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The associations of adolescents' dating violence victimization, well-being and engagement in risk behaviors

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Abstract

This brief report describes dating violence victimization among adolescents in Flanders, Belgium, and focuses on how dating violence is related to adolescents' well-being and engagement in risk behaviors, such as substance use, sexual behaviors, and engagement in vandalism or fighting. A survey was conducted in Flanders, Belgium among 1187 adolescents (61.3% female, $n = 728$). A total of 466 respondents between 16 and 22 years old ($M = 17.82$ years, $SD = 0.92$) were in a relationship (71.0% female, $n = 331$), and, therefore, formed the subsample of the present study. The results show that adolescents, who consume alcohol at a younger age, have ever used marihuana, or were involved in vandalism have a higher probability to become victim of dating violence than adolescents who are not involved in these behaviors. Dating violence victimization was also linked with symptoms of depression and a lower self-esteem.

Keywords: dating violence; dating violence victimization; adolescents; risk behavior.

Introduction

Some adolescents might find themselves within dating and relationships that involve abuse or violence (Lewis & Fremouw, 2001). Dating violence can be physical (e.g., hitting, pushing or slapping a partner), emotional (e.g., yelling or insulting a partner or threatening to use violence) or sexual in nature (e.g., pressuring a partner to engage in sexual activities by insisting or threatening a romantic partner) (Bonomi et al., 2012; CDC, 2016).

Teenage dating violence is a public health problem (CDC, 2016; Teten, Ball, Valle, Noonan, & Rosenbluth, 2009). This is substantiated by longitudinal studies conducted in North-America focusing on the associations between dating violence victimization, risk behaviors and well-being. Dating violence victimization among adolescents has been associated with substance use, such as smoking, alcohol use and marijuana use (Ackard, Eisenberg, & Neumark-Sztainer, 2007; Foshee, Reyes, Gottfredson, Chang, & Ennett, 2013; Foshee, Benefield, Ennett, Bauman, & Suchindran, 2004; Exner-Cortens, Eckenrode, & Rothman, 2013; Roberts, Klein, & Fisher, 2003). Dating violence victimization has also been found to predict risky sexual behaviors, such as contraceptive non-use (Shorey et al., 2015). Dating violence victimization has also been linked with conduct problems (such as fighting with peers) (Foshee et al., 2004) and antisocial behaviors, such as destruction of property or runaway behavior (Exner-Cortens, Eckenrode, & Rothman, 2013; Roberts, Klein, & Fisher, 2003). With regard to well-being, dating violence victimization has also been linked to experiencing symptoms of depression (Ellis, Crooks, & Wolfe, 2009; Foshee et al., 2013; Foshee et al., 2004; Exner-Cortens, Eckenrode, & Rothman, 2013; Roberts, Klein, & Fisher, 2003), suicidal ideation and suicidal behaviors (Ackard et al., 2007; Exner-Cortens, Eckenrode, & Rothman, 2013; Roberts, Klein, & Fisher, 2003).

While previous research in Europe has focused on adolescents' attitudes and experiences with dating violence, few studies outside of North America have focused on replicating the associations between dating violence victimization and health outcomes such

as engagement in risk behavior and well-being (Bowen et al., 2013; Hamby, Nix, De Puy, & Monnier, 2012; Puy, Hamby, & Lindemuth, 2014). International research in this subject area is warranted as the legal and cultural context between the US and other countries might differ. For instance, the legal framework for alcohol and cigarette consumption differs between the US and Belgium, the country in which this study was conducted. In the domain of sexual behaviors, previous research has found that Dutch youth engage in sexual contact at a later time than their American peers, and that they engage more often in discussions about sexual health with their parents than adolescents in the US (van de Bongardt, de Graaf, Reitz, & Deković, 2014). In some US schools, sexual education is taught using sexual education initiatives which exclusively focus on abstaining from sexual intercourse. These lesson plans appear to be less effective in preventing sexual risk behaviors than interventions which use a more encompassing type of relational and sexual education (Kohler, Manhart, & Lafferty, 2008). In the Flemish educational system, the region in which the present study was conducted, a comprehensive relational and sexual education program is included in the standards that have to be met by secondary schools (Ministerie van de Vlaamse Gemeenschap, s.d.). The amount of teenage pregnancies among 15 to 19 year olds (57 per 1000 women) is also higher as compared to Belgium (21 per 1000 women) (Sedgh, Finer, Bankole, Eilers, & Singh, 2015), as is the percentage of youth with STDs in the among the same age group (Panchaud, Singh, Feivelson, & Darroch, 2000).

