perpetration, whereas in the third study (chapter five) risk factors for sexual violence victimization were studied. In the fourth study (chapter six) we studied types of perpetrators and victims based on the forms of sexual violence they used or experienced and in the fifth study (chapter seven) we studied the moderating roles of protective factors on the association between risk factors and sexual violence perpetration and victimization. In this last chapter, we discuss the main findings of the five empirical studies. Moreover, we elaborate the implications and limitations of the studies, and mention issues for future research.

Prevalence of sexual violence perpetration and victimization

In chapters three and five, we studied the prevalence of sexual violence perpetration and victimization. In these studies, we found 70% of the young men perpetrating and 68% of the young women experiencing at least one instance of sexual violence. Previous investigations on sexual violence have also indicated perpetration to be as high as 67% in South Africa (Magojo & Colling, 2003) and victimization as high as 65% in Ethiopia (Worku & Addisie, 2002). It is important to note that in our studies, perpetration and victimization are each considered on a continuum of sexual violent behaviors, ranging from verbal/psychological intimidation to physically forced sexual intercourse. Accordingly, about 56% of the young men have perpetrated and 52% of the young women have experienced sexual offense (verbal remarks, etc), and 62% of the young men have perpetrated and 56% of the young women have experienced sexual assault (unwanted, non-coital physical contact). The available studies on verbal/psychological pressure for sexual activities have demonstrated up to 74% sexual offense victimization in Ethiopia (Mulugeta, Kassaye, & Berhane, 1998) but no reported prevalence on perpetration. The rate of sexual offense perpetration reported in South Africa, however, was as low as 17% (Magojo & Colling, 2003). This difference may be accounted for by the number of items used to measure sexual offense perpetration. Magojo and Colling used only one item whereas we used 7 items. Sexual assault perpetration was 13% (Philpart, Goshu, Gelaye, Williams, & Berhane, 2009) and victimization was 43% (Gorfu & Demisse, 2007) in Ethiopia, and 27% perpetration in South Africa (Magojo & Colling, 2003).

The deviations of the prevalence in our findings with that of previous findings in Ethiopia could be related to differences in the number of items used to measure the specific forms of sexual violence, the time span used to determine the prevalence, and the geographic area of the study. In general, the proportions of both sexual violence perpetration and victimization involving non-coital sexual behaviours are higher and vary in the degree depending on whether the prevalence was studied for last year or for lifetime, whether the victims report or the perpetrators report was used, and whether one town versus more than one town was studied, and in which part of the country these towns are located.

On the other hand, a much lower proportion of both perpetration (chapter 3) and victimization (chapter 5) were reported for sexual coercion (verbal and psychological persuasion to have intercourse) and sexual aggression (physically forced intercourse). About 38% of the young men have perpetrated and 25% of the young women have experienced sexual coercion, and 23% of the young men have perpetrated and 15% of the young women have experienced sexual aggression. However, there was no reported prevalence on sexual coercion both in Ethiopia and Africa in prior studies. The prevalence on sexual aggression perpetration was reported 3% in Ethiopia (Philpart et al., 2009) and 23% in Tanzania (Wubs et al., 2009). The reported prevalence on sexual aggression victimization has ranged 5% to 43% in Ethiopia (Gorfu & Demisse, 2007; Molla, Ismail, Kumei, & Kebede, 2002; Mulugeta et al., 1998) and 15% to 38% in Africa (Jewkes & Abrahams, 2002; Moore, Awusabo-Asare, Madise, John-Langba, & Kumi-Kyereme, 2007; Rwenge, 2000).

In chapter six, we also studied the proportion of perpetrators and victims of sexual offense, sexual assault, sexual coercion and sexual aggression through a person-centered approach. The analysis revealed three perpetrator and victim types. Among the males, 46% of the young men did not perpetrate any forms of sexual violence (non-offenders), 32% were perpetrators of sexual offense and sexual assault (minor offenders), and 22% of the entire male sample were perpetrators of sexual offense, sexual assault, sexual coercion and sexual aggression (serious offenders). Among the females, 60% of the young women did not experience any forms of sexual violence (non-victims), 22% were victims of sexual offense and sexual assault (minor victims) and 18% were victims of sexual offense, sexual assault, sexual coercion and sexual aggression (severe victims).

In both the variable and person-centered analyses of sexual violence, the prevalence rates of perpetration are higher when obtained based on perpetrator reports compared to victim reports. Several possibilities may account for these differences. First, this may be because of young women's fear of stigma in disclosing the actual level of sexual violence

victimization (Gelaye, Arnold, Williams, Goshu, & Birhane, 2009). The young women may perceive that they will be excluded or degraded by their peers if they reveal their actual level of victimization since female peers may promote a more passive reaction to a male partner's sexual advances (Wood, Maforah, & Jewkes, 1998). Second, the young women may also think that revealing the actual level of sexual violence victimization may not trigger support from the community (Heise, Ellsberg, & Gottemoeller, 1999) necessary in reducing the victimization since most African cultures (including Ethiopia) favour female submission to males' sexual advances. Yet, in presenting the purpose of the study we emphasized that this information could be useful for designing interventions to reduce sexual violence. Third, some young women might have considered the unwanted sexual activities as acceptable and normative behaviours for friendly relationships (Koss, 1985; Wood et al., 1998). Finally, the study focus might also account for the lower reports for victims than perpetrators. The study questions focused on victimization that happened from young men of similar age, rather than whether the female experienced any victimization; thus, the females were not asked to report about whether older, adult men had also victimized them. Given that males generally target younger women for sex this could partially account for the higher rates of perpetration in all forms of sexual violence compared to victimization.

The differences in prevalence rates of both perpetration and victimization between our study and the previous studies, however, could also be traced to variations in geographic coverage of a study area (a town, region, nationwide) and the time span a study focused on (one year, ten years and lifetime). In the current study we focused on a higher risk region of Ethiopia compared to the other studies, our questions targeted lifetime prevalence (although the oldest member of our sample was 24). Moreover, it may be because of differences in the number of items used to measure the different forms of sexual violence perpetration and victimization (some have used one item, others have used two or three, and still others have used more than ten). The prevalence rates reported in the present studies were derived from twenty-one items adapted from previous investigations.

Risk factors for sexual violence perpetration and victimization

In chapter four and five we investigated the risk factors for sexual violence perpetration and victimization using a variable-centered approach. Having multiple sexual partners, frequent watching of pornography and substance use were the strongest risk factors for both sexual violence perpetration and victimization. A supportive attitude towards sexual violence and fearful parental attachment also significantly contributed to both sexual violence perpetration and victimization.

An exaggerated feeling of entitlement (narcissism) was found to enhance sexual violence perpetration and rejection sensitivity was found to increase vulnerability to sexual violence victimization. Results in chapter six, where a person-oriented approach was used to identify victim and perpetrator types, found that these characteristics were also linked with the serious offenders and severe victims.

Substance uses (khat chewing, shisha smoking, and alcohol drinking) have become common practices among young people of Ethiopia (Kebede et al., 2005; Meressa, Mossie, & Gelaw, 2009). Substances are most often consumed to facilitate a social get together where males and females socialize (Maziak, 2008). The frequent consumptions of such substances, however, may influence young men's thinking about young women. They often think of young women as being more interested in sex than the women actually are (Farris, Treat, Viken, & McFall, 2008). Some young men, for example, have the expectation that drinking alcohol enhances sexual desires (Abbey, McAuslan, & Ross, 1998; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003). They often view their drinking as an excuse for both their misperception of women's friendly cues as sexual interest and for their own unwanted sexual advances (Abbey, 2002; Abbey, BeShears, Clinton-Sherrod, & McAuslan, 2004).

Some other studies, however, pointed out that alcohol drinking contributes to sexual violence perpetration only when accompanied by a predisposition to perpetrate sexual violence (Noel, Maisto, Johnson, & Jackson Jr, 2009; Ullman, Karabatsos, & Koss, 1999). However, our analysis (in Chapter 4) in this regard did not confirm this hypothesis, since we found no interaction between substance use and sexual violence attitude. This may be because frequent substance users might have positive inclinations to the perpetration of sexual violence or that the level of attitudes towards sexual violence is at such a high base rate that any substance use is enough to disinhibit men's adverse sexual advances. If young women use substances, on the other hand, it may impair their judgement in situations that may lead to violence. They are most often unrealistically optimistic in their appraisal of the situation (Gidycz, McNamara, & Edwards, 2006) increasing their vulnerability to male victimizing behaviours. Alcohol drinking also reduces the young women's capacity to resist unwanted sexual moves both verbally and physically through its influence on cognitive and motor functions (Abbey et al., 2004). Frequent substance use may also serve as a springboard to other risk behaviors.

The focus group discussions (Chapter 5) revealed that watching pornographic films usually begins later in the evening as a follow-up of group enjoyment in khat and shisha use. Since khat and shisha use is regular practice on weekends and if usually coupled with later curfews, this may pave the way for introducing pornography into the group activity as

the evening progresses. Exposure to pornographic films, in turn, may influence the young men and women in perceiving unwanted sexual behaviours as acceptable sexual behaviours (Zillmann & Bryant, 1988). The films often portray women as initially unwilling who later cooperate in different sexual behaviours with multiple partners (Zillmann, 2000) and most often depict the dominant role of men and submissive role of women in sexual interaction (Barron & Kimmel, 2000). Viewing these films, may reinforce or create the idea that sexual dominance of men over women is normative behaviour. In addition, the film may also be used to trigger young women's sexual desire and break their resistance to unwanted intercourse perpetrated by the men (Dines & Jensen, 2004). In this sense, it may send a message that men can have sex with women who view the films, assuming that their willingness to watch the pornographic films serves as a signal for interest in actual sexual activities.

Engagement with multiple sexual partners was also linked with young men's perpetration of sexual violence and young women's vulnerability to sexual violence victimization. Thus, the more partners one had, the more likely one was to perpetuate (in the case of males) or experience (in the case of females) sexual violence. Young men often lack the empathy and emotional attachment for the women when they are engaged with multiple sexual partners (Malamuth, Lintz, Heavey, Barnes, & Acker, 1995). Most women do not welcome intercourse outside of a committed relationship unless forced to have it (Oliver & Hyde, 1993). Some young women may also develop sexual relations with multiple partners for shorter durations because of fear of the emotional discomfort that may be triggered as a result of an intimate relationship (Davis, 2006; Gentzler & Kerns, 2004). Young women's engagements with multiple sexual partners enhance their likelihood of encountering coercive men (Testa & Dermen, 1999). The formation of many sexual relationships may also increase the young women's chance of meeting men who perceive intercourse as a relationship obligation (Katz & Myhr, 2008). Should a relationship end, young women may also receive pressure from their female peers to form another romantic relationship in turn increasing their exposure to (potentially) coercive men (Bauermeister, Elkington, Brackis-Cott, Doleral, & Mellins, 2009).

Highly narcissistic young men are also more prone to perpetrate sexual violence than less narcissistic ones. The highly narcissistic young men often perceive themselves as superior than other men (Bushman, Bonacci, Dijk, & Baumeister, 2003). They think of sexually active young women as always accepting their sexual requests. When their sexual advance is blocked, they may opt for forceful means to acquire sex (Baumeister, Catanese, & Wallace, 2002). However, not all highly narcissist young men perpetrate a high level of

sexual violence. Our finding in chapter four has shown that it is those that have positive attitude towards sexual violence that are more prone to perpetrate sexual violence.

