ORIGINAL RESEARCH ARTICLE

Dating Violence and Self-Efficacy for Delayed Sex among Adolescents in Cape Town, South Africa

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Abstract

In South Africa, dating violence is known to be widespread among adolescents, and is therefore a major public health issue because of its association with sexual risk behaviours. The objective of the study was to examine the relationship between dating violence and self-efficacy for delayed sex among school-going adolescents in Cape Town, South Africa. The study is based on analyses of data from a school-based health education programme targeting sexual and reproductive health issues.The study involved 3,655 school-going adolescents aged between 12 and 17 in Cape Town, South Africa. The data was collected by means of a self-administered questionnaire composed of 153 items on sexual and reproductive health, dating violence as well as socio-demographic characteristics. The results indicated that males showed a higher percentage of both dating violence victimization and perpetration, as compared to females. It was also found that adolescents from lower socio-economic backgrounds were more likely to be the victims of dating violence as compared to those from a higher socio-economic background. Female learners showed higher levels of self-efficacy for delayed sex than their male counterparts. Although the result revealed that there was a significant association between self-efficacy for delayed sex and socio-economic status, this link decreased with age. It is concluded that educational programmes aimed solely at improving self-efficacy for delayed sex is insufficient. Such programmes must also aim at preventing dating violence and equipping adolescents with the skills to negotiate their way out of dating violence. *Afr J Reprod Health 2014; 18[2]: 46-57).*

Keywords: STI, HIV, Sexual Risk Behavior, Sexual Debut, Coerced Sex

Résumé

En Afrique du Sud, la violence dans les fréquentations est très répandue chez les adolescents, et constitue donc un probleme majeur de santé publique en raison de son association avec les comportements sexuels à risque. L'objectif de l'étude était d'étudier la relation entre la violence dans les fréquentations et l'auto-efficacité pour le rapport sexuel retardé chez les adolescents qui fréquentent encore l'école à Cape Town, en Afrique du Sud. L'étude est basée sur l'analyse des données d'un programme d'éducation sur la santé en milieu scolaire qui vise l'étude des problèmes de santé sexuelle et de la reproduction des adolescents. L'étude concernait 3655 adolescents âgés d'entre 12 et 17 ans au Cap, en Afrique du Sud. Les données ont été recueillies à l'aide d'un questionnaire auto-administré composé de 153 articles sur la santé sexuelle et de la reproduction, la violence dans les fréquentations ainsi que les caractéristiques socio- démographiques. Les résultats ont indiqué que les hommes ont enregistré un pourcentage plus élevé de victimes de la violence et sa dans les fréquentations et sa perpétration, par rapport aux femmes. Il a également été constaté que les adolescents issus de milieux socio-économiques défavorisés sont plus susceptibles d'être victimes de violence dans les fréquentations par rapport à ceux d'un milieu socio-économique plus élevé. Les apprenants de sexe féminin ont montré des niveaux plus élevés d'auto-efficacité pour le rapport sexuel retardé que leurs homologues masculins. Bien que le résultat ait révélé qu'il y avait une association significative entre l'auto-efficacité pour le rapport sexuel retardé et la situation socio-économique, ce lien diminue avec l'âge. Nous avons conclu que les programmes éducatifs qui visent uniquement à améliorer l'auto-efficacité pour le rapport sexuel retardé ne sont pas suffisants. Ces programmes doivent également viser à prévenir la violence dans les fréquentations et à donner aux adolescents les compétences nécessaires pour négocier leur moyen de sortir de violence dans les fréquentations. *Afr J Reprod Health 2014; 18[2]: 46-57).*

Mots-clés: IST, VIH, risque de comportement sexuel, premiers rapports sexuels, rapports sexuels forcés

Introduction

In this era of HIV/AIDS, delaying sex among adolescents is a serious concern and has played an important role in educational activities aimed at preventing the spread of the disease, since it provides the only complete protection against teenage pregnancy and sexually-transmitted diseases, including HIV. Delaying sex also provides buffering from the psychological and emotional harm that may result from premature sexual relationships[1]. While school-based sexuality programmes aimed at promoting delayed sex have been successful in improving knowledge in the field of sex education, behavioural change as regards sexual activity has been noted only when the programmes have included contraceptive information such as condom use, coupled with strategies for resisting peer or social pressure to engage in sexual activity[2,3]. Programmes that have used this method, in addition to providing accessible and 'teen-friendly' reproductive health services, have demonstrated a reduction in early sexual activity[4].

