# Journal International de Victimologie International Journal of Victimology

Année 17, Numéro 36 – 2020

# THE INFLUENCE OF GENDER ON PATHWAYS FROM LIFETIME EXPOSURE TO INTERPARENTAL VIOLENCE TO SEXUAL TEEN DATING VIOLENCE VICTIMIZATION: A TWO-WAVE STUDY

Ruel C.<sup>1</sup>, Théorêt V.<sup>2</sup>, Lavoie F.<sup>1</sup>, Blais M.<sup>2</sup>, & Hébert M<sup>23</sup>

<sup>1</sup>École de psychologie, 2325 rue des bibliothèques, Université Laval, Québec, (Québec) Canada G1V 0A6

<sup>2</sup>Département de sexologie, Université du Québec à Montréal, Case Postale 8888, Succursale Centreville, Montréal, (Québec) Canada H3C 3P8

<sup>3</sup>Canada Research Chair on Interpersonal Trauma and Resilience

**ABSTRACT:** Sexual teen dating violence is highly prevalent and linked to numerous mental health problems. However, risk factors for this form of violence remain understudied. This study used a short-term prospective longitudinal design to investigate gendered pathways from exposure to interparental violence to sexual teen dating violence victimization through acceptance of violence and self-efficacy to disclose violence. A total of 2,564 high school students completed self-report questionnaires. Path analysis revealed that general exposure to interparental violence was associated with acceptance of girl-inflicted violence, which in turn, predicted girls' sexual victimization at Wave 2. Lower self-efficacy to disclose abuse at Wave 1 was also directly associated with girls' sexual victimization at Wave 2. Path analysis failed to predict boys' sexual victimization. Effect sizes were small but underlined the relevance of pursuing prevention programs that aim to promote self-efficacy to disclose violence acceptance of teen dating violence, especially among girls.

KEYWORDS : Relational abuse; acceptance of violence; self-efficacy; adolescence

**RÉSUMÉ**: La violence sexuelle dans les relations amoureuses est prévalente et associée à plusieurs conséquences sur le plan de la santé mentale. Par contre, les facteurs de risque associés à cette forme de violence demeure peu étudiés. La présente étude s'appuie sur un schème prospectif longitudinal à court terme pour explorer les trajectoires liant l'exposition à la violence interparentale et la violence sexuelle en contexte amoureux par l'entremise de l'acceptation de la violence et du sentiment d'auto-efficacité à dévoiler la violence. Au total, 2,564 étudiants du secondaire ont rempli des questionnaires auto-rapportés. Les analyses révèlent que l'exposition à la violence interparentale est associée à l'acceptation de la violence perpétrée par les filles qui en retour, prédit la victimization sexuelle au Temps 2. Le sentiment d'auto-efficacité pour dévoiler la violence au Temps 1 est directement associé à la victimisation sexuelle chez les filles au Temps 2. Les analyses ne permettent pas de prédire la victimisation sexuelle en contexte amoureux chez les garçons. Les tailles d'effet bien que faibles soulignent la pertinence des initiatives de prévention visant à promouvoir le sentiment d'auto-efficacité pour dévoiler la violence en contexte amoureux, particulièrement chez les filles.

MOTS-CLÉS : Abus relationnels; acceptation de la violence; adolescence

## I - INTRODUCTION

Dating relationships are an important step in the psychosocial development of teenagers, as they influence their individual development as well as future romantic relationships (Collins, Welsh, & Furman, 2009). However, a significant number of teenagers find their romantic relationships marked by teen dating violence (TDV). Despite its relevance, sexual TDV has rarely been studied (Wincentak, Connolly, & Card, 2017). Sexual TDV involves the use of coercive and physical behaviors to attempt or to perpetrate a sexual behavior in a dating context, ranging from using verbal persuasion to using physical force to commit a sexual act against a person's will (Koss & Oros, 1982; Wincentak et al., 2017). A recent meta-analysis revealed that 14 % of adolescent girls reported sexual victimization within their romantic relationships compared to 8 % of adolescent boys (Wincentak et al., 2017). Suicide attempts, binge drinking, lower self-esteem and lower emotional well-being are consequences of sexual TDV for both genders (Vagi, O'Malley Olsen, Basile, & Vivolo-Kantor, 2015).

Such data highlights the need to implement efficient strategies to prevent sexual TDV and research documenting associated salient risk factors is an important step for such endeavors. Social learning theory (Bandura, 1977) offers some insights into the possible mechanisms of intergenerational transmission of violence. It postulates that children learn by witnessing the actions of figures that are influential and important to them. Thus, growing in an aggressive home environment and witnessing violence used by parents, often role models, could increase the risk of one's being involved in violence later in life. Indeed, a child seeing a parent being violent or oppressive toward his or her partner could learn that violence, psychological, physical or sexual, and control are part of relationships and an acceptable way to address conflict and frustration with a romantic partner or to gain control in the relationship (Jouriles, McDonald, Norwood, & Ezell, 2001). The child would be prone to develop attitudes of acceptance toward violent behavior and then to reproduce or tolerate it in similar contexts, leading to a higher risk of victimization or perpetration of any form of TDV. Moreover, these children could be less exposed to constructive alternatives strategies to solve conflicts or to deal with their emotions. It could become more usual for them to use or tolerate aggression as a way to deal with difficult situations (Jouriles et al., 2001.). This theory has been tested mostly to predict the intergenerational transmission of physical TDV but this could extent to other forms of TDV, such as sexual TDV. Past exposure to interparental violence (IPV) could be a risk factor for sexual TDV. Thus, growing up exposed to coercion and aggression between their parents, one could come to banalize or tolerate different forms of abuse in its relationship, such as sexual TDV, from a partner to obtain control. The present study aims to evaluate pathways from exposure to IPV to sexual TDV victimization, considering attitudes of acceptance of violence and self-efficacy to disclose violence.