A positive attitude towards sexual violence increases young men's likelihood of perpetrating sexual violence and young women's vulnerability to sexual violence victimization. Young men with a positive attitude towards sexual violence often think of infidelity from their sexual partner and use sexual violence as a means of dominance and control (Malamuth, Addison, & Koss, 2000). They also think the use of force in a relationship as acceptable and normative (Malamuth et al., 1995). Moreover, young women with a tolerant attitude towards male supremacy in sexual relations often become submissive to the unwanted sexual advances of their partner (Enosh, 2007). The high rejection sensitivity of these women also increases their compliance to unwanted intercourse from their partner. They often perceive non-compliance to the sexual demands of their partner as resulting in being replaced by a more willing woman (Downey, Freitas, Michaelis, & Khouri, 1998).

A strong need for acceptance is also related to young women's vulnerability to sexual violence victimization. Young women who want to be accepted by their female peer group may be pressured to engage in sexual relationships. Bauermeister et al. (2009) stated that sexually active female peer groups encourage being in a relationship through popularization of those who participate. Being in a relationship, however, may force young women to comply with unwanted sexual demands as part of the relationship obligations (Katz & Myhr, 2008). This is because some men may think that by staying in the same romantic relationship eventually should lead to the couple having sexual intercourse. Moreover, young women's fearful parental attachment may also cause them to seek acceptance from their partner and become suspicious of rejection from the same man. In these situations, young women most often conform to the sexual demands of their partner to assure acceptance and continued love (Impett & Peplau, 2002; Tracy, Shaver, Albino, & Cooper, 2003). On the other hand, fearfully attached young men may perpetrate sexual violence when they perceive their feelings of acceptance to be threatened. These young men have a strong need for acceptance from their partner with a high fear of abandonment from the same woman. Thus, perpetration may be used among these men to ensure acceptance and reduce the anxious feeling of abandonment (Feeney, Peterson, Gallois, & Terry, 2000; Malamuth, Feshback, & Jaffe, 1977).

Moderating role of protective factors

In chapter seven, we found that a risk factor index was positively and strongly related to both sexual violence perpetration and victimization. A protective factor index was negatively related to sexual violence perpetration and victimization and moderated the

association between the risk factor index and sexual violence perpetration and victimization. That is, the links between the risk factor index and sexual violence were weaker for those young women and men with higher levels of protective factors. This means that young men's and women's increased exposure to higher level protective factors (secure parental attachment, parent-adolescent sexual communication, religiosity and school connectedness) may minimize their exposure to sexual violence. Consistent with this, Frey, Ruchkin, Martin, and Schwab-Stone (2009) have argued that an increased level of connectedness to parents, school, and community reduces the occurrence of violence among young people. Increased involvement in these protective factors may trigger the development of respectful relationships among young men and women, thus reducing the likelihood of either perpetrating or experiencing sexual violence (Flood, Fergus, & Heenan, 2009).

Out of the protective factors involved, only school connectedness was negatively related with both sexual violence perpetration and victimization. It also buffered the association between the risk factor index and sexual violence perpetration and victimization. Higher levels of involvement in school-related activities may help in developing self-management, respect for others and resolving disagreements peacefully (McNeely, Nonnemaker, & Blum, 2002). It may direct young men and women to be focused on their academic duties minimizing the chances of engagement in risky behaviors (Frey et al., 2009) which may likely reduce the occurrence of sexual violence.

Secure parental attachment and religiosity were only related with sexual violence victimization. Secure parental attachment is negatively related with sexual violence victimization and it has also moderated the association between risk factors index and sexual violence victimization. This may be because secure parental attachment may reduce young women's involvement in risky behaviors (Blum et al., 2003; Henrich, Brookmeyer, Shrier, & Shahar, 2006), and delay a romantic relationship and onset of sexual intercourse (Anteghini, Fonseca, Ireland, & Blum, 2001). Even if they enter into a romantic relationship, because these young women have strong parental support and advice about their relationship, they may be more likely to form relations with partners based on healthier norms (i.e., respect and mutual decision making) compared to insecure females (Leadbeater, Banister, Ellis, & Yeung, 2008).

Religiosity was also found to be negatively related with sexual violence victimization and it buffered the association between the risk factors index and sexual violence victimization in which the relationship was weaker for young women with high level of religiosity. Increased religiosity and involvement in religious services may develop personal and social controls against involvement in risky behaviors (Kliewer & Murrelle,

2007) which may increase their vulnerability to victimization. Regular religious services attendance and respecting religious commandments may reduce the chances of encountering men who favor premarital sex (Adamczyk & Felson, 2006). The young women's religiosity also deters young men's view of the young women. For example, young women who regularly attend religious services may lead men to view these women as less likely to engage in a sexual relationship. This, in turn, may inhibit men from initiating behaviors directed towards sex (Howard, Qiu, & Boekeloo, 2003). This may be because the content of their discussion may be more on religious matters or the religious teaching against premarital sex may prevent the men from pursuing them. Thus, religiosity may serve as a deterrent for men's victimizing behaviors, although more research is needed to determine whether this is the mechanism.

Summary

Multiple sexual partners, frequent pornography and substance use, supportive or tolerant attitudes towards sexual violence, and men's supremacy on sexual relations are the prominent risk factors that contribute to young men's perpetration of sexual violence and young women's vulnerability to sexual violence victimization. An exaggerated feeling of entitlement (narcissism) highly contributes to sexual violence perpetration, and high rejection sensitivity highly increases vulnerability to sexual violence victimization. Additionally, parental connectedness, parent-adolescent sexual communication, religiosity and school connectedness have been found as protective factors that in combination reduce the likelihood of either young men's perpetration of sexual violence or young women's vulnerability to sexual violence victimization. Specifically, a high level of school connectedness minimized the chances of both sexual violence perpetration and victimization; whereas a high level of secure parental attachment and religiosity reduced the likelihood of sexual violence victimization. Therefore, decreasing the exposure of young men and women to risk factors, and increasing their involvement in higher levels of protective factors (school connectedness to both males and females, and secure parental attachment and religiosity to females) may minimize the likelihood of young men's perpetration of sexual violence and young women's vulnerability to sexual violence victimization.

Implication for Prevention and Intervention

The studies in this dissertation may have the following implications for prevention and intervention. Raising the awareness of both young men and women on the nature of, and risk and protective factors to sexual violence may help to mitigate the occurrence of sexual violence. Schools' mini-media (instant messages and entertainment broadcasting

through the megaphone) can openly challenge school cultures that tolerate and trivialize less severe forms of sexual violence: sexual offense and sexual assault. Prevention efforts conducted at these levels can help to preclude the progression of violent behaviours to more severe forms: sexual coercion and sexual aggression (Foshee et al., 1998; Gross, Winslett, Roberts, & Gohm, 2006). Sexual coercion and sexual aggression may result in unintended pregnancy, STI and HIV since the majority of sexual coercion and sexual aggression acts happen without the use of a condom (Howard, Wang, & Yan, 2007). School officials have to allow discussions on condom and condom use through school mini-media and school co-curricular clubs. This may serve as one means of HIV prevention among sexually active young men and women (Lagaa, SchwaÈrtlanderb, Pisanic, Sowd, & Caraeel, 2001).

The existing secondary schools' biology, and civics and ethical education curricula could be used to integrate information concerning sexual violence, its distinct forms, and risk and protective factors. The Federal Ministry of Education could also consider introducing sexual violence, sexual offense, sexual assault, sexual coercion and sexual aggression including the risk and protective factors into a separate module in the curriculum as sex education (currently sex education is non-existent). This will allow schools to deal with sexual violence as regular duties, raising the awareness of students and school communities on the attitudes and behaviours leading to sexual violence.

Schools' co-curricular clubs and mini-media could also be used as a supportive channel to augment the curricular offerings. Specific issues like men's and women's socialization, open communication, respect for the opinion of others and free consent could be integrated into these activities. The link between substance use, pornography consumption, having multiple sexual partners and attitudes supportive of male supremacy in sexual relations could also be integrated into school clubs' discussions. These will allow discussions of the issues in small groups where young men could learn to take responsibility for their potentially victimizing behaviours. Moreover, young women's awareness to take precautionary measures against men's victimizing behaviours could also be increased. Abbey, Parkhill, BeShears, Clinton-Sherrod, and Zawacki (2006) have suggested conducting school educational programs on appropriate attitudes and behaviours in relationships and sexual intimacy as one strategy to combat sexual violence.

The creation of social norms that promote respectful relationships (Berkowitz, 2003) through a series of small group discussions has been suggested as another strategy to mitigate sexual violence. Schools' co-curricular clubs small group discussions could be tailored to enhance the development of respectful relations among young men and women. Philpart et al. (2009) have suggested the importance of changing social norms supportive

of violence to prevent the occurrence of sexual violence. Young men who have never perpetrated any forms of sexual violence could be mobilized to change the attitudes and behaviours of perpetrating young men. Fabiano, Perkins, Berkowitz, Linkenbach, and Stark (2003), in this respect, have found the effectiveness of reducing the occurrence of sexual violence through the involvement of male peers who are opposed to perpetration of sexual violence. They further indicated that peers who oppose sexual violence perpetration can help in convincing young men in changing their mistaken beliefs about the attitudes and behaviours of other young men towards perpetration of sexual violence. The majority of sexual violence perpetrators might mistakenly believe that the way they behave towards their female friends is acceptable by peers. However, such misperceptions may even enhance the perpetration of sexual violence. Berkowitz (2003) and Fabiano et al. (2003) have argued that correcting misperceptions of young men about peers' attitudes and behaviours toward sexual violence greatly reduces the occurrence of sexual violence.

Dramatic (theatrical) shows (on social get together days) on the consequences frequent substance and pornography use, multiple romantic relationships, and tolerant attitude towards male supremacy in sexual relation in schools can help young women develop protective strategies. Such exposures allow them to visualize the risk of involvement in certain behaviours and possession of attitudes and behaviours toward vulnerability to sexual violence. These, in turn, help them to develop situational protective strategies that block males from taking advantage of young women's vulnerabilities.

The expansion of sexual reproductive health services of the existing Kebele (smallest government administrative structure) youth centres could also help to raise the awareness of young men and women on attitudes and behaviours leading to sexual violence. The village level peer counsellors at the youth centres can educate and counsel young men and women on risk factors that contribute to sexual violence. They can also serve to help trigger revelation and support seeking behaviours among victims of sexual violence. The Federal Ministry of Women, Children and Youth Affairs, however, should integrate prevention, counselling and clinical services on sexual offense, sexual assault, sexual coercion and sexual aggression as core services of the Youth Centres. This will expand the village level services of the youth centres on information, education, counselling and referrals (clinical and legal support) on sexual violence victimization through peer counsellors. These, in turn, can send signals to perpetrating young men that their victimizing behaviours are no longer tolerable. Law enforcement agencies also need to be educated on the continuum of sexual violence victimization. For example, the Ethiopian rape law only states penalties on perpetration of forced sexual intercourse (Criminal Code, 2005) without addressing other sexually violent acts. The results of our

empirical studies, however, depict other forms of sexual violence in addition to physical forced intercourse. Thus, the Ethiopian Federal Ministry of Justice should consider revising the criminal code to include offenses of verbal or psychological pressure for sexual activities (sexual offense), unwanted sexual bodily contacts (sexual assault) and sexual intercourse as a result of verbal or psychological pressure (sexual coercion). This will give legal ground to law enforcement bodies in their effort in the reduction of sexual violence. We suggested sexual offense (less severe form) not to mean all unwanted verbal exchanges but on sexually motivated verbal harassments, since they have a strong negative psychological impact on the victims.

Increasing the exposure of young women and men to protective factors (school connectedness to both females and males, and secure parental attachment and religiosity to females) at an early age reduces the occurrence of sexual violence. Frey et al. (2009) have also recommended enhancing young people's attachments to school, family and community in combination as a preventive strategy for the occurrence of violence. These protective factors may enhance the development of respectful relationships among men and women. Jewkes et al. (2006) and Speizer (2010) have also suggested promoting mutual respect and healthy relationships between young men and women as a means to minimize the incidence of sexual violence.