Adolescent dating violence has become a public health issue throughout the world because of the health consequences for those involved[5]. Dating violence among adolescents in Sub-Saharan African countries is a particular area of concern for research, since little work has been carried out as compared to other regions of the world. The National Centre for Injury Prevention and Control (NCIPC)[6] defines dating violence as "the perpetration or threat of an act of violence by at least one member of an unmarried couple on the other member within the context of dating or courtship". Research conducted in South Africa reports different prevalence rates for dating violence, due to methodological and definitional differences[7, 8]. These authors indicate, however, that the phenomenon is widespread in the country. In a study by Swart et al.[7], the level of dating violence perpetration among school-going adolescents in Cape Town was found to be 40%. Their findings were corroborated by a similar study, which found a prevalence rate of dating violence perpetration of 20.7% among school-going adolescents in Cape Town[8]. Other research also reported 5.8% sexual abuse prevalence rate among male school-going adolescents in Cape Town[9].

The issue of dating violence is a particularly important one because of its association with the onset of sexual activity and consequently with STIs, including HIV. In a study conducted in KwaZulu Natal, South Africa, more than one third of girls aged between 15 and 19 reported that they had lost their virginity through force, coercion or trickery[10]. A related study of school-going adolescents in South Africa indicates that early onset of first sexual intercourse was more likely among males than females, and among older students and students of a lower socio-economic status[11]. The same study also found that first sexual intercourse was significantly associated with intention to have sexual intercourse, dating violence and poor self-efficacy in negotiating delayed sex[11].

A longitudinal study of adolescents' transition from virgin to non-virgin status in Ohio (USA)[12] found a negative relationship between self-efficacy and early sexual initiation among boys. Peer pressure, age and traditional family structure were also negatively related to early sexual initiation for both boys and girls, while academic achievement was positively related to early sexual initiation. These findings, which indicate that more boys than girls report early sexual initiation, are consistent with other research in this area[13,14]. For example a link between family structure and age of first sexual intercourse has been found[15]. This study revealed that a late age of first sexual intercourse was more likely among adolescents who lived in an intact family unit (a two-parent family, married parents)[15]. It was also indicated in the same study that early onset of sexual intercourse is also associated with adolescents with a past dating history[15]. Among white adolescents, the risk of early sexual intercourse was slightly higher among those of a lower socioeconomic status[16]. Though there are few studies on dating relationships among South African adolescents, there is some evidence to suggest that dating tends to start in early adolescence, between 13 and 14 years of age, while between the ages of 16 and 20 years most adolescents report being in a relationship, which half describe as casual, that is, not regular or permanent[17,18]. A systematic review of literature

revealed that at least 50% of young South Africans are sexually active by the age of 16, and 13.1% of males between 15 and 24 years of age reported their first sexual relationship before the age of 15 (range 9-14)[19,20].

Theoretical Framework

This study was informed by Bandura's Social Cognitive Theory[21] with the aim of examining the relationship between dating violence and self-efficacy for delayed sex. This theory has been proven to provide useful change targets for sexual health promotion[22-24]. Social Cognitive Theory is used in the design of educational programmes, providing as it does a broad variety of theoretical variables linked to behaviour and behaviour change. The theory is based on the assumptions that behaviour is influenced by personal factors and environment (reciprocal determinism). This implies that behaviour is largely determined by people's expectations and values regarding the outcomes of their behaviour (outcome expectations and expectancies), as well as people's expectations concerning self-efficacy and self-control with regards to performing the behaviour[22].