## **Exposure to IPV**

Exposure to IPV is a risk factor that has been found in numerous studies linked to different forms of TDV for both genders (Hébert et al., 2017). Studies investigating this association specifically for sexual violence found a significant link between exposure to IPV and sexual victimization for teenage boys and girls (Hellevik & Overlien, 2016; Wolfe, Scott, Wekerle, & Pittman, 2001) and college-age women (Swartout, Swartout, & White, 2011). A Norwegian cross-sectional study concluded that exposure to violence at home was linked to sexual TDV victimization for both genders (Hellevik & Overlien, 2016). However, in some studies, exposure to IPV was included in a global maltreatment variable (Hellevik & Overlien, 2016; Vézina et al., 2015; Wolfe et al., 2001), and sexual victimization was not restricted to a dating context (Swartout et al., 2011) or was studied only among girls (Swartout et al., 2011; Vézina et al., 2015). Not to mention that other studies used a combined score of both sexual and physical violence (Fergusson, Boden, & Horwood, 2008; O'Keefe & Treister, 1998; Vézina et al., 2015). Thus, more studies are needed to understand the association between exposure to IPV and sexual TDV victimization.

Furthermore, the relation between exposure to IPV and TDV could be influenced by the gender of the perpetrating parent. Indeed, the child's appraisal of the violence witnessed may differ depending on whether the mother or the father is the perpetrator. Due to physical strength differences, mother-tofather violence could be perceived as less harmful, since the apparent outcomes could be compliance of the victim to the perpetrator, and would be less likely to result in negative consequences such as physical injuries (Olsen, Parra, & Bennett, 2010). Some studies have found that exposure to motherto-father violence was a better predictor of physical TDV victimization than exposure to father-tomother violence (e.g., Karlsson, Temple, Weston, & Le, 2016; Malik, Sorenson, & Aneshensel, 1997), but inconsistencies remain (Gover, Kaukinen, & Fox, 2008). To the best of our knowledge, no study specifically studied how gender of the perpetrating parent is related with sexual TDV victimization.

## Attitudes of acceptance of violence

Attitudes of acceptance of violence could also directly influence experiences of sexual TDV. Indeed, teenagers who perceive TDV as acceptable under certain circumstances might be more prone to use violence against a partner or more likely to tolerate violence from a partner. This relation was found to be significant for physical TDV victimization and perpetration (e.g., Ali, Swahn, & Hamburger, 2011) and sexual TDV perpetration (Dardis, Kelley, Edwards, & Gidycz, 2013; Shen, Chiu, & Gao, 2012). Acceptance of violence was also related to sexual victimization not specific to a dating context (Bekele, van Aken, & Dubas, 2011). Moreover, the results of studies on the impact on TDV of the acceptance of girl-inflicted violence or boy-inflicted violence are mixed. For example, O'Keefe and Treister (1998) concluded that acceptance of boy-inflicted violence was a predictor of girls' sexual and physical victimization. One of the few studies exploring the effect of sex-specific acceptance of violence and non-acceptance of girl-inflicted violence were risk factors for perpetration of sexual TDV but not victimization (Shen et al., 2012). Therefore, it seems relevant to investigate the attitudes of acceptance of violence according to the gender of the perpetrator for sexual TDV.

Moreover, authors have expressed the need for research on TDV to go beyond the direct relation between exposure to IPV and TDV to examine the potential factors that could influence this association, such as factors of mediation and moderation (Foshee & Reyes, 2011). Social learning theory (Bandura, 1977) postulates that acceptance of violence mediates the association between exposure to IPV and TDV. Several studies found this link to be significant for different forms of TDV perpetration (e.g., Clarey, Hokoda, & Ulloa, 2010; Foshee, Bauman, & Linder, 1999), but there is a discrepancy in the literature (Brendgen, Vitaro, Tremblay, & Wanner, 2002). Although this relation is less studied, it could also be significant for sexual TDV. Studies using a combined score of physical and sexual violence found a significant link between exposure to IPV and TDV perpetration through attitudes, but it varied by gender (e.g., Gage, 2016; Kinsfogel & Grych, 2004). For example, exposure to both mother-to-father and father-to-mother violence was linked, through personal acceptance of TDV, to greater perpetration of sexual and physical TDV for girls, while for boys, acceptance of TDV was not a mediator (Gage, 2016). Whether the same holds for sexual victimization remains to be explored.