Limitations

The empirical investigations, in this dissertation, have the following limitations. To begin with, the studies were done using a cross-sectional study design and temporal (or even causal) relationships among the variables are therefore difficult to establish. Secondly, the measures used in the investigations required the students to recall their experiences related to sexuality; hence there may be recall bias or a social desirability effect and validation of these behaviours was not confirmed by either reports by others or observations. Third, the reading comprehension ability of the participants may influence their responses to the questionnaire which in turn may affect the results. Fourth, the studies rely on the honesty of the participants' response but some students may be duplicitous in responding. Fifth, the clustering of both perpetrators and victims of sexual violence (on an Ethiopian/African sample) was the first of its kind and requires further studies to establish the replicability of the types on other samples. Sixth, our study used five separate single items in the measurement of five risky behaviours and therefore reliability of these items could not be established. Seventh, the study on protective factors focused on parental and environmental factors and did not focus on individual level protective factors that may also be important. Finally, the present research focused on youth who still attend secondary school. Given that a high majority of females are no longer in school by age 16 and that

even a high percentage of men particularly those of lower educational tracks finish school by 16 years of age, the estimates of sexual violence may even be underreported and the results found here may not generalize to that group. The finding that school connectedness is an important protective factor against both sexual violence perpetration and victimization suggests that youth who leave school early may be particularly vulnerable.

Future Research

The studies in this dissertation, have pointed to the following issues as worth studying in the future. Standardization of items to measure sexual offense, sexual assault, sexual coercion, and sexual aggression requires future study. Such research undertaking reduces confusions and misunderstandings on the determination of prevalence rates, and risk and protective factors contributing to them. It also enables the consistent use of measures in the determination of perpetrators and victim types. In order to establish the temporal link between risk and protective factors to sexual violence perpetration and victimization longitudinal studies are needed and such investigations are sorely lacking in Ethiopia and other African countries. Moreover, the current study focused on relatively older adolescents and therefore little is known about childhood or early adolescent precursors of sexual violence. Future studies can also determine the stability of types of perpetrators and victims through longitudinal studies. Person-centered studies on the forms of sexual violence are needed to establish replicable perpetrator and victim types. It can also show specific risk factors that characterize the different perpetrator and victim types and whether these factors can be identified prior to sexual violence perpetration or victimization begins. Individual level protective factors (e.g., feeling of empathy for others) could be studied to examine their moderating role on the relation between risk factors and sexual violence perpetration and victimization. Finally, research on sexual violence on youth who leave school early is sorely needed in order to establish prevalence rates as well as to identify their risk and protective factors.

Final Conclusion

The present dissertation demonstrates that sexual violence is a serious problem among Ethiopian youth. Action needs to be taken to reduce sexual violence, and the identification of risk and protective factors among Ethiopian youth is an important first step. Implementation of prevention strategies within schools should focus on both reduction of the risk factors and increment of protective factors. Employing schools' curricular and non-curricular channels could hope to have maximum effects on the reduction of the occurrence of sexual violence.

References

- Abbey, A. (2002). Alcohol-related sexual assault: A common problem among college students. *Journal of Studies in Alcohol, 14*, 118-128.
- Abbey, A., BeShears, R., Clinton-Sherrod, A. M., & McAuslan, P. (2004). Similarities and differences in women's sexual assault experiences based on tactics used by the perpetrator. *Psychology of Women Quarterly, 28*, 323-332.
- Abbey, A., McAuslan, P., & Ross, L. T. (1998). Sexual assault perpetration by college men: The role of alcohol, misperception of sexual intent, and sexual beliefs and experiences. *Journal of Social and Clinical Psychology, 17*, 167-195.
- Abbey, A., McAuslan, P., Zawacki, T., Clinton, A. M., & Buck, P. O. (2001). Attitudinal, experiential, and situational predictors of sexual assault perpetration. *Journal of Interpersonal Violence, 16*, 784-807.
- Abbey, A., Parkhill, M. R., BeShears, R., Clinton-Sherrod, A. M., & Zawacki, T. (2006). Cross-sectional predictors of sexual assault perpetration in a community sample of single African American and Caucasian men. *Aggressive Behaviour, 32*, 54-67.
- Abbey, A., Ross, L. T., McDuffie, D., & McAuslan, P. (1996) Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly, 20*, 147-169.
- Abrahams, N., & Jewkes, R. (2005). Effects of South African men's having witnessed abuse of their mothers during childhood on their levels of violence in adulthood. *American Journal of Public Health, 95*, 1811-1816.
- Abrahams, N., Jewkes, R., Hoffman, M., & Laubsher, R. (2004). Sexual violence against intimate partners in Cape Town: Prevalence and risk factors reported by men. *Bulletin of the World Health Organization, 82*, 1-9.
- Adamczyk, A., & Felson, J. (2006). Friends' religiosity and first sex. *Social Science Research, 35*, 924-947.
- Allen, M., D'Alessio, D., & Brezgel, K. (1995). A meta-analysis of summarising the effect of pornography II: Aggression after exposure. *Human Communication Research, 22*, 258-283.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: American Psychiatric Association.
- Anjum, Q., Ahmed, F., & Ashfaq, T. (2008). Knowledge, attitude and perception of water pipe smoking (Shisha) among adolescents aged 14-19 years. *Journal of Pakistan Medical Association, 58*, 312-317.
- Anteghini, M., Fonseca, H., Ireland, M., & Blum, R. W. (2001). Health risk behaviors and

- associated risk and protective factors among Brazilian adolescents in Santos, Brazil. *Journal of Adolescent Health*, 28, 295–302.
- Arnold, D., Gelaye, B., Goshu, M., Berhane, Y., & Williams, M. A. (2008). Prevalence and risk factors of gender-based violence among female college students in Awassa, Ethiopia. *Violence and Victims*, 23, 787-800.
- Arriaga, X. B. (2004). Do adolescent follow in their friends', or their parents', footsteps? *Journal of Interpersonal Violence*, 19, 162-184.
- Aspy, C. B., Vesely, S. K., Oman, R. F., Rodine, S. Marshall, L., & McLeroy, K. (2007). Parental communication and youth sexual behavior. *Journal of Adolescence*, 30, 449-466.
- Baker, E., Beech, A., & Tyson, M. (2006). Attachment disorganization and its relevance to sexual offending. *Journal of Family Violence*, 21, 221-231.
- Banyard, V. L., Cross, C., & Modecki, K. L. (2006). Interpersonal violence in adolescence: Ecological correlates of self reported perpetration. *Journal of Interpersonal Violence*, 21, 1314-1332.
- Barnett, J. K., Papini, D. R., & Gbur, E. (1991). Familial correlates of sexuality active pregnant and nonpregnant adolescents. *Adolescence*, 26, 457-472.
- Barron, M., & Kimmel, M. (2000). Sexual violence in three pornographic media: Toward a sociological explanation. *Journal of Sex Research*. 37, 161-168.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four category model. *Journal of Personality and Social Psychology*, 61, 226-244.
- Basile, K. C., Black, M. C., Simon, T. R., Arias, I., Brener, N. D., & Saltzman, L. E. (2006). The association between self-reported lifetime history of forced sexual intercourse and recent health-risk behaviors: Findings from the 2003 national youth risk behavior survey. *Journal of Adolescent Health*, 39, 752.e1–752.e7.
- Bauermeister, J. A., Elkington, K., Brackis-Cott, E., Dolerel, C., & Mellins, C. A. (2009). Sexual behavior and perceived peer norms: Comparing perinatally Hiv-infected and Hiv affected youth. *Journal of Youth and Adolescence*, 38, 1110-1122.
- Baumeister, R. F., Catanese, K. R., & Wallace, H. M. (2002). Conquest by force: A narcissistic reactance theory of rape and sexual coercion. *Review of General Psychology*, 6, 92-135.
- Bekele, A. B., Van Aken, M. A., & Dubas, J. S. (2011). Sexual violence victimization among female secondary school students in eastern Ethiopia. *Violence and Victims*, 26, 608-630.
- Bekele, A. B., Van Aken, M. A., & Dubas, J. S. (2011). Risk factors for sexual violence

- perpetration among male secondary school students in Eastern Ethiopia. Unpublished Manuscript.
- Bergen, R. K., & Bogle, K. A. (2000). Exploring the connection between pornography and sexual violence. *Violence and Victims, 15*, 227-234.
- Berkowitz, A. D. (2003). Applications of social norms theory to other health and social justice issues. In H.W. Perkins (Ed.), *The social norms approach to preventing school and college age substance abuse: A handbook for educators, counselors, and clinicians* (pp. 259-279). San Francisco: Jossey-Bass.
- Blum, R. W., Halcón, L., Beuhring, T., Pate, E., Campell-Forrester, S., & Venema, A. (2003). Adolescent health in the Caribbean: Risk and protective factors. *American Journal of Public Health, 93*, 456–460.
- Blum, R. W., & Ireland, M. (2004). Reducing risk, increasing protective factors: Findings from the Caribbean youth health survey. *Journal of Adolescent Health, 35*, 493-500.
- Borowsky, I.W., Hogan, M., & Ireland, M. (1997). Adolescent sexual aggression: Risk and protective factors. *Pediatrics, 100*(6). Retrieved June 10, from <http://www.pediatrics.org/cgi/content/full/100/6/e7>
- Braun-Courville, D.K., & Rojas, M. (2009). Exposure to sexually explicit web sites and adolescent sexual attitudes and behaviors. *Journal of Adolescent Health, 45*, 156–162.
- Brookmeyer, K. A., Henrich, C. C., & Schwab-Stone, M. (2005). Adolescents who witness community violence: Can parent support and prosocial cognitions protect them from committing violence? *Child Development, 76*, 917-929.
- Bushman, B. J., Bonacci, A. M., Dijk, M. V., & Baumeister, R. F. (2003). Narcissism, sexual refusal, and aggression: Testing a narcissistic reactance model of sexual coercion. *Personality Processes and Individual Differences, 84*, 1027-1040.
- Buzy, W. M., McDonald, R., Jouriles, E. N., Swank, P. R., Rosenfield, D., Shimek, J. S., & Shindler, D. C. (2004). Adolescent girls' alcohol use as risk factor for relationship violence. *Journal of Research on Adolescence, 14*, 449-470.
- Carr, J. L., & VanDeusen, K. M. (2004). Risk factors for male sexual aggression on college campuses. *Journal of Family Violence, 19*, 279-289.
- Casey, E. A., Beadnell, B., & Lindhorst, T. P. (2009). Predictors of sexually coercive behavior in a nationally representative sample of adolescent males. *Journal of Interpersonal Violence, 24*, 1129-1147.
- Cavazos-Rehg, P. A., Krauss, M. J., Spitznagel, E. L., Schootman, M., Bucholz, M. K., Peipert, J. F.,... & Bierut, L. J. (2009). Age of sexual debut among US adolescents.