From a routine-lifestyle theory perspective, youth who engage in deviant or risky behaviors might be more vulnerable for dating violence victimization, as they are more likely to be in situations in which guardians who could protect them, such as parents, are absent (cf. Cohen & Felson, 1979; Gover, 2004). Cultural and legal differences might, however, have an impact on which behaviors are perceived as a deviant or a risky. For instance, it could be hypothesized that when potential legal consequences are absent, as is the case with the

consumption of some substances such as cigarettes in Belgium, that adolescents might regard it less as a deviant behavior and might find it more acceptable to engage substance use in the presence of these so-called guardians, such as their parents. Consequently, the fact that engagement in these risky behaviors is done less outside of situations with social control might lower the chances for victimization. Moreover, cultural differences in the educational efforts about sexual and relational education might potentially affect the associations between dating violence victimization and engagement in other types of risk and risky behaviors.

The aim of this brief report is to add to the literature by describing how dating violence victimization is linked to well-being and risk behaviors among adolescents in Flanders, Belgium. The results can contribute to the understanding of why some adolescents are more likely to become victim of dating violence than others and can guide the development of international prevention and intervention efforts. In the discussion section we will contrast our findings with previous research.

Methods

Participants

The data are part from the larger *Teen Digital Dating Survey* (Van Ouytsel, Ponnet, & Walrave, 2016), which was conducted among 1187 adolescents (61.3% female, $n = 728$) between March and May 2015 in 7 Flemish secondary schools. The participants were between 16 and 22 years old ($M = 17.82$ years ; $SD = 0.92$). In all schools, students from the two final grades of secondary education took part in the survey. In one school, students from an additional so-called “seventh year” of secondary education also participated. Students following this program, enroll for an additional year of vocational or technical training which enables them to master a trade or a profession. The students are typically subject to the same class schedules, rules and classes than other high school students. Some students in our

sample had also repeated a grade. The inclusion of these students is the reason why some students in our sample are up to 22 years old. All results reported in this manuscript are based on the 466 respondents (71.0% female, $n=331$) who indicated that they were currently in a romantic relationship. The procedures of this study were approved by the author's IRB.

Measures

Substance use and sexual behaviors

The items measuring alcohol use, marijuana use, sexual behaviors, fighting, and vandalism were adapted from the *Youth Risk Behavior Survey* (Centers for Disease Control and Prevention, 2015). The questions were translated into Dutch and some additional examples were added to make sure that the questions were relatable to the respondents. The items and response options are included in Appendix 1.

Fighting or vandalism

The respondents were asked how often they had been in a physical fight in the 6 months prior to the study on a scale from 0=0 times to 7=12 times or more ($M=.19$; $SD=.72$). The vandalism item was adapted from Cretacci (2008) and asked how often the respondents had "deliberately damage property that did not belong to" them on a scale from 0=0 times to 4=4 times or more ($M=.15$; $SD=.50$). Because on average, very few respondents were involved in these behaviors, the variable was recoded to a dichotomous variable, with 0=*not engaged in the behavior* and 1=*engaged in the behavior*. This revealed that 11.3% ($n=52$) of the respondents had been involved in a fight and that 9.9% ($n=46$) had been involved in vandalism.

Symptoms of depression

Symptoms of depression were measured using the Dutch version of the 8-item CES-D8 scale (*Cronbach's alpha*=.85) (Ponnet et al., 2013; Van de Velde, Bracke, & Levecque, 2010). The mean of the sum score was used in further analyses ($M=1.73$; $SD=.54$).

Self-esteem

The respondents' self-esteem was measured using the Dutch version of the 10-item Rosenberg Self-Esteem scale (*Cronbach's alpha*=.89) (Franck, De Raedt, Barbez, & Rosseel, 2008; Rosenberg, 1979). The scale includes 5 positively worded items and 5 negatively worded items. The positive worded items were recoded which means that higher values reflect a lower self-esteem. The mean of the sum score was used in further analysis ($M=2.14$; $SD=.53$).

Dating violence victimization

Dating violence victimization was measured on 4 items that were adapted from Bonomi et al. (2012) (*Cronbach's alpha*=.75). The respondents indicated on a scale from 1 = never to 5 = very often to which extent they had experienced physical forms of dating violence, psychological forms of dating violence, and sexual forms of dating violence. Because victimization did not occur very often on average, the items were recoded in dichotomous variables. Respondents were counted as victim if they had reported at least one of the four forms of dating violence had been reported ($n=107$; 23.1% had become victim of one form of dating violence). The items are included in Table 1.

*** PLEASE INSERT TABLE 1 ABOUT HERE ***

Demographic variables

The participants were asked to report their gender, age and living situation ($n=300$, 64.4% lived with both parents; $n=166$, 35.6% lived in another living situation).