Self-efficacy in delaying sex may prove important as a predictor and causal factor in relation to actual sexual behaviour. A high level of delayed sex self-efficacy may lead to later sexual transition and fewer partners. People with a high level of self-assurance in their capabilities approach difficult tasks (in this case delaying sex) as challenges to be mastered rather than as threats to be avoided, and approach threatening situations with the assurance that they can exercise control over them. On the contrary, those with a low sense of efficacy doubt their capabilities and shy away from difficult tasks, for example delaying sex. They have low aspirations and only a weak commitment to the goals they choose to pursue. The theory goes on to explain that the stronger the perceived self-efficacy, the more successful people are in reducing health impairing habits and adopting and integrating health-promoting habits into their regular lifestyles, such as in this case delaying sex to avoid being infected by HIV. However, self-efficacy also varies according to the situation[25]. A person may feel confident that he or she can perform an act under one condition, and yet this same person may have very low self-efficacy as regards performing that same act under different conditions. For instance in their study of the intersection of violence and HIV infection[26], Susan Maman and colleagues point out that females in abusive relationships are unable to negotiate for safer sexual practices because of fear of being physically abused. In another study, Wingwood and DiClemente[27] found that women with abusive primary partners were more likely to fear negotiating condom use. However it is possible that these people will be able to negotiate safer sex within non-abusive relationships. An adolescent's fear of her partner's potentially violent reaction may therefore hinder his or her ability to negotiate delayed sex.

This main objective of this study is therefore to examine the association between socio-demographic characteristics, self-efficacy for delayed sex and dating violence among adolescents in Cape Town. The findings of the study could help improve already existing educational programmes aimed at equipping adolescents with the skills required to negotiate their way out of dating violence.

Methods

Participants

This study was based on data from a school-based health intervention aimed at adolescents in three locations in Africa, namely Cape Town and Polokwane (South Africa) and Dares Salaam (Tanzania), known as the SATZ (South Africa and Tanzania) study. The classes were composed of learners of ages ranging between 8 and 20. A large-scale field experiment involving 40 schools with between 3,000-5,600 students was conducted in each of the three locations. Schools were paired on selected demographic characteristics, and within each pair one school was randomly assigned to an intervention condition and the other to the control (delayed intervention) condition.

When determining the minimum number of students and schools required to obtain satisfactory statistical accuracy, it was necessary

to take into account the design effect. The design effect refers to the increase in the standard error of estimates brought about by the fact that clusters (schools) are randomized, instead of individuals. Thirteen pairs of schools in Cape Town, 12 in Dar es Salaam and 15 in Polokwane were included, and for the purposes of this study, baseline data from Cape Town was used. Participants were selected if they met the inclusion criteria of not being less than eleven years old and not more than 17 years old, and being or having been involved in a dating relationship. Details of the study where these same participants were used are described elsewhere[22].

Measures

Data was collected by means of a self-completed questionnaire that consisted of 153 items on topics related to sexuality and reproductive health. In the course of a 2003 reliability study that has been described elsewhere[28], the questionnaire was extensively pre-tested and adjusted to suit the settings as regards language and cultural issues. The study was based on a number of variables in the questionnaire that specifically address gendered violence, derived from the Revised Conflict Tactics Scale (CTS2)[29], perceived self-efficacy for delayed sex and socio-economic status, among others. The CTS2 was adapted to suit the South African context such that phrases and words where changed to reflect the contextual meaning of statements. However, this was done without compromising the items and content of the questionnaire.

Dating Violence

A nine-item self-report scale was used to address dating violence (physical, emotional and sexual) among adolescents. These nine items included questions for both victims and perpetrators of dating violence (whether intended or not). A third variable, 'overlappers', was created to cater for those who have been both victims and perpetrators of dating violence. Participants who answered yes to at least one of the "victims" items but not to any of the perpetrator items were coded as having been victims to dating violence. Participants who answered yes to at least one of the perpetrator items but none of the victim items were coded as having been perpetrators. Those who answered yes to at least one item in each of the scales were coded as overlappers, and those who did not give any "yes" answer to any of the items were coded as non-involvers. A "yes" answer, implying involvement in dating violence, was coded as '1', and a "no" answer, representing non-involvement, was coded as '0'. The Cronbach alpha of the scale is .74 for the victim's subscale, .70 for the perpetrators subscale and .84 for all items combined.