- Contraception*, 80, 158–162.
- CDC (2009). School connectedness: Strategies for increasing protective factors among youth. Atlanta, GA: U.S. Department of Health and Human Services.
- Central Statistics Agency CSA. (2006) Ethiopia demographic and health survey 2005. Addis Ababa: CSA.
- CSA. (2007). Ethiopian statistical abstract. Addis Ababa: CSA.
- Champion, H. L., Robert, H. D., Rebecca, H., & Mark, W. (2004). Adolescent sexual victimization, use of alcohol and other substances, and other health risk behaviours. *Journal of Adolescent Health*, 35, 321-328.
- Chan, K. L., Straus, M. A., Brownridge, D. A., Tiwari, A., & Leung, W. C. (2008). Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide. *Journal of Midwifery & Women's Health*, 53, 529-537.
- Chen, B., Tai, P. C., Harrison, R., & Pan, Y. (2005). Novel hybrid hierarchical-k-means clustering method (H-K-means) for microarray analysis. *Presented in Computational Systems Bioinformatics Conference* (pp.105 - 108). Atlanta, GA, USA.
- Clawson, C.L., & Reese-Weber, M. (2003). The amount and timing of parent-adolescent sexual communication as predictors of late adolescent sexual risk taking behaviours. *The Journal of Sex Research*, 40, 256-265.
- Clements, P. T., Speck, P. M., Crane, P. A., & Faulkner, M. J. (2004). Issues and dynamics of sexually assaulted adolescents and their families. *International Journal of Mental Health Nursing*, 13, 267–274.
- Cohen, J. A. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37–46.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644–663.
- Corbin, W. R., Bernat, J. A., Calhoun, K. S., McNair, L. D., & Seals, K. L. (2001). The Role of alcohol expectancies and alcohol consumption among sexually victimized and nonvictimized college women. *Journal of Interpersonal Violence*, 16, 297-311.
- Criminal Code (2005). The criminal code of the Federal Democratic Republic of Ethiopia. Proclamation No.414/2004 (Article 620), Addis Ababa: Federal Ministry of Justice.
- Crockett, L. J., Raffaelli, M., & Moilanen, K. L. (2003). Adolescent Sexuality: Behaviour and meaning. In G. Adams & M. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp.371-392). Malden, MA: Blackwell.

- Crown, L., & Roberts, L. J. (2007). Against their will: Young women's nonagentic sexual experiences. *Journal of Personal and Social Relationships*, *24*, 385-405.
- Cunradi, C. B., Caetano, R., & Schafer, J. (2002). Religious affiliation, denominational homogamy, and intimate partner violence among US couples. *Journal for the Scientific Study of Religion*, *41*, 139-151.
- Daigle, L. E., Fisher, B. S., & Stewart, M. (2010). The effectiveness of sexual victimization prevention among college students: A summary of "what works". *Victims and Offenders*, *4*, 398-404.
- Davis, D. (2006). Attachment-related pathways to sexual coercion. In M. Mikulincer, & G. Goodman (Eds.), *Dynamics of romantic love: Attachment, care giving and sex* (pp. 293-336). New York: Guilford.
- Davis, E. C., & Friel, L. V. (2001). Adolescent sexuality: Disentangling the effects of family structure and family context. *Journal of Marriage and Family*, *63*, 669-681.
- Davis, K. C., George, W. H., & Norris, J. (2004). Women's response to unwanted sexual advances: The Role of alcohol and inhibition conflict. *Psychology of Women Quarterly*, *28*, 333-343.
- Davis, D., Shaver, P. R., & Vernon, M. L. (2004). Attachment style and subjective motivations for sex. *Personality and Social Psychology Bulletin*, *30*, 1076-1090.
- Davis, D., Shaver P. R., Widaman, K., Vernon, M. L., Follette. W. C., & Beitz, K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, *13*, 465-483.
- Dean, K. E., & Malamuth, N. M. (1997). Characteristics of men who aggress sexually and of men who imagine aggressing: Risk and moderating variables. *Journal of Personality and Social Psychology*, *72*, 449-455.
- Degue, S., & DiLillo, D. (2004). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and Victims*, *19*, 673-688.
- Degue, S., & DiLillo, D. (2005). "You would if you love me": Towards an improved conceptual and ethiological understanding of nonphysical male sexual coercion. *Aggression and Violent Behavior*, *10*, 313-532.
- DeKeseredy, W. S., & Kelly, K. (1995). Sexual abuse in Canadian university and college dating relationships: The contribution of male peer support. *Journal of Family Violence*, *10*, 41-53.
- Deribew, A. (2007). Magnitude and risk factors of intimate partner violence against women in Agaro Town, South west Ethiopia. *Ethiopian Journal of Health Science*, *17*, 99-106.

- de Visser, R. O., Rissel, C. E., & Richters, J. (2007). The impact of sexual coercion on psychological, physical and sexual well-being in a representative sample of Australian women. *Archive of Sexual Behavior, 36*, 676-686.
- Dibaba, Y. (2007). Sexual violence against female youth in Jimma town: Prevalence, risk factors and consequences. *Ethiopian Journal of Health Science, 17*, 47-58.
- DiIorio, C., Dudley, W. N., Soet, J. E., & Mccarty, F. (2004). Sexual possibility situations and sexual behaviours among young adolescents; The moderating role of protective factors. *Journal of Adolescent Health, 35*, 528e11-528e20.
- Dines, G., & Jensen, R. (2004). Pornography and media: Toward a more critical analysis. In M. S. Kimmel and R. F. Plante (Eds.), *Sexualities: Identity, behavior, and society* (pp. 369-380). New York: Oxford University Press.
- D'Onofrio, B. M., Murrelle, L., Eaves, L. J., McCullough, M. E., Landis, J. L., & Maes, H. H. (1999). Adolescent religiousness and its influence on substance use: Preliminary findings from the Mid-Atlantic school age twin study. *Twin Research, 2*, 156-168.
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology, 70*, 1327-1343.
- Downey, G., Freitas, A. L., Michaelis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners *Journal of Personality Social Psychology, 75*, 545- 560.
- Drieschner K., & Lange, A. (1999). A review of cognitive factors in the etiology of rape: Theories, empirical studies and implications. *Clinical Psychology Review, 19*, 57-77.
- Dunkle, K. L., Jewkes, R. K., Brown, H. C., Gray, G. E., McIntyre, J. A., & Harlow, S. D. (2004). Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *Lancet, 363*, 1415-1421.
- Earl, R. M., & Burns, N. R. (2009). Experiences of peer aggression and parental attachment are correlated in adolescents. *Personality and Individual Differences, 47*, 748-752.
- Edwards, G. L., & Barber, B. L. (2009). The relationship between rejection sensitivity and compliant condom use. *Archives of Sexual Behavior, 39*, 1381-1388.
- Eitle, D. (2005). The moderating effects of peer substance use on the family structure-adolescent substance use association: Quantity versus quality of parenting. *Addictive Behaviors, 30*, 963-980.
- Ellis, L., Widmayer, A., & Palmer, C. T. (2009). Perpetrators sexual assault continuing to have sex with their victims following the initial assault. *Interpersonal Journal of Offender Therapy and Comparative Criminology, 53*, 454-463.

- Enosh, G. (2007). Cognition or involvement? Explaining sexual coercion in high school dating. *Sexual Abuse: A Journal Research and Treatment, 19*, 311-329.
- Erulkar, A. S. (2004). The experience of sexual coercion among young people in Kenya. *International Family Planning Perspectives, 30*, 182-189.
- Fabiano, P. M., Perkins, H. W., Berkowitz, A., Linkenbach, J., & Stark, C. (2003). Engaging men as social justice allies in ending violence against women: Evidence for a social norms approach. *Journal of American College Health, 52*, 105-112.
- Farris, C., Treat, T. A., Viken, R. J., & McFall, R. M. (2008). Sexual coercion and the misperception of sexual intent. *Clinical Psychology Review 28*, 48-66.
- Fatusi, A. O., & Blum, R. W. (2008). Predictors of early sexual initiation among a nationally representative sample of Nigerian adolescents. *BMC Public Health, 8*, 136-150.
- Federal Ministry of Health (FMOH). (2004). AIDS in Ethiopia 5th report. Addis Ababa: FMOH.
- FMOH. (2006). AIDS report in Ethiopia 6th report. Addis Ababa: FMOH.
- Feeney, J. A., Peterson, C., Gallois, C., & Terry, D. J. (2000). Attachment style as a predictor of sexual attitudes and behavior in late adolescence. *Psychology and Health, 14*, 1105-1122.
- Ferguson, C. J., & Hartley, R. D. (2009). The pleasure is momentary...the expense damnable? The influence of pornography on rape and sexual assault. *Aggression and Violent Behavior, 14*, 323-329.
- Fiala, W. E., Bjorck, J. P., & Gorsuch, R. (2002). The religious support scale: Construction, validation, and cross validation. *American Journal of Community Psychology, 30*, 761-786.
- Fineran, S., & Bennett, L. (1999). Gender and power issues of peer sexual harassment among teenagers. *Journal of Interpersonal Violence, 14*, 626-641.
- Fineran, S., & Bolen, R. M. (2006). Risk factors for peer sexual harassment in schools. *Journal of Interpersonal violence. 21*, 1169-1190.
- Fischer, G. J., & Chen, J. (1994). The attitudes toward forcible date rape (FDR) scale: Development of a measurement model. *Journal of Psychopathology and Behavioral Assessment, 16*, 33-51.
- Flood, M., Fergus, L., & Heenan, M. (2009). Respectful relationships education: Violence prevention and respectful relationships education in Victorian secondary schools. Melbourne: Department of Education and Early Childhood Development.

- Forke, C. M., Myers, R. K., Cattalozzi, M., & Schwarz, D. F. (2008). Relationship violence among female and male college undergraduate students. *Archive of Pediatric and Adolescence Medicine, 162*, 634-641.
- Foshee, V. A., Bauman, K. E., Arriaga, X. B., Helms, R. W., Koch, G. G., & Linder, G. F. (1998). An evaluation of safe dates, an adolescent dating violence prevention program. *American Journal of Public Health, 88*, 45-50.
- Foshee, V. A., Bauman, K. E., & Linder, G. F. (1999). Family violence and the perpetration of adolescent dating violence: Examining social learning and social control processes. *Journal of Marriage and the Family, 61*, 331-342.
- Foster, H., Hagan, J., & Brooks-Gunn, J. (2004). Age, puberty, and exposure to intimate partner violence in adolescence. *Annals of the New York Academy of sciences, 1036*, 151-166.
- Franke, T. M. (2000). The role of attachment as a protective factor in adolescent violent behavior. *Adolescent & Family Health, 1*, 40-57.
- Frey, A., Ruchkin, V., Martin, A., & Schwab-Stone, M. (2009). Adolescents in transition: School and family characteristics in the development of violent behaviors entering high school. *Child Psychiatry and Human Development, 40*, 1-13.
- Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Psychosocial and Personality Development, 74*, 578-594.
- Garoma, S., Belachew, T., & Wondafrash, M. (2007). KAP of sexual coercion on young females in Nekmite town, western Ethiopia. *Ethiopian Journal of Health Science, 17*, 121-129.
- Garcia-Moreno, C., Jansen, H. A., Ellsberg, M., Heise, L., & Watts, C. H. (2006). Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet, 368*, 1260-1269.
- Gebre-Yesus, D., & Fantahun, M. (2010). Assessing communication on sexual and reproductive health issues among high school students with their parents, Bullen Woreda, Benishangul Gumuz Region, North West Ethiopia. *Ethiopian Journal of Health and Development, 24*, 89-95.
- Gelaye, B., Arnold, D., Williams, M. A., Goshu, M., Birhane, Y. (2009). Depressive symptoms among female college students experiencing gender-based violence in Awassa, *Journal of Interpersonal Violence, 24*, 464-481.
- Gentzler, A. L., & Kerns, K. A. (2004). Association between insecure attachment and sexual experiences. *Personal Relationships, 11*, 249-265.
- George, W. H., Gournic, S. J., & McAfee, M. P. (1988). Perceptions of post drinking female