## Self-efficacy to deal with violence

Another potential mediator of the relation between exposure to IPV and sexual TDV could be self-efficacy to deal with violence, a component often included in violence prevention programs (e.g., Cameron et al., 2007). Those programs aim to reduce TDV by improving teenagers' perception of their efficacy to address interpersonal violence by disclosing experiences of violence to a trusted person and seeking help. Self-efficacy refers to people's beliefs in their capacity to undertake a specific action

or task (Bandura, 1997). Walsh and Foshee (1998) found that a higher perceived self-efficacy to adopt certain behaviors that would minimize the risk of being sexually victimized did indeed reduce the likelihood of sexual victimization for teenage girls. Moreover, a negative relationship was found between a greater perceived self-efficacy in anger management and conflicts along with dating violence in adult couples (Nocentini, Pastorelli, & Menesini, 2013). Therefore, self-efficacy to disclose TDV could influence sexual TDV victimization, as it could be associated with better social and conflict resolution skills, which could possibly reduce the risks of TDV. Moreover, greater perceived selfefficacy to disclose victimization could reduce TDV by increasing the possibilities that teenagers will indeed obtain help and support, which could lead them to end the relationship. Furthermore, Wolfe, Wekerle, Reitzel-Jaffe, and Lefebvre (1998) found that family violence during childhood, including exposure to IPV, was linked to teenagers' lower self-efficacy to address problematic social situations, including TDV. This finding suggests that exposure to IPV could influence the development of selfefficacy to address violence. Teenagers who were exposed to IPV could have internalized a sense of helplessness and perception of inefficacy since they, or their parents, could not stop the violence. Moreover, Cameron et al. (2007) found that adolescents who perpetrated physical TDV felt less confident in their capacity to adopt nonviolent behaviors. Therefore, self-efficacy could be a potential mediator between exposure to IPV and sexual TDV.

## **Objectives and hypothesis**

Past studies support the relevance of investigating the associations between exposure to IPV, attitudes of acceptance of violence, self-efficacy to disclose violence and sexual TDV victimization. Sexual TDV, and in particular sexual victimization, has received less attention than other forms of TDV, especially when considering the gender-specific variables of exposure to IPV and attitudes of acceptance of violence. Studying all forms of TDV is necessary, since each form could be associated with different risk factors, which could in addition possibly differ between teenage boys and girls (Shen et al., 2012; Wincentak et al., 2017). Indeed, the findings in the literature regarding the effects of gender are discrepant. Moreover, most of the studies relied on a cross-sectional design, which precludes the possibility of establishing temporal order between the variables.

This study uses a subsample based on a representative sample of Quebec high school students to investigate the gendered pathways from exposure to IPV to sexual TDV victimization with consideration of the acceptance of violence and self-efficacy to disclose violence. The two main hypotheses, in which gender effect will be tested, are as follows: **Hypothesis 1:** A greater exposure to IPV in general will lead to a greater experience of sexual TDV victimization through the mediation of acceptance of violence in general. Two sub-objectives will be explored: **Sub-objective 1.1:** The different impact of exposure to mother-to-father and father-to-mother violence on acceptance of violence and sexual TDV will be tested for both genders. **Sub-objective 1.2:** The different impact of acceptance of girl-inflicted violence and boy-inflicted violence on the association between exposure to IPV, acceptance of violence and sexual TDV will be tested. **Hypothesis 2:** A greater exposure to IPV in general will be linked to a lower perception of self-efficacy to disclose violence, which will be associated with more experiences of sexual TDV for both genders. Therefore, self-efficacy to disclose violence will be a mediator of the pathway between exposure to IPV and sexual TDV victimization.

# II – METHOD

**Participants :** The present study used data from the first and second waves of the [Blinded for review] survey. The first wave (W1) of the study occurred during fall 2011 and the second wave (W2) six months later. Data were collected through a one-stage stratified cluster sampling of 34 high schools

randomly selected from the Ministry of Education provincial database. Eight strata were created based on the language of teaching, the education system, the geographical area and the underprivileged school index. The original sample included 8,230 teenagers from 329 classes of 34 schools (28 public and 6 private schools). The second-wave sample included 6,472 teenagers.

Participants who reported not being in a relationship in the past six months (3,175) and those who were older than 18 in the first wave were excluded from the present study. Participants who reported being exclusively attracted to people of the same sex were also excluded, since the attitude items used measured acceptance of TDV among heterosexual partners. Finally, 250 participants were excluded because they did not answer both questionnaires. All the present study's analyses took into account the complex sampling design and sampling weights to ensure the representativeness of the sample. Participants in the study were given a sample weight to correct biases in the nonproportionality of the sample of schools compared to the target population. The weight was defined as the inverse of the probability of selecting the given grade in the same stratum in the population. The final sample of the present study has 2,564 participants (weighted n = 1,904) (63.8% girls) with a mean age of 15.29 years (*SE*: 0.10; range: 14-17). For the majority of our sample, the language spoken at home is French (92.5%), the ethnicity of the parents is native-born (82.8%) and the level of education of their mother (67.3%) and their father (58.6%) is higher than high school.

**Measures** :Variables of exposure to IPV, acceptance of violence and self-efficacy to disclose violence were assessed in W1. Sexual TDV was measured in the W2, six months later.

**Exposure to interparental violence.** The *Revised Conflict Tactics Scales* (CTS2: Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was used to measure lifetime exposure to IPV. Four items measured exposure to psychological and physical violence (for eg., "insult, swear, push, slap"; "push, shove, slap, twist the arm, throw something at the other person that could hurt") between the parents or caregivers. Participants indicated the frequency with which they had witnessed these acts of mother-to-father or father-to-mother violence (*never* to *11 or more times*). A total score was computed with these four items for three scales: general exposure to IPV ( $\alpha = .80$ ), motherto-father exposure to IPV ( $\alpha = .72$ ) and father-to-mother exposure to IPV ( $\alpha = .64$ ). A higher score on any scale means a greater exposure to IPV.