Self-Efficacy for Delayed Sex

Adolescents' perceived self-efficacy for delayed sex was measured on an eight-item self-report instrument used in the SATZ study. These items included questions on *ability to wait before having sex* (3 items; "I am able to wait until I am 18 years old before I have sexual intercourse", "I am able to tell my boy/girlfriend that I do not want to have sex until I am 18 years old" and "I will be able to stay away from having sex during the next six months"), *refusal of sex* (3 items; "I am able to refuse to have sex with boy/girlfriend who offers me gifts for sex", "I would be able to refuse to have sex with my boy/girlfriend if I did not feel like having sex" and " I would be able to refuse to have sexual intercourse even if I had been drinking alcohol") and *avoiding situations that may encourage one to have sex* (2 items; "I am able to recognize situations that may encourage me to have sex" and "I am able to avoid situations that may encourage me to have sex"). The instrument is rated on a 5-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). A mean score (mean value across the eight items) was then computed. A valid score was computed when four or more items had valid responses (non-missing values). The Cronbach's alpha coefficient for the study was .79.

Socio-Economic Status (SES)

The SES scale was derived by computing a simple sum score based on six variables measuring SES. These include number of assets (e.g. TV, bicycle, car, tap water and electricity), number of people

sleeping in the same room (reversed), subjective assessment of material situation of the family (ordinal scale with five categories such as "we have enough money for food but not for clothes and luxury). All three variables were then standardized and a simple sum score was computed. For the purposes of bivariate analysis, the SES variable was banded in three categories: low, medium and high.

Procedures

The SATZ study was approved by the Regional Committee for Medical Research for Western Norway and the Research Committee of the Faculty of Health Sciences. Permission was granted by the participating schools, and parents were given letters describing the study, as well as a form to decline the participation of their child, if they so wished. Each student signed a consent form. Self-completed anonymous electronic questionnaires were administered to students in Cape Town in two of three languages, using hand-held computers. The research instrument had previously been subjected to a test-retest reliability study, in 2003[28], and the baseline data collection was carried out in February and March 2004, before the commencement of the intervention. The administration of the intervention took place over a period of 2-3 months, and a booster was administered at each site. The first post-intervention data collection took place shortly after the intervention was completed, and a second one was carried out approximately a year after the baseline. Anonymity was guaranteed, to ensure no collection of personal information from the participants and the safe storage of the data collected.

Statistical Analysis

The Statistical Package for Social Sciences (SPSS, 2006), version 15, was used for analysis. Descriptive statistics were run to describe the characteristics of the sample and to ensure that the variables did not violate the assumptions underlying the statistic selected for analysis. The Chi-square test was used to measure the significance of associations between categorical demographic variables and dating violence, and the independent sample t-test and the One-Way ANOVA were used to compare the difference in the mean of dating violence according to the continuous variables. All statistical tests were performed using two-tailed at $p < 0.05$ level of significance.

Results

Dating Violence by Socio-Demographic factors

The sample consisted of 3,655 students in Cape Town, made up of 51.9% males and 48.1% females. Adolescents in the sample had experienced at least one form of dating violence, either as victim, perpetrator or both, as shown in Table 1. Males showed higher percentages of both dating violence victimization and perpetration, as compared to females. More males (32.4%) had been victims of dating violence (being beaten or punched by a boy-/girlfriend) than females (17.8%). The results also indicated that males were perpetrators of dating violence (threatening or using a knife against a boy/girlfriend) more often (21.3%) than their female counterparts (4.9%)

A significant association was found between dating violence and gender ($\chi 2 = 145.20$, $p < .001$), as shown in Table 2. Analysis shows, too, that, in relation to dating violence, more males than females were victims (13.9% vs.11.2%) and also perpetrators (7.3% vs. 5.3%), and 19.0% of males and 6.9% of females were found to be in the overlap or mixed group. While the proportion of males who were victims or perpetrators of dating violence were only marginally higher than for females, the proportion of males in the overlap group (19%) is much higher than among females (6.9%).