- sexuality: Effects of gender, beverage choice, and drink payment. *Journal of Applied Social Psychology*, 18, 1295-1317.
- George, W. H., Stoner, S. A., Davis, K. C., Lindgren, K. P., & Norris, J. (2006). Post drinking sexual perceptions and behaviors towards another person: Alcohol expectancy set and gender differences. *The Journal of Sex Research*, 43, 282-291.
- Getachew, K., & Sintayehu, M. (2007). Types, magnitude, predictors and controlling mechanisms of aggression in secondary schools of Jimma zone. *Ethiopian Journal of Education and sciences*, 2, 51-61.
- Ghwanmeh, S. H. (2007). Applying clustering of hierarchical k-means-like algorithm on Arabic language. *International Journal of Information Technology* 3, 168-172.
- Gidycz, C. A., McNamara, J. R., & Edwards, K. M. (2006). Women's risk perception and sexual victimization: A review of the literature. *Aggression and Violent Behaviour*, 11, 441-456.
- Goldstein, S. E., Malanchuk, O., Davis-Kean, P. E., & Eccles, J. S. (2007). Risk factors of sexual harassment by peers: A longitudinal investigation of African American and European American adolescents. *Journal of Research on Adolescence*, 17, 285-300.
- Gomez, A. M., Speizer, I. S., & Beauvais, H. (2009). Sexual violence and reproductive health among youth in Port-au-Prince, Haiti. *Journal of Adolescent Health*, 44, 508-510.
- Gorfu, M., & Demisse, A. (2007). Sexual violence against school girls in Jimma zone: Prevalence, patterns, and consequences. *Ethiopian Journal of Education and Sciences*, 2, 11-37.
- Gossaye, Y., Deyessa, N., Birhane, Y., Ellsberg, M., Emmelin, M., Ashenafi, M.,... Hogberg, U. (2003). Women's health and life events: Study in rural Ethiopia. *Ethiopian Journal of Health and Development*, 17, 1-47.
- Gowen, K. L., Feldman, D. R., & Yisrael, D. S. (2004). A comparison of the sexual behaviors and attitudes of adolescent girls with older versus similar age boyfriends. *Journal of Youth and Adolescence*, 33, 167-175.
- Gross, A., Winslett, A., Roberts, M., & Gohm, C. (2006). An examination of sexual violence against college women. *Violence Against Women*, 12, 288-300.
- Hadley, W., Brown, L. K., Lescano, C. M., Kell, H., Spalding, K., DiClemente, R., Donenberg, G. (2009). Parent-adolescent sexual communication: Associations of condom use with condom discussions. *AIDS Behavior*, 13, 997-1004.
- Hald, G. M., Malamuth, N. M., & Yuen, C. (2010). Pornography and attitudes supporting violence against women: Revisiting the relationship in nonexperimental studies. *Aggressive Behavior*, 36, 14-20.

- Hall, G. C. N., Teten, A. L. , DeGarmo, D. S., Sue, S., & Stephens, K. A. (2005). Ethnicity, culture, and sexual aggression: Risk and protective factors. *Journal of Consulting and Clinical Psychology, 73*, 830-840.
- Harper, M. S., Dickson, J. W., & Welsh, D. P. (2006). Self silencing and rejection sensitivity in adolescent romantic relationships. *Journal of Youth and Adolescence 35*, 435-443.
- Hartwick, C., Desmarais, S., & Hennig, K. (2007). Characteristics of male and female victims of sexual coercion. *The Canadian Journal of Human Sexuality, 16*, 31-44.
- Heise, L., Ellsberg, M., & Gottemoeller, M. (1999). Ending violence against women. *Population Reports, Series L, No. 11*.
- Henrich, C. C., Brookmeyer, K. A., Shrier, L. A., & Shahar, G. (2006). Supportive relationships and sexual risk behaviour in adolescence: An ecological-transactional approach. *Journal of Paediatrics Psychology, 31*, 286-297.
- Hersh, K., & Gray-Little, B. (1998). Psychopathic traits and attitudes associated with self reported sexual aggression in college men. *Journal of Interpersonal Violence, 13*, 456-471.
- Hines, D. A. (2007). Predictors of sexual coercion against women and men: A multilevel, multinational study of university students. *Archives of Sexual Behavior, 36*, 403–422.
- Hoffman, S., O’Sullivan, L. F., Harrison, A., Dolezal, C., & Monroe-Wise, A. (2006). HIV risk behaviors and the context of sexual coercion in young adults’ sexual interactions: Results from a diary study in rural South Africa. *Sexually Transmitted Diseases, 33*, 52–58.
- Holt, M. K., & Espelage, D. L. (2005). Social support as a moderator between dating violence victimization and depression/anxiety among African American and Caucasian Adolescents. *School Psychology Review, 34*, 309-328.
- Howard, D. E., Griffin, M. A., & Boekeloo, B. O. (2008). Prevalence and psychosocial correlates of alcohol-related sexual assault among university students. *Adolescence, 43*, 733-750.
- Howard, D., Qiu, Y., & Boekeloo, B. (2003). Personal and social contextual correlates of adolescent dating violence. *Journal of Adolescent Health, 33*, 9–17.
- Howard, D. E., & Wang, M. Q. (2005). Psychosocial correlates of US adolescents who report a history of forced sexual intercourse. *Journal of Adolescent Health, 36*, 372-379.
- Howard, D. E., Wang, M. Q., & Yan, F. (2007). Prevalence and psychosocial correlates of

- forced sexual intercourse among U.S. high school adolescents. *Adolescence*, 42, 629-643.
- Hutchinson, M. K., Jemmott, J. B., Jemmott, L. S., Braverman, P., & Fong, G. T. (2003). The role of mother daughter sexual risk communication in reducing sexual risk behaviors among urban adolescent females: A prospective study. *Journal of Adolescent Health*, 33, 98-107.
- Hyde, J. S., & DeLamater, J. D. (2000). Understanding human sexuality (7th ed.). Boston: McGraw Hill.
- Impett, E. A. & Peplau, L. A. (2002). Why some women consent to unwanted sex with a dating partner: Insights from attachment theory. *Psychology of Women Quarterly*, 26, 360-370.
- Jackson, S. M., Cram, F., & Seymour, F. W. (2000). Violence and sexual coercion in high school students' dating relationships. *Journal of Family Violence*, 15, 23-36.
- Jewkes, R., & Abrahams, N. (2002). The epidemiology of rape and sexual coercion in South Africa: An overview. *Social Science Medicine*, 55, 1231-1244.
- Jewkes, R., Dunkle, K., Koss, M. P., Levin, J. B., Nduna, M., Jama, N., & Sikweyiya, Y. (2006). Rape perpetration by young, rural South African men: Prevalence, patterns and risk factors. *Social Science and Medicine*, 63, 2949-2961.
- Johnson, G. M., & Knight, R. A. (2000). Developmental antecedents of sexual coercion in juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 12, 165-178.
- Johnson, I., Morgan, E., & Sigler, R. (2007). Age of greatest risk for victimization by forced sexual intercourse: Vulnerability of high school women. *Journal of Criminal Justice*, 35, 622-629.
- Kabiru, C. W., & Orpinas, P. (2009). Factors associated with sexual activity among high-school students in Nairobi, Kenya. *Journal of Adolescence*, 32, 1023-1039.
- Katz, J., May, P., Sorensen, S., & Deltosta, J. (2010). Sexual revictimization during women's first year of college: Self-blame and sexual refusal assertiveness as a possible mechanisms. *Journal of Interpersonal Violence*, 25, 2113-2126.
- Katz, J., Moore, J. A., & Tkachuk, S. (2007). Verbal sexual coercion and perceived victim responsibility: Mediating effects of perceived control. *Sex Roles*, 57, 235-247.
- Katz, J., & Myhr, L. (2008). Perceived to be conflict patterns and relationship quality associated with verbal sexual coercion by male dating partners. *Journal of Interpersonal Violence*, 23, 798-814.
- Kebede, D., Alem, A., Mitike, G., Enquesslassie, F., Berhane, F., Abebe, Y., ... & Gebremichael, T. (2005). Khat and alcohol use and risky sex behaviour among in-

- school and out-of-school youth in Ethiopia. *BMC Public Health*, 5, 109-117.
- King, G., Flisher, A. J., Noubary, F., Reece, R., Marais, A., & Lombard, C. (2004). Substance abuse and behavioral correlates of sexual assault among South African adolescents. *Child Abuse & Neglect*, 28, 683-696.
- Kliwer, W., & Murrelle, L. (2007). Risk and protective factors for adolescent substance use: Findings from a study in selected Central American Countries. *Journal of Adolescent Health*, 40, 448-455.
- Koenig, M. A., Lutalob, T., Zhaoa, F., Nalugodab, F., Kiwanukab, N., Wabwire-Mangenc, F., ... & Graya, R. (2004). Coercive sex in rural Uganda: Prevalence and associated risk factors. *Social Science & Medicine* 58, 787-798.
- Koss, M. P. (1985). The hidden rape victim: Personality, attitudinal and situational characteristics. *Psychology of Women Quarterly*, 9, 193-212.
- Koss, M. P. (1989). Hidden rape: Sexual aggression and victimization in a national sample of students in higher education. In M. A. Pirog-Good & J. E. Steel (Eds.), *Violence in dating relationships: Emerging social issues* (pp145-168). New York: Praeger.
- Koss, M. P., & Gidycz, C. A. (1985). Sexual experiences survey: Reliability and validity. *Journal of Consulting and Clinical Psychology*, 53, 422-423.
- Koss, M. P., Leonard, K. E., Beezley, D. A., & Oros, C. J. (1985). Nonstranger sexual aggression: A discriminant analysis of the psychological characteristics of undetected offenders. *Sex Roles*, 12, 981-992.
- Koss, M. P., & Oros, C. J. (1982). Sexual experiences survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 50, 455-457.
- Kotchick, B. A., Shaffer, A., Forehand, R., & Miller, K. S. (2001). Adolescent sexual risk behavior: A multi-system perspective. *Clinical Psychology Review*, 21, 493-519.
- Krahe, B., Bieneck, S., & Moller, I. (2005). Understanding gender and intimate partner violence from international perspective. *Sex Roles*, 52, 807-827.
- Krahe, B., Bieneck, S., & Olwing, S. R. (2007). The role of sexual scripts in sexual aggression and victimization, *Archive of Sexual Behavior*, 36, 687-701.
- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (ed.) (2002). World report on violence and health. Geneva: World Health Organization.
- Lacasse, A., & Mendelson, M. J. (2007). Sexual coercion among adolescents: Victims and perpetrators. *Journal of Interpersonal Violence*, 22, 424-437.
- Lagaa, M., SchwaÈrtlanderb, B., Pisanic, E., Sowd, P. S., & Caraeel, M. (2001). To stem HIV in Africa, prevent transmission to young women. *AIDS*, 15, 931-934.