Acceptance of prescribed norms scale. Six items measured the acceptance of TDV in heterosexual couples. Four original items from the *Acceptance of Prescribed Norms Scale* (Foshee, Linder, MacDougall, & Bangdiwala, 2001) and two items adapted from this scale were used in the questionnaire (i.e. "In a heterosexual couple: "it's okay for a guy to slap his girlfriend when she doesn't stop saying mean or humiliating things to him"; "it's okay for a girl to slap her boyfriend when he doesn't stop saying mean or humiliating things to her"). Three items measured acceptance of boy-inflicted violence and three items assessed acceptance of girl-inflicted violence. The answer options ranged from 0 (*strongly disagree*) to 3 (*strongly agree*). Three scores were computed: acceptance of TDV in general ( $\alpha = .73$ ), acceptance of boy-inflicted violence ( $\alpha = .72$ ) and acceptance of girl-inflicted violence ( $\alpha = .73$ ). A higher score on any scale means a greater acceptance of TDV.

**Self-efficacy to disclose personal violence.** The questionnaire included two of eight items of the *Self-Efficacy to Deal with Violence Scale* (Cameron et al., 2007) to assess the participant's perception of self-efficacy to disclose experiences of TDV (i.e., "Please imagine yourself in the following situations. How confident are you that you could tell someone you trust that you are abusing [or "you are being abused by"] your boyfriend/girlfriend?"). The four-point response scale ranged from 1 (*not at all confident*) to 4 (*very confident*). A total score was computed with the sum of the two items (r = .51); a higher score on this scale means that participants felt more confident in their ability to disclose potential experiences of TDV.

**Sexual teen dating violence victimization.** Nine items adapted from the revised version of the *Sexual Experiences Survey* (SES) (Koss et al., 2007; Koss & Oros, 1982) were used to measure sexual TDV victimization. The items included three categories of sexual violence (i.e., "kiss, caress and touch"; "try to have sex with the other person"; "have sex with penetration") combined with three types of coercive behaviors (i.e., "using arguments or pressure"; "using some physical force to force them", "giving her/him drugs or alcohol"). Participants indicated how often the related acts of victimization occurred to them in the last six months. The answer format is a 4-point scale, ranging from 0 (*never*) to 3 (6 *times or more*). A total score was computed for the scale of victimization ( $\alpha = .92$ ); a higher score indicated a higher frequency of experiences of sexual TDV.

**Past experiences of sexual violence.** An item measuring past sexual victimization since the age of 12 (excluding the preceding 12 months) was used as a control variable. Participants had to answer whether any of their partners had "Forced or pressured the other person to engage in a sexual activity (touching, attempted sexual intercourse, or sexual relations with penetration) when they didn't want to, by using various tactics". The response range was dichotomous.

#### Procedures

The research ethics board of the [Blind for review] approved the project and the research protocol. Adolescents completed paper-based self-administered questionnaires in class for both waves (questionnaires required approximately 40 minutes to complete). Two research assistants were present on site to explain the goals and context of the study and to assist adolescents if needed. Respondents agreed to participate on a voluntary basis by signing an informed consent form. A list of resources (helplines, websites, community organizations, health services) was provided to all adolescents. The overall response rate was 99% of the students who were present in class, and the retention rate between the W1 and W2 was 71%.

## **III - ANALYSES**

In the subsample used (n = 2,564), non-response rates ranged from 0.3% to 5.9%; thus, losses of power and biases are unlikely or nonsignificant (Graham, 2009). Missing data did not follow any specific pattern of non-response. All variables, except self-efficacy, had non-normal distribution therefore winsorization and logarithmic transformations were performed on these variables (Hellerstein, 2008; Tabachnick & Fidell, 2013). Several analyses were performed to test the hypotheses. First, chi-square analyses were used to investigate gender difference on sexual TDV victimization, acceptance of violence, exposure to IPV and self-efficacy to disclose TDV. Second, correlations were computed between all study variables by gender. Third, following Preacher, Rucker, and Hayes (2007) guidelines, mediation analyses with gender as a moderator were tested to investigate the association between general exposure to IPV and sexual TDV victimization through general acceptance of violence (H.1) and self-efficacy (H.2). Fourth, different path analyses models were computed to compare the influence of exposure to mother-to-father IPV, father-to-mother IPV or general IPV on acceptance of TDV and sexual TDV victimization (Sub-objective 1.1). Similarly, path analyses models were used to compare the influence of girl-inflicted violence or boy-inflicted violence on the association between exposure to IPV and sexual TDV victimization (Sub-Objective 1.2). Lastly, the final and more parsimonious path analysis model was tested for boys and girls separately. The models were tested with ML estimation using robust standard errors. The significance of indirect effects was tested using 1000 bootstrap samples and 95% bias-corrected confidence intervals (CIs). The full information maximum likelihood method (FIML), which includes all the raw data available to address the missing data (Wothke, 2000) was used. A comparative fit index (CFI) score higher than 0.90, a root mean square error of approximation (RMSEA) value of .05 or less and nonsignificant chisquare values indicate that the model fits the data well (Browne & Cudeck, 1993; Tabachnick & Fidell, 2013). The descriptive and bivariate analyses were tested with SPSS 22 and the path analyses were

tested with Mplus version 7 (Muthén & Muthén, 1998-2012).