The results further indicate that there was a significant link between age group and dating violence ($p = 0.001$). Distribution by age indicates that experience of dating violence was highest among learners aged 16-17 (22.0%), declining to 16.3% in the 14-15 age group and to 9.9% in the 12-13 age group.

Table 1: Dating violence victimization and perpetration by gender

Items on victimization	Males		Females		Chi-Square (*p*-value)
	Total N	%	Total N	%	
Have you ever had a boy-/girlfriend who beat you up?	1845	16.2	1731	10.8	< .01
Has a boy /girlfriend ever punched or hit you with something that could hurt?	1839	16.2	1723	7.0	< .001
Has a boy/girlfriend ever threatened to use a knife or other weapon against you?	1833	10.6	1722	3.9	< .001
Has a boy/girlfriend ever used a knife or other weapon against you?	1830	9.1	1720	2.7	< .001
Have you ever had a boy-/girlfriend who physically forced you to have sex when you did not want to?	1825	14.4	1715	5.0	< .001
Items on perpetration					
Have you ever punched or hit a boy-/girlfriend with something that could hurt?	1834	16.3	1725	10.4	< .01
Have you ever threatened to use a knife or other weapon against a boy-/girlfriend?	1830	11.9	1721	2.6	< .001
Have you ever used a knife or other weapon against a boy-/girlfriend?	1833	9.4	1721	2.3	< .001
Have you ever forced anyone else to have sex when they did not want to?	1827	10.8	1716	1.5	< .001

Table 2: Dating violence by socio-demographic variables

Characteristics	Non-Involved	Victims	Perpetrators	Overlap group	Total N	Chi-Square (*p*-value)
	N (%)	N (%)	N (%)	N (%)		
Gender						< 0.001
Male	1100 (59.8)	256 (13.9)	134 (7.3)	349 (19.0)	1839	
Female	1322 (76.5)	194 (11.2)	92 (5.3)	120 (6.9)	1728	
Age Ranges						< 0.001
12 – 13	1758 (75.5)	230 (9.9)	121 (5.2)	219 (9.4)	2328	
14 – 15	579 (55.4)	170 (16.3)	88 (8.4)	208 (19.9)	1045	
16 – 17	105 (44.5)	52 (22.0)	20 (8.5)	59 (25.0)	236	
Socioeconomic Status (SES)						< 0.05
Low	501 (57.5)	140 (16.1)	67 (7.7)	163 (18.7)	872	
Medium	659 (63.2)	145 (13.9)	80 (7.7)	158 (15.2)	1042	
High	1278 (75.5)	168 (9.9)	83 (4.9)	164 (9.7)	1693	
Living with Mother						n.s
Yes	2109 (68.9)	371 (12.1)	187 (6.1)	392 (12.8)	3059	
No	301 (64.2)	64 (13.6)	36 (7.7)	68 (14.5)	469	
Living with Father						n.s
Yes	1523 (69.8)	264 (12.1)	127 (5.8)	268 (12.3)	2182	
No	874 (65.5)	173 (13.0)	98 (7.3)	189 (14.2)	1334	

This implies that being both a victim and a perpetrator of dating violence also increases with age. The results also reveal a significant association between socio-economic status and dating violence: the low socio-economic status (SES) group had the highest proportion of victims (16.1%), followed by moderate SES (13.9%) and high SES (9.9%). Perpetrators of dating violence were the same (7%) in both low and moderate SES groups, but higher than in the high SES group (4.9%). The overlap group demonstrated a pattern similar to that of victims, with 18.8% for low SES, 15.2% for moderate SES and 9.7% for high SES. This indicates that the low SES group was more likely to report violence victimization or being in the overlap or mixed group as compared to the medium and high SES groups. There was, however, no significant association between dating violence and living with either the mother or the father.