- Lampthey, P. R., Johnson, J. L., & Khan, M. (2006). The global challenge of HIV/AIDS. *Population Bulletin*, 61(1).
- Leadbeater, B. J., Banister, E. M., Ellis, W. E., & Yeung, R. (2008). Victimization and relational aggression in adolescent romantic relationships: The influence of parental and peer behaviors, and individual adjustment. *Journal of Youth and Adolescence*, 37, 359–372.
- Lewin, M. (1985). Unwanted intercourse: The difficulty of saying no. *Psychology of Women Quarterly*, 9, 184-192.
- Libbey, H. P. (2004). Measuring students' relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health*, 74, 274-283.
- Little, C. B., & Rankin, A. (2001). Why do they start it? Explaining reported early-teen sexual activity. *Sociological Forum*, 16, 703-729.
- Livingston, J. A., Buddie, A. M., Testa, M., & VanZile-Tamsen, C. (2004). The role of sexual precedence in verbal sexual coercion. *Psychology of Women Quarterly*, 28, 287-297.
- Livingston, J. A., Testa, M., & VanZile-Tamsen, C. (2007). The reciprocal relationship between sexual victimization and sexual assertiveness. *Violence Against Women*, 13, 298-313.
- Loh, C., Gidycz, C. A., Lobo, T. R., & Luthra, R. (2005). A prospective analysis of sexual assault perpetration: Risk factors related to perpetrator characteristics. *Journal of Interpersonal Violence*, 20, 1325-1348.
- Magojo, T. S., & Collings, S. J. (2003). Prevalence and attitudinal predictors of child sexual offending in a nonforensic sample of South African high school males. *Journal of Child and Adolescent Mental Health*, 15, 27 – 32.
- Malamuth, N. M. (2003). Criminal and noncriminal sexual aggressors: Integrating psychopathy in a hierarchical mediational confluence model. *Annals of the New York Academy of Sciences*, 989, 33-58.
- Malamuth, N. M., Addison, T., & Koss, M. (2000). Pornography and sexual aggression: Are there reliable effects and can we understand them? *Annual Review of Sex Research*, 11, 26-91.
- Malamuth, N. M., Feshback, S., & Jaffe, Y. (1977). Sexual arousal and aggression: Recent experiments and theoretical issues. *Journal of Social Issues*, 22, 110-133.
- Malamuth, N. M., Lintz, D., Heavey, C., Barnes, G., & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflicts with women: A 10-year follow-up study. *Journal of Personality and Social Psychology*, 69, 353-369.

- Malamuth, N. M., Sockloskie, R., Koss, M., & Tanaka, J. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology, 59*, 670-681.
- Martyn, K. K., & Martin, R. (2003). Adolescent sexual risk assessment. *Journal of Midwifery & Women's Health, 48*, 213-219.
- Maxwell, C. D., Robinson, A. L., & Post, L. A. (2003). The nature and predictors of sexual violence victimization and offending among adolescents. *Journal of Youth and Adolescence, 32*, 465-477.
- Maziak, W. (2008). The Waterpipe: Time for Action. *Addiction, 103*, 1763-1767.
- McCree, D. H., Wingood, G. M., DiClemente, R., Davies, S., & Harrington, K. F. (2003). Religiosity and risky sexual behavior in African-American adolescent females. *Journal of Adolescent Health, 33*, 2-8.
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of School Health, 72*, 138-146.
- Meressa, K., Mossie, A., & Gelaw, Y. (2009). Effect of substance use on academic achievement of health officer and medical students of Jimma University, southwest Ethiopia. *Ethiopian Journal of Health Science, 19*, 155-163.
- Messman-Moore, T. L., Coates, A. A., Gaffey, K. J., & Johnson, C. F. (2008). Sexuality, substance use, and susceptibility to victimization: Risk for rape and sexual coercion in a prospective study of college women. *Journal of Interpersonal Violence, 23*, 1730-1746.
- Miller, B. C., Norton, M. C., Fan, X., & Christopherson, C. R. (1998). Pubertal development, parent communication, and sexual values in relation to adolescent sexual behaviors. *Journal of Early Adolescence, 18*, 27-52.
- Minow, J. C., & Einolf, C. J. (2009). Sorority participation and sexual assault risk. *Violence Against Women, 15*, 835-851.
- Mitike, G., Tesfaye, M., Ayele, R., Gadisa, T., Enqusillasie, F., Lemma, W.,... Woldu, A. (2007). HIV/AIDS behavioral surveillance survey (BSS) Ethiopia 2006: Round two. Addis Ababa: FMOH.
- Molla, M., Ismail, S., Kumei, A., & Kebede, F. (2002). Sexual violence among female street adolescents in Addis Ababa. *Ethiopian Journal of Health and Development, 16*, 119-128.
- Moore, A. M., Awusabo-Asare, K., Madise, N., John-Langba, J., & Kumi-Kyereme, A. (2007). Coerced first sex among adolescent girls in Sub-Saharan Africa: Prevalence and context. *African Journal of Reproductive Health, 11*, 62-82.

- Muehlenhard, C. L., & Falcon, P. L. (1990). Men's heterosocial skill and attitude toward women as predictors of verbal sexual coercion and forceful rape. *Sex Roles, 23*, 241-259.
- Mulugeta, E., Kassaye, M., & Berhane, Y. (1998). Prevalence and outcomes of sexual violence among high school students. *Ethiopian Medical Journal, 36*, 167-174.
- Muñoz-Rivas, M. J., Graña, J. L., O'Leary, K. D., & González, M. P. (2009). Prevalence and predictors of sexual aggression in dating relationships of adolescents and young adults. *Psicothema, 21*, 234-240.
- Mustaine, E. E., & Tewksbury, R. (2002). Sexual assault of college women: A feminist interpretation of routine activities analysis. *Criminal Justice Review, 27*, 89-123.
- Naing, L., Winn, T., & Rusli, B. N. (2006). Practical issues in calculating the sample size for prevalence studies. *Archives of Orofacial Sciences, 1*, 9-14.
- Noel, N. E., Maisto, S. A., Johnson, J. D., & Jackson Jr., L. A. (2009). The effects of alcohol and cue salience on young men's acceptance of sexual aggression. *Addictive Behaviors, 34*, 386-394.
- Norris, J., Davis, K. C., George, W. H., Martell, J., & Heiman, J. R. (2004). Victim's response and alcohol-related factors as determinants of women's responses to violent pornography. *Psychology of Women Quarterly, 28*, 59-69.
- O'Connor, M. L. (1998). Adolescent with close family relationships have reduced chances of engaging in risky behaviours. *Family Planning Perspectives, 30*, 97-99.
- O'Donohue, W., McKay, J. S., & Schewe, P. A. (1996). Rape: The role of outcome expectancies and hypermasculinity. *Sexual Abuse: A Journal of Research and Treatment, 8*, 133-141.
- Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin, 114*, 29-51.
- Osman, S. L. (2003). Predicting men's rape perceptions based on belief that "No" really" means "Yes". *Journal of Applied Social psychology, 33*, 683-692.
- O'Sullivan, L. F., & Allgeier, E. R. (1998). Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *The Journal of Sex Research, 35*, 234-243.
- Parera, N., & Suri's, J. C. (2004). Having a good relationship with their mother: A protective factor against sexual risk behavior among adolescent females? *Journal of Paediatrics and Adolescence Gynaecology, 17*, 267-271.
- Patel, V., Andrews, G., Pierre, T., & Kamat, N. (2001). Gender, sexual abuse and risk behaviors in adolescents: A cross-sectional survey in schools in Goa, India. *The National Medical Journal of India, 14*, 263-267.

- Pearce, M. J., Jones, S. M., Schwab-Stone, M. E., & Ruchkin, V. (2003). The protective effects of religiousness and parent involvement on the development of conduct problems among youth exposed to violence. *Child Development, 74*, 1682–1696.
- Petersen, I., Bhana, A., & McKay, M. (2005). Sexual violence and youth in South Africa: The need for community-based prevention interventions. *Child Abuse & Neglect, 29*, 1233–1248.
- Peterson, Z. D., Janssen, E., & Heiman, J. R. (2010). The association between sexual aggression and HIV risk behavior in heterosexual men. *Journal of Interpersonal Violence, 25*, 538-556.
- Pettifor, A. E., Measham, D. M., Rees, H. V., & Padian, N. S. (2004). Sexual power and HIV risk, South Africa. *Emerging Infectious Diseases, 10*, 1996-2004.
- Pettifor, A. E., Rees, H. V., Kleinschmidt, I., Steffenson, A. E., Macphail, C., Hlongwa-Madikizela, L.,... Padian, N. S. (2005). Young people's sexual health in South Africa: HIV prevalence and sexual behaviors from a nationally representative household survey. *AIDS, 19*, 1525-1534.
- Pettifor, A. E., Rees, H. V., Steffenson, A., Hlongwa-Madikizela, L., Macphail, C., Vermaak, K., & Kleinschmidt, I. (2004). HIV and sexual behaviour among young South Africans: A national survey of 15 to 24 years olds. Johannesburg: Reproductive Health Research Unit, University of the Witwatersrand.
- Philpart, M., Goshu, M., Gelaye, B., Williams, M. A., & Berhane, Y. (2009). Prevalence and Risk factors of gender-based violence committed by male college students in Awassa, Ethiopia. *Violence and Victims, 24*, 122-136.
- Pick, S., & Palos, P. A. (1995). Impact of the family on the sexual lives of adolescents. *Adolescence, 30*, 667-675.
- Purdie, V., & Downey, G. (2000). Rejection sensitivity and adolescent girls' vulnerability to relationship-centered difficulties. *Child Maltreatment, 5*, 338-349.
- Raghavan, R., Bogart, L. M., Elliott, M. N., Vestal, K. D., & Schuster, M. A. (2004). Sexual victimization among a national probability sample of adolescent women. *Perspectives on Sexual Reproductive Health, 36*, 225-232.
- Raj, A., Santana, M. C., Marche, A. L., Amaro, H., Cranston, K., & Silverman, J. G. (2006). Perpetration of intimate partner violence associated with sexual risk behaviors among young adult men. *American Journal Public Health, 96*, 1873-1878.
- Reza, A., Breiding, M. J., Gulaid, J., Mercy, J. A., Blanton, C., Mthethwa, Z., ... Anderson, M. (2009). Sexual violence and its health consequences for female children in Swaziland: A cluster survey study. *Lancet, 373*, 1966-1972.

- Rhynard, J., Krebs, M., & Glover, J. (1997). Sexual assault in dating relationships. *Journal of School Health, 67*, 89-94.
- Rickert, V. I., Wiemann, C. M., Vaughan, R. D., & White, J. W. (2004). Rate and risk factors for sexual violence among an ethnically diverse sample of adolescents. *Archives of Pediatrics and Adolescent Medicine, 158*, 1132-1139.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenthal, D. A. (1997). Understanding sexual coercion among young adolescents: Communicative clarity, pressure and acceptance. *Archives of Sexual Behavior, 26*, 481-493.
- Rosenthal, S. L., Burklow, K. A., Lewis, L. M., Succop, P. A., & Biro, F. M. (1997). Heterosexual romantic relationships and sexual behaviors of young adolescent girls. *Journal of Adolescent Health, 21*, 238-243.
- Rostosky, S. S., Wilcox, B. L., Wright, M. L., & Randall, B. A. (2004). The impact of religiosity on adolescent sexual behavior: A review of the evidence. *Journal of Adolescent Research, 19*, 677-697.
- Rozee, P. D., & Koss, M. P. (2001). Rape: A century of resistance. *Psychology of Women Quarterly, 25*, 295-311.
- Rwenge, M. (2000). Sexual risk behaviors among young people in Bamenda, Cameroon. *International Family Planning Perspectives, 26*, 118-123 & 130.
- Ryan, K. M. (1998). The relationship between courtship violence and sexual aggression in college students. *Journal of Family Violence, 13*, 377-394.
- Ryan, K. M. & Jorski, J. K. (1998). The enjoyment of sexist humor, rape attitudes, and relationship aggression in college students. *Sex Roles, 38*, 743-756.
- Sabo, D. F., Miller, K. E., Farrel, M. P., Melnick, M. J., & Barnes, G. M. (1999). High school athletic participation, sexual behaviour and adolescent pregnancy: A regional study. *Journal of Adolescent Health, 25*, 207-216.
- Salameh, P., Waked, M., & Aoun, Z. (2008). Waterpipe smoking: Construction and validation of the Lebanon waterpipe dependence scale (LWDS-11). *Nicotine & Tobacco Research, 10*, 1-10.
- Santelli, J. S., Kaiser, J., Hirsch, L., Radosh, A., Simkin L., & Middlestadt, S. (2004). Initiation of sexual intercourse among middle school adolescents: The influence of psychosocial factors. *Journal of Adolescent Health, 34*, 200-208.
- Santor, D. A. Messervey, D., & Kusumakar, V. (2000). Measuring peer pressure, popularity and conformity in adolescent boys and girls: Predicting school