## **IV - RESULTS**

#### Descriptive and bivariate analyses

As indicated in Table 1, girls (18.5%) were significantly more likely to report any experience of sexual TDV victimization in the previous six months than boys (6.0%). Boys were significantly more likely than girls to report any acceptance of general violence (67.8% and 62.6% respectively). Finally, girls were more likely to report general exposure to IPV (66.5%) and self-efficacy to disclose TDV (95.7%) compared to boys (55.8% and 88.1% respectively). The initial control variables that we intended to include in the analyses were mother's level of education (standing as a proxy for socio-demographic level) and past experiences of sexual TDV. However, the two variables were not included in subsequent analyses because they had low correlations with sexual TDV victimization in the second wave (r = -.004 for mother's level of education, and r = .121 for past sexual TDV). Table 2 reports bivariate correlations between the study variables. An association between exposure to IPV and acceptance of girl-inflicted violence was found for both genders. However, risk factors (exposure to IPV, self-efficacy to disclose TDV, acceptance of violence) had significant associations with sexual TDV victimization among girls only.

## Preliminary path analyses

Mediation analysis showed a significant indirect association between general exposure to IPV and sexual TDV victimization through a general acceptance of violence (H1). However, no significant indirect association between general exposure to IPV and sexual TDV victimization through selfefficacy was found (H2). Self-efficacy was therefore included as an independent variable rather than a mediator in subsequent models. Gender was a moderator on many associations, which confirmed the relevance of analyzing gender separately. Further analyses were conducted to explore the potential impact of the gender of the perpetrating parent on the models (Sub-objective 1.1), three path analyses were performed with each scales of exposure to IPV (general; father-to-mother; mother-to-father). The results provided similar fit and associations between the variables in the models except for exposure to IPV was kept for the sake of parsimony. Sex-specific attitudes of acceptance of violence (girl-inflicted violence; boy-inflicted violence; H1.2) were then explored for girls and boys separately. Only acceptance of girl-inflicted violence was significant in both path analyses.

## Final path analyses differentiated by gender

As this study aims to determine the role of gender on the models, two final path analyses were conducted: one for girls (see model 1, figure 1a) and one for boys (see model 2, figure 1b). Both models provided a good fit: CFI = 0.970, RMSEA = .035,  $\chi^2$  (1) = 2.89, p = .089 (see figure 1a, model for girls) and CFI = 1.000, RMSEA = .000,  $\chi^2$  (1) = .003, p = .95 (see figure 1b, model for boys). For girls (model 1), exposure to IPV was linked to sexual TDV directly (figure 1a:  $\beta$  = 0.057, p < .01) and indirectly through acceptance of girl-inflicted violence (model 1: *IE* = 0.011, 95% CI [.003, .020]). Self-efficacy to disclose violence was also linked directly to girls' sexual TDV victimization. However, boys' sexual TDV victimization was not predicted by the risk factors identified in the model (see fig.1b). Indeed, the only significant association was between exposure to IPV and acceptance of girl-inflicted violence (fig. 1b:  $\beta$  = 0.125, p < .001), but the latter variable was not linked to sexual TDV (model 2: *IE* 

= .005, 95% CI [-.003, .017]).

## **V – DISCUSSION**

The main objectives of this study were to investigate gender-specific pathways from exposure to IPV to sexual TDV victimization through acceptance of violence and perception of self-efficacy to disclose violence for participants drawn from a representative sample of Quebec adolescents. Major gender differences were found, as the three identified risk factors significantly predicted sexual TDV victimization for girls but not for boys. However, the model explained only a small part of the variance of sexual TDV victimization for girls. For boys, our model failed to predict their experiences of sexual TDV, even though the results show that a significant number of them were victims (6%).

First, the hypothesis that exposure to IPV would be indirectly linked to sexual TDV victimization through acceptance of violence was supported only for girls. Indeed, girls exposed to higher levels of IPV were more likely to report acceptance of girl-inflicted violence in wave 1 and experiences of sexual TDV in wave 2. A direct path between exposure to IPV and girls' sexual TDV victimization was also found. Moreover, exposure to IPV was linked to boys' acceptance of girl-inflicted violence, but it did not predict their victimization by sexual violence. Thus, these findings partly support Bandura's social learning theory for girls, which postulates that children learn from their models' behaviors and are susceptible to reproducing them or tolerating them (Bandura, 1977). Thus, girls who grow up witnessing abuse and violence in their household could come to normalize such behaviors by believing that coercion from a partner is normal or by integrating an idea that they are not worthy of respect. This could make it harder for those girls at adolescence to identify abusive relationships and to escape from a climate of violence. Therefore, these girls would be more likely to experience sexual TDV victimization.