Data analysis

The data were analyzed using SPSS v.22.0 (IBM Corp., Armonk, NY). Logistic regression analyses assessed the associations between well-being, risk behaviors (independent variables), and dating violence victimization (dependent variable). In all analyses, the odds ratios were controlled for gender, age, and living situation (0 = *living with both parents*; 1 = *other living situation*). The analyses are reported in Table 2.

Results

*** PLEASE INSERT TABLE 2 ABOUT HERE ***

Substance use

There were no associations between having ever tried a cigarette, the amount of days that adolescents had consumed cigarettes, and dating violence victimization. However, there was a significant association between having used alcohol on an average younger age and dating violence victimization. We did not find a link between binge drinking and dating violence victimization. Having ever tried marijuana was significantly linked to dating violence victimization.

Sexual behaviors

Adolescents having had sexual contact or having had unsafe sexual intercourse, was significantly linked to dating violence victimization. There was no relationship between alcohol or drug use at the last sexual encounter and dating violence victimization.

Involvement in fights and vandalism

There was a significant association between adolescents' involvement in vandalism and dating violence victimization. No links were found between involvement in fights and dating violence victimization.

Depression and self-esteem

Significant associations were found between adolescents' higher self-reported symptoms of depression and lower self-reported levels of self-esteem and experiences of dating violence victimization.

Discussion

In our sample, 23.1% of adolescents had experienced a form of dating violence in the six months prior to our survey. Research on the correlates of dating violence victimization is important to prevention and intervention efforts, as it could show which related or underlying risk behaviors can be targeted simultaneously (Temple, Shorey, Tortolero, Wolfe, & Stuart, 2013). Youth who engage in risk behaviors and health risk behaviors might find themselves more often in situations lacking protection or supervision by adults, and therefore associate with peers who are involved in deviant behaviors, increasing their chances for victimization, (cf. Cohen & Felson, 1979; Gover, 2004).

With regard to substance use, our results differed from previous research (e.g., Foshee et al., 2004; Foshee et al., 2013; Roberts, Klein, & Fisher, 2003). While alcohol consumption at a younger age was linked with a higher risk of dating violence victimization, no other associations between alcohol use and victimization were found. As opposed to previous

studies (Ackard et al., 2007, Foshee et al., 2013; Exner-Cortens, Eckenrode, & Rothman, 2013), we also did not find associations between smoking and dating violence victimization. Cultural factors might explain the differences between our study and previous research, as the legal drinking age in the US is 21 years as opposed for 16 years for beer and wine, and 18 for liquors in Belgium. The minimum age for buying tobacco products is also lower in Belgium (16 years) as compared to the US (18 years and in some states 19 and 21 years). Future cross-cultural research could focus more deeply on how cultural (and legal) differences might impact the associations between substance use and dating violence.

In line with previous studies (Shorey et.al., 2015), our study found a significant association between engagement in sexual risk behavior and dating violence victimization. As opposed to previous studies (e.g., Foshee et al., 2004), no association was found between fighting among peers and dating violence victimization. However, a link was found between vandalism and dating violence victimization. Self-reports of symptoms of depression or self-reported lower self-esteem, was also significantly linked to dating violence victimization. Still, the cross-sectional nature of this study limits our ability to determine if these are a consequence of the abuse or whether they make adolescents more vulnerable to becoming victims of dating violence (Callahan, Tolman, & Saunders, 2003). Also other limitations should be kept in mind when interpreting the results of our study, such as the use of self-reports, the use of a predominantly female convenience sample, and the cross-sectional design of our study. The fact that our sample is predominantly female might have impacted our results for behaviors in which boys and girls might differ, such as sexual behaviors. Future research with a larger sample size and a more equal amount of males and females could provide us with greater power to detect differences and might enable us to detect even small gender differences and to stratify the results according to gender. It should also be noted that the sample size in some subgroups of our analyses was low, which was for example the case

when assessing associations between sexual contact and dating violence victimization. Moreover, information on cyber aggression and perpetration was not included in the present study. Notwithstanding these limitations, our study's strengths include the relatively large sample size and the use of standardized measures to assess well-being and risk behaviors.

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Table 1. Dating violence victimization within the sample ($n = 466$)

Dating violence victimization	% reporting victimization
My partner has hit, slapped, scratched, pushed, bitten or hurt me in another physical way (i.e., physical forms of dating violence)	15.1% ($n = 70$)
My partner has threatened to hit me, spread rumors about me, or to destroy something belonging to me or to harm me in some other way on purpose	2.8% ($n = 13$)
My partner has shouted, yelled, insulted, sworn at me or said other things to hurt me on purpose	13.2% ($n = 61$)
My partner has pressured me to participate in sexual activities by insisting, begging, arguing with me or by threatening to hit me or to end our relationship	5.6% ($n = 26$)