- performance, sexual attitudes and substance abuse. *Journal of Youth and Adolescence*, 29, 163-182.
- Santrock, J. W. (2008). *Life-span development* (11th ed.). Boston: McGraw Hill.
- Sapp, M., Farrell, J., & James, H. K. (1999). Attitude towards rape among African American male and female college students. *Journal of Counseling and Development*, 77, 204-208.
- Schachner, D. A., & Shaver, P. R. (2004). Attachment dimensions and sexual motives. *Personal Relationships*, 11, 179-195.
- Schnurr, M. P., & Lohman, B. J. (2008). How much does school matter? An examination of adolescent dating violence perpetration. *Journal of Youth and Adolescence*, 37, 266-283.
- Schwartz, M. D., & DeKeseredy, W. S. (2000). Aggression bias and women abuse: Variation by male peer support, region, language, and school type. *Journal of Interpersonal Violence*, 15, 555-565.
- Schwartz, J. P., Waldo, M., & Higgins, A. J. (2004). Attachment styles: Relationship to masculine gender role conflict in college men. *Psychology of Men and Masculinity*, 5, 143-146.
- Scott Jr., L. D., Munson, M. R., McMillen, J. C., & Ollie, M. T. (2006). Religious involvement and its association to risk behaviors among older youth in foster care. *American Journal of Community Psychology*, 38, 223-236.
- Seme, A., & Wirtu, D. (2008). Premarital sexual practice among school adolescents in Nekemte town, east Wollega. *Ethiopian Journal of Health and Development*, 22, 167-173.
- Serquina-Ramiro, L. (2005). Physical intimacy and sexual coercion among adolescent intimate partners in the Philippines. *Journal of Adolescent Research*, 20, 476-496.
- Seto, M. C., Maric, A., & Barbaree, H. E. (2001). The role of pornography in the etiology of sexual aggression. *Aggression and Violent Behavior*, 6, 35-53.
- Sheeran, P., Abraham, C., & Orbell, S. (1999). Psychological correlates of heterosexual condom use: A meta-analysis. *Psychological Bulletin*, 125, 90-132.
- Sieverding, J. A., Adler, N., Witt, S., & Ellen, J. (2005). The influence of parental monitoring on adolescent sexual initiation. *Archives of Pediatric Adolescence Medicine*, 159, 724-729.
- Sieving, R. E., McNeely, C. S., & Blum, R. W. (2000). Maternal expectations, mother-child connectedness, and adolescent sexual debut. *Archives of Pediatrics Adolescence Medicine*, 154, 809-816.
- Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality:

- Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, 60, 870–883.
- Singh, S., Fetters, T., Gebreselassie, H., Abdella, A., Gebrehiwot, Y., Kumbi S., & Audam, S. (2010). The estimated incidence of induced abortion in Ethiopia, 2008. *International Perspectives on Sexual and Reproductive Health*, 36, 16–25.
- Sionean, C., DrClemente, R. J., Wingood, G. M., Crosby, R., Cobb, B. K., Harrington, K., ...& Oh, M. K. (2002). Psychosocial and behavioural correlates of refusing unwanted sex among African-American adolescent females. *Journal of Adolescent Health*, 30, 55-63.
- Sipsma, E., Isabel, J. C., Cerrato, I. M., & Everaerd, W. (2000). Sexual aggression against women by men acquaintances: Attitudes and experiences among Spanish university students. *The Spanish Journal of Psychology*, 3, 14-27.
- Smith, C. (2003). Theorizing religious effects among American adolescents. *Journal for the Scientific Study of Religion*, 42, 17– 30.
- Smollbone, S. W., & Dadds, M. R. (2000). Attachment and coercive sexual behavior. *Sexual Abuse: A Journal of Research and Treatment*, 12, 3-15.
- Somers, C. L., & Paulson, S. E. (2000). Students' perceptions of parent adolescent closeness and communication about sexuality: Relations with sexual knowledge, attitudes, and behaviours. *Journal of Adolescence*, 23, 629-644.
- Speizer, I. S. (2010). Intimate partner violence attitudes and experience among women and men in Uganda. *Journal of Interpersonal Violence*, 25, 1224-1241.
- State University of New York at Buffalo (2007). Sexual assertiveness questionnaire and date rape prevention. New York: Counseling Services, Retrieved June 20, 2008 from <http://ub-counseling.buffalo.edu/rapeprevent.shtml>
- Stirpe, T., Abracen, J., Stermac, L., & Wilson, R. (2006). Sexual offenders' state of mind regarding childhood attachment: A controlled investigation. *Sexual Abuse: A Journal of Research and Treatment*, 18, 289-302.
- Testa, M., & Dermen, K. H. (1999). The differential correlates of sexual coercion and rape. *Journal of Interpersonal Violence*, 14, 548-561.
- Testa, M., & Livingston, J. A. (1999). Qualitative analysis of women's experiences of sexual aggression: Focus on the role of alcohol. *Psychology of Women Quarterly*, 23, 573-589.
- Testa, M., & Parks, K. A. (1996). The role of women's alcohol consumption in sexual victimization. *Aggression and Violent Behaviour*, 1, 217-234.
- Testa, M., VanZile-Tamsen, C., & Livingston, J. (2007). Prospective prediction of

- women's sexual victimization by intimate and nonintimate male perpetrators. *Journal of Consulting and Clinical Psychology*, 75, 52-60.
- Testa, M., VanZile-Tamsen, C., Livingston, J. A., & Koss, M. P. (2004). Assessing women's experiences of sexual aggression using the sexual experience survey: Evidence for validity and implications for research. *Psychology of Women Quarterly*, 28, 256-265.
- Thomaes, S., Stegge, H., Bushman, B. J., Olthof, T., & Denissen, J. (2008). Development and validation of the childhood narcissism scale. *Journal of Personality Assessment*, 90, 382-391.
- Tjaden, P., & Thoennes, S. (2000). Full report of the prevalence, incidence, and consequences of violence against women: Findings from the national violence against women survey. Washington Dc: National Institute of Justice.
- Tracy, J. L., Shaver, P. R., Albino, A. W., & Cooper, M. L. (2003). Attachment styles and adolescent sexuality. In P. Florsheim (Ed.), *Adolescent romance and sexual behavior: Theory, research, and practical implications* (pp. 137-159). Mahwah, NJ: Erlbaum.
- Turchik, J. A., Probst, D. R., Chau, M., Nigoff, A., & Gidycz, C. A. (2007). Factors predicting the type of tactics used to resist sexual assault: A prospective study of college women. *Journal of Consulting and Clinical Psychology*, 75, 605-614.
- Ullman, S. E., Karabatsos, G., & Koss, M. P. (1999). Alcohol and sexual aggression in a national sample of College men. *Psychology of Women Quarterly*, 23, 673-689.
- Upchurch, D. M., & Kusunoki, Y. (2004). Association between forced sex, sexual protective practices, and sexually transmitted diseases among a national sample of adolescent girls. *Womens' Health Issues*, 14, 75-84.
- Van Oudenhoven, J. P., Hofstra, J., & Bakker, W. (2003). Ontwikkeling en evaluatie van de Hechtingstijlvragenlijst [development and evaluation of the attachment style questionnaire]. *Nederlands Tijdschrift voor de Psychologie en haar Grensgebieden*, 58, 95-102.
- Vega, V., & Malamuth, N. M. (2007). Predicting sexual aggression: The role of pornography in the context of general and specific risk factors. *Aggressive Behavior*, 33, 104-117.
- Voller, E. K., Long, P. J., & Ausved, A. C. (2009). Attraction to sexual violence towards women, sexual abuse of children, and non-sexual criminal behaviour: Testing the specialist Vs. generalist models in male college students. *Archives of Sexual Behaviour*, 38, 235-243.

- von Eye, A., Bogat, G. A., & Rhodes, J. E. (2006). Variable-oriented and person-oriented perspectives of analysis: The example of alcohol consumption in adolescence. *Journal of Adolescence*, *29*, 981–1004.
- Ward, T., Hudson, S., Marshall, W., & Siegert, R. (1995). Attachment style and intimacy deficits in sexual offenders: A theoretical framework. *Sexual Abuse: A Journal of Research and Treatment*, *7*, 317–335.
- Werner-Wilson, R. J. (1998). Gender differences in adolescent sexual attitudes: The influence of individual and family factors. *Adolescence*, *33*, 519-531.
- Widman, L., & McNulty, J. K. (2009). Sexual narcissism and the perpetration of sexual aggression. *Archives of Sexual Behavior*, *39*, 926-939.
- Wolf, K. A., & Foshee, V. A. (2003). Family violence, anger expression styles, and adolescent dating violence. *Journal of Family Violence*, *18*, 309-316.
- Wood, K., & Jewkes, R. (1997). Violence, rape, and sexual coercion: everyday love in South African township. *Gender and Development*, *5*, 41-46.
- Wood, K., Maforah, F., & Jewkes, R. (1998). He forced me to love him, putting violence on adolescent sexual health agendas. *Social Science and Medicine*, *42*, 233-242.
- Worku, A., & Addisie, M. (2002). Sexual violence among female high school students in Debark (NW Ethiopia). *East African Medical Journal*, *79*, 96-99.
- Wubs, A. G., Aarø, L. E., Flisher, A. J., Bastien, S., Onya, H. E., Kaaya, S., & Mathews, C. (2009). Dating violence among school students in Tanzania and South Africa: Prevalence and socio-demographic variations. *Scandinavian Journal of Public Health*, *37*, 75-86.
- Yeater, E. A., & Lenberg, K. L. (2008). When social situation take a turn for the worse: Situational and interpersonal risk factors for sexual aggression. *Sex Roles*, *59*, 151-163.
- Yimin, C., Schouqing, L., Arzhu, Q., Yuke, Z., Jianhua, W., Jinxin, Z.,... Shaomin, W. (2002). Sexual coercion among adolescent women seeking abortion in China. *Journal of Adolescent Health*, *31*, 482-486.
- Young, B. J., & Furman, W. (2008). Interpersonal factors in the risk for sexual victimization and its recurrence during adolescence. *Journal of Youth and Adolescence*, *37*, 297-309.
- Zablotska, I. B., Gray, R. H., Koenig, M. A., Serwadda, D., Nalugoda, F., kigozi, G.,... Wawer, M. (2009). Alcohol use, intimate partner violence, sexual coercion and HIV among women aged 15-24 in Rakai, Uganda. *AIDS and Behavior*, *13*, 225-233.
- Zawacki, T., Abbey, A., Buck, P. O., McAuslan, P., & Clinton-Sherrod, A. M. (2003).

Perpetrators of alcohol-involved sexual assaults: How do they differ from other sexual assault perpetrators and nonperpetrators? *Aggressive Behaviour*, 29, 366–380.

Zillmann, D. (2000). Influence of unrestrained access to erotica on adolescents' and young adults' dispositions toward sexuality. *Journal of Adolescent Health*, 27, 41-44.

Zillmann, D., & Bryant, J. (1988). Effects of prolonged consumption of pornography on family values. *Journal of Family Issues*, 9, 518-544.

Zweig, J. M., Barber, B. L., & Eccles, J. S. (1997). Sexual coercion and wellbeing in young adulthood: Comparisons by gender and college status. *Journal of Interpersonal Violence*, 12, 291-308.