Contrary to our hypothesis, exposure to IPV and acceptance of violence were not directly or indirectly linked to boys' sexual TDV. A study among teenage boys concluded that psychological violence (i.e. calling you names) and corporal punishment from a parent predicted boys' physical TDV directly and indirectly through positive attitudes toward violence but that exposure to IPV did not (Brendgen et al., 2002). Therefore, a broader measure of childhood victimization, including different forms of exposure to violence, could possibly influence the findings regarding boys' victimization. Moreover, it is possible that boys interpret sexual violence differently than girls do. Jackson, Cram, and Seymour (2000) found that teenage boys were more likely to report not being bothered by sexual violence, suggesting that they might not perceive it as abusive. Therefore, boys' reports and perceptions of sexual TDV might differ from girls', as they might not in some cases perceive themselves as victims. Boys may also face greater obstacles to disclosing violence; it has been suggested that gender norms could partly explain this difference (Hellevik & Overlien, 2016), as it could be perceived as unmanly for a boy to refuse sexual advances from a partner. Qualitative studies could help to grasp boys' perceptions and potential obstacles to the disclosure of abuse.

The differential effect of exposure to mother-inflicted violence and father-inflicted violence was tested as factors associated with sexual TDV. The results indicate that there was no significant difference regarding the gender of the perpetrating parent in our models. Hence, we found that it was the fact of being exposed to conflict and violence between parents that was associated to acceptance of violence by both genders and girls' victimization by sexual TDV. However, many studies showed differences between the gender of the perpetrating parent and its effect on physical TDV victimization (e.g., Gover et al., 2008; Karlsson et al., 2016) and perpetration of sexual and physical TDV (e.g., Gage, 2016). The levels of exposure to IPV reported in our sample were relatively low compared to those reported in other studies, which might explain why no significant effect emerged. Including a broader definition

and different types of exposure to IPV as well as the child's reaction could add to the current state of knowledge on exposure to IPV (Lapierre, Lessard, & Hamelin Brabant, 2016). Additionally, assessing the child's perceived consequences of exposure to IPV could contribute to an understanding of the mechanisms that lead to future dating violence (Olsen et al., 2010).

Exploring attitudes with regard to specific acceptance of girl- and boy-inflicted violence showed interesting results. For both genders, only acceptance of girl-inflicted violence was significant, and it was linked with girls' sexual TDV victimization. Karlsson et al. (2016) also concluded that acceptance of girl-inflicted violence was a more important predictor of TDV victimization. However, Karlsson et al. (2016) measured physical and psychological TDV, but not sexual TDV. Enosh (2007) found that personal attitudes of acceptance of violence were a greater predictor of girls' sexual victimization. However, many inconsistent results exist in the literature on the influence of gender-specific attitudes of acceptance of violence for boys and girls (e.g., O'Keefe & Treister, 1998; Shen et al., 2012). Acceptance of violence could be influenced by cultural gender norms. Indeed, girl-inflicted violence is more widely accepted by both genders in our society and is perceived as less serious than boyinflicted violence (Robertson & Murachver, 2009). Therefore, some teenagers believing that violence is justifiable under certain circumstances for boys, or both genders might express acceptance only through acceptance of girl-inflicted violence, since it would be perceived as more socially acceptable. Moreover, boys could be more influenced by peers' norms toward violence than girls, whose personal attitudes about violence were linked to sexual violence (Enosh, 2007). Therefore, a broader measure of acceptance of violence could be relevant.

Contrary to our second hypothesis, self-efficacy to disclose violence was not linked to exposure to IPV. However, a direct path from self-efficacy to sexual TDV victimization was found for girls only. Previous studies also found that teenagers with experiences of TDV felt less confident in addressing violence (Cameron et al., 2007; Hébert, Van Camp, Lavoie, Blais, & Guerrier, 2014). Our results suggest that girls with a lower perception of self-efficacy to disclose violence were more likely to experience sexual TDV. An explanation could be that girls who feel unable to disclose violence might feel hopeless in regard to difficult social situations, including more severe forms such as TDV, and might have more passive or avoidant responses to them, possibly contributing to a heightened risk of sexual TDV victimization or greater perceived vulnerability. Future studies could assess the potential factors decreasing girls' self-efficacy to address violence. Another hypothesis could be that a lower sense of self-efficacy to disclose violence might be the result of a violent or coercive relationship climate, which could reduce the girl's feeling that she can seek support by disclosing a potential abusive situation because of fear of offending her partner. Conflict in a relationship might increase the risk of violence (Capaldi et al., 2012). It is unclear why self-efficacy to disclose violence was not linked to boys' sexual TDV victimization. Boys could face supplementary barriers to disclose abuse due to gender differences in socialization. Indeed, men would generally be more reluctant to seek help and could feel more shame in revealing sexual abuse (Jackson et al., 2000; Yeager & Fogel, 2006).

This study presents certain limitations. First, the participants were retrieved from a representative sample of high school students; thus, some adolescents, such as school dropouts, are absent from the sample. Second, data were collected from a retrospective and self-reported questionnaire. This method, although frequent, includes some biases such as underreporting and social desirability. Also, particularities of our sample and the province where the Survey was conducted may affect generalization of our results. Indeed, most participants of our sample came from native born families, spoke French at home and their parents had an education level higher than high school. Moreover, sexual TDV, like any experience of violence, is a complex and multifactorial phenomenon. The risk factors presented in our study explain only a very small portion of the variance of girls' victimization, suggesting that many other factors should be considered in order to gain a better representation of the development of sexual TDV. For example, measuring polyvictimization in childhood, with different forms of maltreatment, and not only exposure to IPV, could have provided a better understanding of

the development of TDV (Hamby, Finkelhor, & Turner, 2012; Hébert, Moreau, Blais, Lavoie, & Guerrier, 2016; Miller et al., 2011). Moreover, a study among teenagers showed that all the participants who reported physical TDV victimization had experienced at least another episode of victimization, such as child maltreatment and sexual victimization (Hamby et al., 2012). Growing up with a parent presenting mental health issues or substance abuse have also been linked to TDV (Miller et al., 2011). Future studies are needed to explore whether such issues could also influence teenagers' development of self-efficacy to deal or disclose with difficult situations, such as TDV.