Delayed Sex Self-Efficacy by Selected Predictors

Table 3 shows associations between self-efficacy for delayed sex and the predictors (gender, dating violence, living with biological mother or father, age and socio-economic status), on the basis of bivariate analysis. The results show that there was a significant association between gender and self-efficacy for delayed sex (p = 0.001) among female learners (M= 4.13, SD=1.05), who displayed higher self-efficacy for delayed sex than male learners (M=3.78, SD= 1.38), with mean values of 3.78 for males and 4.13 for females. Female learners in this study therefore had high self-efficacy for delayed sex, as compared to males. There was also a significant association between dating violence and self-efficacy for delayed sex (p = 0.001). As might be expected, participants not involved in any form of dating violence had the highest self-efficacy score (M = 4.05, SD = 1.16), while the overlap group had the lowest score on self-efficacy for delayed sex (M = 3.69, SD = 1.42). There was no significant difference in self-efficacy for delayed sex among those living with their biological mother, but this was significant in the case of those living with their biological father (p = 0.001). Learners living with their father had a higher self-efficacy for delayed sex (M = 4.00, SD = 1.12) than those who were not living with their father (M =3.87, SD =1.09).

Table 3: Delayed sex self-efficacy by selected predictors (bivariate analysis)

Characteristics	Mean	(SD)	Total Number	(*p*-value)
Gender				<.001[a]
Male	3.78	1.38	1842	
Female	4.13	1.05	1727	
Age Ranges				<.001[b]
12 – 13	4.04	1.15	2333	
14 – 15	3.81	1.13	1040	
16 – 17	3.64	1.33	236	
Dating Violence				<.001[b]
Non-involved group	4.05	1.16	2425	
Victims	3.80	1.35	447	
Perpetrators	3.74	1.37	227	
Overlap group	3.69	1.42	473	
Socio-economic status (SES)				<.001[b]
Low	3.78	1.32	866	
Medium	3.85	1.14	1048	
High	4.10	1.08	1693	
Living with Mother				.077[a]
Yes	3.88	1.36	471	
No	3.96	1.41	3056	
Living with Father				<.001[a]
Yes	3.87	1.12	1327	
No	4.00	1.09	2188	

[a] Independent t-test values; [b] One-way ANOVA.

The ANOVA results revealed a statistically significant difference in self-efficacy for delayed sex according to the age group of learners (p = 0.001). The youngest age group (12-13) had the highest mean for delayed self-efficacy (M = 4.04, SD = 1.15), followed by the 14-15 age group (M = 3.81, SD = 1.13) and the 16-17 group (M = 3.64, SD =1.33). This association indicates that self-efficacy for delayed sex decreases with age. The results in Table 2 also show a significant association between socio-economic status and self-efficacy for delayed sex (p = 0.001). Students with high socio-economic status reported higher levels of self-efficacy for delayed sex (M = 4.10, SD = 1.08), as compared to those from moderate (M = 3.85, SD = 1.14) and low (M = 3.78, SD=1.32) socio-economic status groups.

Discussion

This study among school-going adolescents (11–17 years) in Cape Town, South Africa found dating violence to be widespread. In accordance with what has been reported in previous studies[7,8,30], both boys and girls were victims and perpetrators of dating violence. However, in contrast to other findings[31,32], males in our study experienced significantly higher levels of dating violence as compared to their female counterparts, and a significantly higher number of males have been victims of dating violence than females.

This finding may, of course, not be a true reflection of reality, as females are known to underreport violence victimization and perpetration[33]. It is possible that structural factors, including gender norms, could explain the high perpetration rate of dating violence among male adolescents in the study. Societal perception of males and females with respect to their roles affects adolescents' dating behaviours. Females in some societies are trained to accept battery and assault from intimate partners, while males receive tacit permission for the same behaviours[31]. As noted by Amoakehene[34] in her study of violence against women in Ghana, violence is often used as a means of controlling women. Violent acts against females are often regarded as a normal part of life[35], and this may affect the way females report acts of abuse against them. Self-defence by females against their male counterparts might also not be regarded by those females as a violent act, and therefore goes unreported[35].