SUMMARY IN DUTCH

Het doel van het onderzoek in deze dissertatie was om de determinanten te onderzoeken van seksueel geweld onder leerlingen van middelbare school in het oosten van Ethiopië. Hiervoor zijn een aantal risico- en protectieve factoren onderzocht voor zowel daderschap als slachtofferschap van seksueel geweld. Tevens is gekeken naar de modererende rol van protectieve factoren op de relatie tussen risicofactoren en daderschap en slachtofferschap van seksueel geweld. Dit alles wordt in deze dissertatie gerapporteerd in vijf empirische studies. Na een algemene introductie in Hoofdstuk 1, en een methodologische introductie in Hoofdstuk 2, heeft de eerste studie (Hoofdstuk 3) betrekking op de prevalentie en de patronen van daderschap van seksueel geweld. In de tweede studie (Hoofdstuk 4) werden de risicofactoren voor daderschap van seksueel geweld bestudeerd, en in de derde studie (Hoofdstuk 5) de risicofactoren voor slachtofferschap van seksueel geweld. In de vierde studie (Hoofdstuk 6) werden met een ‘person-centred approach’ verschillende typen van daders en slachtoffers bestudeerd, gevormd op basis van de vormen van seksueel geweld die ze uitoefenden of ervoeren. In de vijfde empirische studie (Hoofdstuk 7) stond de modererende rol van protectieve factoren op het verband tussen risicofactoren en daderschap of slachtofferschap van seksueel geweld centraal. In het laatste hoofdstuk (Hoofdstuk 8) tenslotte worden de bevindingen uit de vijf empirische hoofdstukken bediscussieerd, wordt ingegaan op de beperkingen en op de implicaties van deze studie, en worden suggesties voor verder onderzoek gegeven.

Met betrekking tot de prevalentie van daderschap en slachtofferschap van seksueel geweld (gerapporteerd in Hoofdstukken 3 en 5) vonden we dat 70% van de jonge mannen aangaf op zijn minst één keer seksueel geweld te hebben uitgeoefend, en 68% van de jonge vrouwen op zijn minst één keer seksueel geweld te hebben ervaren. Dit is grotendeels in overeenstemming met eerdere studies. Hierbij is het wel van belang op te merken dat in deze studie zowel daderschap als slachtofferschap gezien wordt op een continuüm van seksueel gewelddadige gedragingen, van verbale of psychologische intimidatie aan het ene eind tot aan fysiek gedwongen seksuele gemeenschap aan het andere eind. Het bleek dat 57% van de jonge mannen wel eens dader is geweest van seksuele beledigingen, en 52% van de jonge vrouwen slachtoffer daarvan. Van de jonge mannen bleek 62% wel eens de dader te zijn geweest van seksuele intimidatie (ongewenst fysiek contact, maar geen gemeenschap) en 56% van de vrouwen wel eens slachtoffer daarvan. Lagere percentages voor zowel daders als slachtoffers werden gerapporteerd voor seksuele dwang (verbale en psychologische dwang om gemeenschap te hebben en voor seksuele agressie (fysiek gedwongen gemeenschap). Van de jonge mannen rapporteerde 38% wel eens dader te zijn

geweest van seksuele dwang, en 25% van de jonge vrouwen wel eens slachtoffer. Bij seksuele agressie rapporteerde 23% van de jonge mannen wel eens dader te zijn geweest en 15% van de jonge vrouwen wel eens slachtoffer. Voor deze laatste twee categorieën (dwang en agressie) werden wat verschillen gevonden met eerdere Ethiopische studies en met studies uit andere Afrikaanse landen. Deze verschillen zouden te maken kunnen hebben met de zeer uitgebreide manier van meten in de huidige studie (met 21 gedragingen in deze studie, vergeleken met 1 of enkele in andere studies). Andere mogelijke oorzaken van dit verschil zouden kunnen liggen in verschillen in de specifieke geografische regio (in deze studie een regio met een hoog risico) of in de tijd waarop een studie zich richt (seksueel geweld in het afgelopen jaar, tien jaar, of, zoals in deze studie, 'life-time prevalence').

In Hoofdstuk 6 werd de prevalentie van daderschap en slachtofferschap van seksueel geweld bestudeerd met een 'person-centred approach'. Hierbij werden drie typen daders en drie typen slachtoffers gevonden. Bij de mannen was er 46% die geen enkele vorm van daderschap van seksueel geweld rapporteerde ('non-offenders'), 32% die daderschap van seksuele beledigingen of intimidatie rapporteerde ('minor offenders') en 22% die daderschap van alle vier categorieën van seksueel geweld (beledigingen, intimidatie, dwang en agressie) rapporteerde ('serious offenders'). Bij de vrouwen was er 60% die geen enkele vorm van slachtofferschap van seksueel geweld rapporteerde ('non-victims'), 22% die slachtofferschap van seksuele beledigingen of intimidatie rapporteerde ('minor victims') en 18% die slachtofferschap van alle vier categorieën van seksueel geweld rapporteerde ('serious victims').

Bij beide soorten analyses van seksueel geweld ('variable-centred' en 'person-centred') lijken de cijfers hoger te liggen wanneer ze gerapporteerd worden door de daders dan door de slachtoffers. Dit zou te maken kunnen hebben met het feit dat de jonge vrouwen angst hadden gestigmatiseerd te worden bij de rapportage van seksueel geweld, en tevens ondersteuning vanuit hun omgeving te verliezen. Ook zou het zo kunnen zijn dat ze de ongewenste seksuele activiteiten beschouwen als acceptabel en normaal binnen vriendschappen.

De studies van risicofactoren voor daderschap en slachtofferschap van seksueel geweld in Hoofdstuk 4 en 5 lieten zien dat het hebben van meerdere seksuele partners, het frequent kijken naar pornografie, en middelengebruik (alcohol; khat en shisha) de sterkste risicofactoren voor zowel daderschap als slachtofferschap van seksueel geweld zijn. Een gedogende houding ten opzichte van seksueel geweld en een angstige gehechtheid aan de

ouders dragen eveneens bij aan daderschap en slachtofferschap van seksueel geweld. Een overdreven gevoel van recht hebben ergens op (narcisme) droeg eveneens bij aan daderschap van seksueel geweld en gevoeligheid voor verwerping aan slachtofferschap. Uit de resultaten van Hoofdstuk 6 (waar naar de typen daders en slachtoffers werd gekeken) bleek eveneens dat deze risicofactoren gekoppeld waren aan de meer ernstige vormen ('serious') van daderschap of slachtofferschap van seksueel geweld. Uit de focus groep discussies tussen jongeren uit een kwalitatieve studie (gerapporteerd in Hoofdstuk 5) kwamen deze risicofactoren nog eens naar voren.

In de studie gerapporteerd in Hoofdstuk 7 werd gevonden dat een samengestelde risico-index positief samenhangt met zowel slachtofferschap als daderschap van seksueel geweld. Een samengestelde index voor protectieve factoren hing negatief samen met seksueel geweld en bufferde de samenhang tussen de risico-index en seksueel geweld. Dat wil zeggen dat de samenhang tussen de risicofactoren en seksueel geweld kleiner is voor zowel daders als slachtoffers met een hoge score op de index voor protectieve factoren. Hierbij bleken vooral veilige gehechtheid aan ouders, communicatie met ouders over seksualiteit, religiositeit en verbondenheid met school belangrijke factoren te zijn. Hoge scores op deze factoren zouden kunnen samenhangen met de ontwikkeling van respectvolle relaties tussen jonge mannen en vrouwen, en op die manier de kans op (zowel daderschap als slachtofferschap van) seksueel geweld verkleinen. Specifiek was het vooral de verbondenheid met school die samenhangt met zowel minder daderschap als slachtofferschap van seksueel geweld, terwijl gehechtheid aan de ouders en religiositeit alleen samenhangen met minder slachtofferschap.

Het onderzoek dat gerapporteerd wordt in deze dissertatie kent ook enkele beperkingen. Allereerst was er sprake van een cross-sectioneel onderzoeksdesign, waardoor temporele (of zelfs causale) uitspraken voorzichtig moeten worden gedaan. Ook werd gevraagd naar de herinneringen aan seksueel geweld, waarbij een vertekening kan zijn opgetreden, en waarbij ook sociale wenselijkheid een rol gespeeld kan hebben. Daarnaast was voor enkele instrumenten (met een enkel item) de betrouwbaarheid niet vast te stellen. De gegevens van de 'person-centred' benadering, de verschillende typen die gevonden zijn, was de eerste van zijn soort in deze onderzoeksrichting, en zouden gerepliceerd moeten worden. Tot slot vond dit onderzoek plaats op middelbare scholen, hetgeen tot een wat vertekende steekproef geleid kan hebben omdat voor sommige tracks de school met 16 jaar beëindigd wordt. Het gegeven dat verbondenheid met school een rol speelt geeft nog eens aan dat juist de jongeren die school vroeg verlaten een risico lopen.

Verder onderzoek zou zich kunnen richten op het verfijnen van de instrumenten die in het huidige onderzoek gebruikt zijn. Met name een standaardisatie van het meten van seksueel geweld in verschillende gradaties (zoals in deze studie in de vorm van beledigingen, intimidatie, dwang en agressie) zou daarbij belangrijk zijn. Hiermee kunnen misverstanden over seksueel geweld uit de weg geholpen worden, en kan een betere schatting van de prevalentie van seksueel geweld in verschillende landen worden verkregen. Longitudinale studies zijn nodig om en beter zicht te krijgen op de temporele samenhang tussen risicofactoren, protectieve factoren, en seksueel geweld. Toekomstige studies zouden ook de gevonden typen kunnen repliceren, en verder valideren. Tot slot is onderzoek nodig onder jongeren die school (vroegtijdig) verlaten, om ook bij hen de prevalentie van seksueel geweld en de rol van risicofactoren en protectieve factoren te bepalen.

Samengevat laat het onderzoek in deze dissertatie zien dat seksueel geweld een serieus probleem is op middelbare scholen in Ethiopië. Het identificeren van risicofactoren en protectieve factoren hierbij is een belangrijke eerste stap. Strategieën die er op gericht zijn om de invloed van risicofactoren te verkleinen en de invloed van protectieve factoren te vergroten zouden kunnen bijdragen aan het terugdringen van het daderschap van seksueel geweld door jonge mannen en het slachtofferschap van seksueel geweld van jonge vrouwen. De implementatie van preventiestrategieën zou zich vooral kunnen richten op scholen, om zo veel mogelijk adolescenten op een zo jong mogelijke leeftijd te bereiken. Bij deze strategieën kan gedacht worden aan allereerst het bespreken van seksueel geweld om zo tot een grotere bewustwording van het probleem te komen. Daarbij zou ook het curriculum van een school op het gebied van biologie, ethiek, en burgerschapszin gebruikt kunnen worden. Ook zou in deze lessen de nadruk kunnen liggen op het ontwikkelen van sociale normen die uitgaan van respectvolle omgang met elkaar. Hier zouden ook dramalessen en schooltheaterproducties kunnen worden gebruikt. Naast de hulp van lokale en nationale overheden, zou het gebruik van zowel het school curriculum als andere activiteiten op school op deze manier tot een reductie van seksueel geweld kunnen leiden.

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Curriculum Vitae

Alemayehu Belachew was born on April 28, 1971 in Jimma, South Western Ethiopia. He has graduated from Addis Ababa University with a bachelor's degree in pedagogical science in 1993 and a master's degree in curriculum and instruction in 1998. He has received nine months training certificate in population and development from training organized by Centre for African Family Studies, Partners in Population and Development, and International Council on Management of Population Programs in collaboration. He has worked as a lecturer in psychology, research methods, and instructional media at Haramaya University, and a program manager in adolescent sexual reproductive health in the Family Guidance Association of Ethiopia. In 2007, he started a PhD project on determinants of sexual violence among young people at the department of Developmental Psychology at Utrecht University under the supervision of Prof. dr. Marcel van Aken and Dr. Judith Dubas. The results of this research are explained in this dissertation.