Despite these limitations, this study has important strengths. It relied on a representative sample of high school students from rural and urban areas of Quebec. It also used a comprehensive measure of sexual TDV, including different levels of severity of sexual coercion and different coercive strategies used by the perpetrator as well as continuous scales for our variables, ensuring a broader comprehension of the participants' experiences. This study extended knowledge of TDV by studying sexual violence specifically and by investigating the gender-specific variables of exposure to IPV and acceptance of violence. Finally, a temporal order was established, since the predictors were assessed in the first wave and sexual TDV was measured in the second wave.

Our findings are in line with the use of attitudes of acceptance of violence and self-efficacy to disclose violence in universal prevention programs aimed at reducing girls' sexual TDV victimization. They also support early identification and interventions for youth exposed to IPV, as it seems to have a lasting effect in adolescence.

## REFERENCES

- Ali, B., Swahn, M., & Hamburger, M. (2011). Attitudes affecting physical dating violence perpetration and victimization: Findings from adolescents in a high-risk urban community. *Violence and Victims, 26*, 669-683. doi:10.1891/0886-6708.26.5.669
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bekele, A. B., van Aken, M. A. G., & Dubas, J. S. (2011). Sexual violence victimization among female secondary school students in Eastern Ethiopia. *Violence and Victims*, 26, 608-630. doi:10.1891/0886-6708.26.5.608
- Brendgen, M., Vitaro, F., Tremblay, R. E., &
  Wanner, B. (2002). Parent and peer effects on delinquency-related violence and dating violence: A test of two mediational models. *Social Development, 11*, 225-244. doi:10.1111/1467-9507.00196
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equations models* (pp. 136–162). Newbury Park, CA: Sage.
- Cameron, C. A., Byers, E. S., Miller, S. A., McKay, S. L., St. Pierre, M., Glenn, S., & the Provincial Strategy Team for Dating Violence Prevention. (2007). *Dating violence prevention in New Brunswick.* Frederiction, NB: Muriel McQueen Fergusson Centre for Family Violence Research.
- Capaldi, D. M., Knoble, N. B., Shortt, J. W., & Kim, H. K. (2012). A systematic review of risk factors for intimate partner violence. *Partner Abuse, 3*, 231-280. doi:10.1891/1946-6560.3.2.231
- Clarey, A., Hokoda, A., & Ulloa, E. C. (2010). Anger control and acceptance of violence as mediators in the relationship between exposure to interparental conflict and dating violence perpetration in Mexican adolescents. *Journal of Family Violence*, 25, 619-625. doi:10.1007/s10896-010-9315-7
- Collins, W. A., Welsh, D. P., & Furman, W.

(2009). Adolescent romantic relationships. *Annual Review of Psychology, 60*, 631-652.

doi:10.1146/annurev.psych.60.110707.163 459

- Dardis, C. M., Kelley, E. L., Edwards, K. M., & Gidycz, C. A. (2013). A mixedmethodological examination of investment model variables among abused and nonabused college women. *Journal of American College Health*, *61*, 36-43. doi:10.1080/07448481.2012.750609
- Enosh, G. (2007). Cognition or involvement? Explaining sexual-coercion in high-school dating. Sexual Abuse: A Journal of Research and Treatment, 19, 311–329. doi:10.1007/s11194-007-9050-7
- Fergusson, D. M., Boden, J. M., & Horwood, L. J. (2008). Developmental antecedents of interpartner violence in a New Zealand birth cohort. *Journal of Family Violence*, 23, 737–753. doi:10.1007/s10896-008-9199-y
- 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. doi:10.2307/353752
- Foshee, V. A., Linder, F., MacDougall, J. E., & Bangdiwala, S. (2001). Gender differences in the longitudinal predictors of adolescent dating violence. *Preventive Medicine, 32*, 128-141. doi:http://dx.doi.org/10.1006/pmed.2000.07 93
- Foshee, V. A., & Reyes, H. L. M. (2011). Dating abuse: Prevalence, consequences, and predictors. In J. R. Levesque (Ed.), *Encyclopedia of adolescence* (pp. 602-615). New York: Springer.
- Gage, A. J. (2016). Exposure to spousal violence in the family, attitudes and dating violence perpetration among high school students in Port-au-Prince. *Journal of Interpersonal Violence, 31*, 2445-2474. doi:10.1177/0886260515576971
- Gover, A. R., Kaukinen, C., & Fox, K. A. (2008).