Cross-tabulations performed on items on violent behaviours show higher prevalence rates for males on all items, both for perpetration and victimization (Table 1). This study shows that about 14% of males and 5% of females have been forced to have sex against their will, and sexual violence certainly seems to be a major feature of the lives of many adolescents in Sub-Saharan Africa. Disturbing prevalence rates have been found in studies from various countries in the region. In a study by Moore et al.[36], for instance, prevalence rates of forced sexual intercourse was found to be 38% in Malawi, 30% in Ghana, 23% in Uganda and 15% in Burkina Faso. The high rate of male sexual victimization was higher than a previous study which found 5.8% examined the prevalence of sexual abuse among high school students in Cape Town, South Africa[9]. Possible explanation for such increase in male sexual victimization may be as a result of sexual coercion and repeated exposure to perpetuators of such acts.

Age and SES were also significantly associated with violence victimization and perpetration. It was observed that both age and socio-economic status were negatively associated with violence victimization and perpetration among adolescents in Cape Town, a finding consistent with those of[9,37-41]. In our view, the relationship between age and dating violence may be explained partially by the fact that most of the female adolescents may be in dating relationships with males who are much older than themselves, thereby making them more vulnerable to abuse. On the other hand, older male adolescents may have also learned the use of violence as a means of controlling their female partners as South Africa is known to have a relatively high rate of interpersonal violence. They may also suffer violence from their female counterparts partly in the form of self-defense.

The various levels of violence in this study (victims, perpetrators, overlaps) showed a negative association with delayed sex self-efficacy. This association is explained by how people develop or create self-efficacy[42]. Self-efficacy relates to one's belief in one's own competence to perform a behaviour, which in this case is delayed sex. However, self-efficacy varies according to the situation[25]. A person may feel confident that he or she can delay sex when he or she is with a non-abusive partner, but this same person may have very low self-efficacy to delay sex when he or she is with an abusive partner. Perceived self-efficacy has also been studied with regard to the prevention of unprotected sexual behaviour, e.g. resisting sexual coercion, and the use of contraceptives to avoid unwanted pregnancy. For example, teenage girls have been found, for example, to use contraceptives more effectively if they believed they could exercise control over their sexual activities[43], implying therefore that when people believe they do not have the power to produce an outcome, they will not attempt to make things happen[21]. The study revealed an association between gender and self-efficacy for delayed sex,

with females having higher self-efficacy for delayed sex compared to males. This finding lends support to other studies[11,13-14,] which found that early onset of first sexual intercourse, was more likely among males than females. Based on Bandura's four sources of self-efficacy[21], girls may have been prepared through verbal persuasion by their families, educators and peers. In many African societies, pre-marital sex is permissible for males. Showing virility is considered to be a desirable masculine attribute[44,45], while females are socialized to be conservative and passive when it comes to sexual intercourse. While it is acceptable for males to have sex prior to marriage, for females there is not the same level of acceptability, and they are usually admonished to remain virgins until marriage[46]. This form of socialization and the accompanying societal expectation may be a contributory factor in females' greater self-belief that they can delay sex. This confirms a previous study which found that girls consistently report higher levels of self-efficacy for delayed sex compared to boys[47].

The finding that socio-economic status (SES) is positively associated with delayed sex self-efficacy is supported by previous studies[48,49]. The association between SES and low self-efficacy for delayed sex for girls may partly be explained by the role played by transactional sex in the sexual activity of girls. Girls from higher socio-economic backgrounds might not be motivated to engage in the exchange of sex for material gain as compared to those from lower socio-economic status backgrounds. This could therefore imply that low socio-economic status could be a risk factor for low self-efficacy for delayed sex. There was also a significant relationship between involvement in dating violence and socio-economic status. This suggests that low socio-economic status could also be a risk factor for being a victim to dating violence but not for perpetration of dating violence.