Table 2. Odds ratios for involvement in risk behaviors and well-being associated with dating violence victimization adjusted for gender, age and living situation

	No dating violence victimization		Dating violence victimization		aOR [95% CI]
	n	% / M [SD]	n	% / M [SD]	
Ever tried a cigarette (No/Yes)					
No	134	37.9%	28	26.2%	1.00 (RG)
Yes	220	62.1%	79	73.8%	1.54 [.94 – 2.53]
Amount of cigarettes (past 30 days)	219	1.80 [2.30]	79	2.22 [2.31]	1.05 [.94 – 1.18]
Ever tried alcohol (No/Yes)					
No	16	4.5%	9	8.4%	1.00 (RG)
Yes	341	95.5%	98	91.6%	.48 [.20 – 1.13]
Age first tried alcohol	341	4.48 [.86]	98	4.29 [.81]	.77 [.59 – 1.00]*
Amount of days alcohol use (past 30 days)	339	1.95 [1.13]	97	2.03 [.97]	1.00 [.81– 1.23]
Binge drinking (past 30 days)	338	1.08 [1.34]	98	1.44 [1.41]	1.10 [.93 – 1.31]
Ever tried marihunana (No/Yes)					
No	233	65.3%	46	43.0%	1.00 (RG)
Yes	124	34.7%	61	57.0%	2.09 [1.32 – 3.32]***
Amount of times marihuana use (past 30 days)	124	1.19 [1.51]	61	1.62 [1.82]	NC
Ever had sexual contact (No/Yes)					
No	35	10.0%	3	2.9%	1.00 (RG)
Yes	318	90.1%	102	97.1%	3.67 [1.09 – 12.33]*
Alcohol/drug use before last sexual intercourse (No/Yes)					
No	298	94.9%	92	92.0%	1.00 (RG)

Yes	16	5.1%	8	8.0%	1.31 [.52 – 3.29]
Unsafe sex at last sexual intercourse (No/Yes)					
No	237	75.2%	59	58.4%	1.00 (RG)
Yes	78	24.8%	42	41.6%	2.17 [1.33 – 3.53]**
Involvement in a fight (No/Yes)					
No	319	90.1%	89	84.0%	1.00 (RG)
Yes	35	9.9%	17	16.0%	1.30 [.67 – 2.51]
Involvement in vandalism (No/Yes)					
No	334	93.6%	84	78.5%	1.00 (RG)
Yes	23	6.4%	23	21.5%	3.39 [1.72 – 6.69]***
Symptoms of depression	354	1.68 [.52]	107	1.91 [.54]	2.56 [1.70 – 3.86]***
Self-esteem	357	2.12 [.54]	107	2.23 [.50]	1.95 [1.25 – 3.05]**

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$;

Note: CI = Confidence Interval; RG = Reference groups; aOR = Odds Ratio adjusted for gender, age and living situation; NC = Not calculable

QuestionResponse options

Substance abuse

Have you ever tried cigarette smoking, even one or two puffs? (No/Yes)

During the past 30 days, on how many days did you smoke cigarettes?

- 0 days
- 1 day
- 2 to 5 days
- 6 to 9 days
- 10 to 19 days
- 20 to 29 days
- All 30 days

Have you ever tried alcohol (e.g., beer, wine, Spanish sparkling wine, gin, cocktails, gin-tonic...)?
(No/Yes)

How old were you when you had your first drink of alcohol (more than just a taste or a sip)?

- 8 years old or younger
- 9 or 10 years old
- 11 or 12 years old
- 13 or 14 years old
- 15 or 16 years old
- 17 years old or older

During the past 30 days, on how many days did you have at least one drink of alcohol ? (count every day separately – e.g., 1 Friday and 2 Saturdays = 3 days)

- 0 days
- 1 day
- 2 to 5 days
- 6 to 9 days
- 10 to 19 days
- 20 to 29 days
- All 30 days

During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, within a couple of hours ? (count every day separately – e.g., 1 Friday and 2 Saturdays = 3 days)

- 0 days
 - 1 day
 - 2 days
 - 3 to 5 days
 - 6 to 9 days
 - 10 to 19 days
 - 20 or more days
-

Have you ever tried cannabis / marijuana /pot?

(No/Yes)

During the past 30 days, how many times did you use marijuana?

0 times

1 time

2 to 5 times

6 to 9 times

10 to 19 times

20 to 39 times

40 times or more

Sexual behavior

Have you ever had sexual contact (also giving a ‘handjob’, giving a ‘blowjob’, cunnilingus...) ?

(No/Yes)

Did you drink alcohol or use drugs before you had sexual intercourse the last time?

(No/Yes)

The last time you had sexual intercourse, did you or your partner use a condom?

(No/Yes)

Appendix 1

Measures and response options