The age of participants displayed a negative association with self-efficacy for delayed sex. This association indicates that younger adolescents had higher levels of self-efficacy for delayed sex, which is consistent with the conclusions of a study which associates younger age with delayed sex[50]. Adolescents within the age range of 12-13 appear to be more likely to have high self-efficacy for delayed sex than the other two age groups from the sample. This could mean that students self-efficacy for delayed sex drops as they become sexually mature. It is important to bear in mind that in the present study, age is also an indicator of being over-aged as compared to one's classmates. Being over-aged is probably associated with poor school performance, and it is reasonable to expect that poor school performance may also be associated with less favourable scores on scales for measurement of concepts like self-esteem, internal locus of control and self-efficacy.

Implications for Interventions

The findings of this study have the following implications for interventions involving school-going adolescents in Cape Town, South Africa. Considering the high rate of dating violence, both for victims and perpetrators, integrating study of the effects of dating violence into students' Life Skills curriculum would contribute to the development of culturally appropriate sexual behaviour. This would help male learners identified in this study as perpetrators to understand the consequences of sexual violence, for adolescent males and females. This is important going by the fact that study also demonstrated a high prevalence rate of male involvement as perpetrators and victims as of dating violence.

Moreover, male adolescents who are not perpetrators of dating violence can be identified and used as peer educators to help to bring about attitudinal change and changes in the behaviour of fellow males, which could help to reduce the occurrence of dating violence. As suggested by Fabiaon et al.[51], for this strategy to be effective it is necessary to involve peers who strongly oppose sexually related violence, as they can encourage and help perpetrators to change their behaviour for the better.

Finally, the Life Skills curriculum has focused mainly on HIV/AIDS information and awareness, with little emphasis placed on sexual violence, or physical and mental health[36,52]. There is, therefore, a need to educate students about the psychological and health aftermath of sexual coercion and

aggression, as these may lead to pregnancy, STI and HIV, given that most non-consensual intercourse occurs without the use of condoms.

Limitations of the Study

Findings from this study must be interpreted cautiously as behaviour intentions and self-efficacy were measured instead of sexual behaviours. Intention to perform behaviour is not always converted into actual practice[53] as it is dependent on several other factors such as the circumstance and the ability to perform it. Additionally, the study was cross-sectional in nature, and cause-effect relationship cannot be inferred. Furthermore, the study was conducted in only two provinces, and thus the results cannot be generalized to all South African students. The study was also conducted with school-going adolescents who were still at school or who attended school on the day the questionnaire was administered, and this may mean that the results of the present study might not be generalizable to young people who are even less involved as students and/or no longer attend school. Finally, the limitations of self-reporting may also apply to the current study. This could have resulted in social desirability bias where participants could have under report undesirable behaviours such as perpetuation of sexual violence. This has the potential of affecting the interpretation of the results. Future research should include both school going and out of school adolescents to get a holistic account of dating violence. Additionally, a qualitative approach could be used to explore more contextual factors that could have contributed to high prevalence of dating violence in the study area.

Conclusion

This study examined the association between dating violence and self-efficacy for delayed sex among school-going adolescents in Cape Town, South Africa. The study sample consisted of 3,655 adolescents from twenty-six schools in Cape Town, and this large sample size increased the accuracy of estimates in the analysis. The study has shown that dating violence is quite prevalent among adolescents in Cape Town, and it also reveals that dating violence is negatively associated with self-efficacy for delayed sex. Educational programmes aimed solely at improving self-efficacy for delayed sex should be improved as judgment of one's ability to delay sex may be influenced by a number of factors, including violence. This therefore suggests that policies and programmes geared towards promoting abstinence among young people must also aim to control dating violence among adolescents, and equip them with the skills to negotiate their way out of abusive relationships.

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Declaration of Conflicting Interests

This work is based on a Master of Health Promotion by the second author under the supervision of Annegreet Wubs. The idea of publishing this paper was conceived by the first author, and he prepared the first draft and did the final editing of the paper. All analyses were re-run by the third author and provided inputs during the writing up of the paper. The author(s) declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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