The relationship between violence in the family of origin and dating violence among college students. *Journal of Interpersonal Violence, 23*, 1667-1693. doi:10.1177/0886260508314330

Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology, 60*, 549-576. doi:10.1146/annurev.psych.58.110405.085 530Hamby, S., Finkelhor, D., & Turner, H. (2012). Teen dating violence: Cooccurrence with other victimizations in the National Survey of Children's Exposure to Violence (NatSCEV). *Psychology of violence, 2*, 111. doi:10.1037/a0027191

- Hébert, M., Daspe, M.-È., Lapierre, A., Godbout, N., Blais, M., Fernet, M., & Lavoie, F. (2017). A meta-analysis of risk and protective factors for dating violence victimization: The role of family and peer interpersonal context. *Trauma, Violence, & Abuse*, 152483801772533. https://doi.org/10.1177/1524838017725336
- Hébert, M., Moreau, C., Blais, M., Lavoie, F., & Guerrier, M. (2016). Child sexual abuse as a risk factor for teen dating violence: Findings from a representative sample of Quebec youth. *Journal of Child & Adolescent Trauma*, 1-11. Advance online publication. doi:10.1007/s40653-016-0119-7
- Hébert, M., Van Camp, T., Lavoie, F., Blais, M., & Guerrier, M. (2014). Understanding the hesitancy to disclose teen dating violence: Correlates of self-efficacy to deal with teen dating violence. *Temida*, *17*, 43-64. doi:10.2298/TEM1404043H
- Hellerstein, J. M. (2008). *Quantitative data cleaning for large databases*. United Nations Economic Commission for Europe (UNECE). Retrieved from http://db.cs.berkeley.edu/jmh
- Hellevik, P., & Overlien, C. (2016). Teenage intimate partner violence: Factors associated with victimization among Norwegian youths. *Scandinavian Journal of Public Health, 44,* 702-708. doi:10.1177/1403494816657264
- 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. doi:10.1023/A:1007545302987

Jouriles, E. N., McDonald, R., Norwood, W. D., & Ezell, E. (2001). Issues and controversies in documenting the prevalence of children's exposure to domestic violence. In S. A. Graham-Bermann & J. L. Edleson (Eds.), *Domestic violence in the lives of children: The future of research, intervention, and social policy* (pp. 12–34). Washington, DC: American Psychological Association

- Karlsson, M. E., Temple, J. R., Weston, R., & Le,
  V. D. (2016). Witnessing interparental violence and acceptance of dating violence as predictors for teen dating victimization. *Violence Against Women, 22*, 625-646. doi:10.1177/1077801215605920
- Kinsfogel, K. M., & Grych, J. H. (2004). Interparental conflict and adolescent dating relationships: Integrating cognitive, emotional, and peer influences. *Journal of Family Psychology*, 18, 505-515. doi:10.1037/0893-3200.18.3.505
- Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., ...White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology* of Women Quarterly, 31(4), 357–370. doi:10.1111/j.1471-6402.2007.00385.x.
- 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. doi:10.1037/0022-006X.50.3.455
- Lapierre, S., Lessard, G., & Hamelin Brabant, L. (Eds.). (2016). *Les violences dans la vie des enfants et des adolescents: Enjeux théoriques, méthodologiques et sociaux.* Québec, Québec: Presses de l'Université du Québec.
- Malik, S., Sorenson, S. B., & Aneshensel, C. S. (1997). Community and dating violence among adolescents: Perpetration and victimization. *Journal of Adolescent Health, 21*, 291-302. doi:http://dx.doi.org/10.1016/ S1054-139X(97)00143-2
- Miller, E., Breslau, J., Chung, W. J., Green, J. G. McLaughlin, K. A., & Kessler, R. C. (2011). Adverse childhood experiences and risk of physical violence in adolescent dating relationships. *Journal of Epidemiology &*

*Community Health, 65*, 1006-1013. doi:http://dx.doi.org/10.1136/jech.2009.105 429

- Muthén, L. K., & Muthén, B. O. (1998–2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Nocentini, A., Pastorelli, C., & Menesini, E. (2013). Self-efficacy in anger management and dating aggression in Italian young adults. *International Journal of Conflict and Violence*, 7, 274-285.
- O'Keefe, M., & Treister, L. (1998). Victims of dating violence among high school students: Are the predictors different for males and females? *Violence Against Women, 4*, 195-223. doi:10.1177/1077801298004002005
- Olsen, J. P., Parra, G. R., & Bennett, S. A.
  (2010). Predicting violence in romantic relationships during adolescence and emerging adulthood: A critical review of the mechanisms by which familial and peer influences operate. *Clinical Psychology Review, 30*, 411-422.
  doi:http://dx.doi.org/10.1016/j.cpr.2010.02.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*, 185-227. doi:10.1080/00273170701341316
- Robertson, K., & Murachver, T. (2009). Attitudes and attributions associated with female and male partner violence. *Journal of Applied Social Psychology, 39*, 1481-1512. doi:10.1111/j.1559-1816.2009.00492.x
- Shen, A. C. T., Chiu, M. Y. L., & Gao, J. (2012). Predictors of dating violence among Chinese adolescents: The role of genderrole beliefs and justification of violence. *Journal of Interpersonal Violence, 27*, 1066-1089. doi:10.1177/0886260511424497
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, *17*, 283-316. doi:10.1177/019251396017003001
- Swartout, K. M., Swartout, A. G., & White, J. W. (2011). A person-centered, longitudinal approach to sexual victimization.

*Psychology of Violence, 1*, 29–40. doi:10.1037/a0022069

- Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics: Pearson New Internatinal Edition. Essex, England: Pearson Education Limited.
- Vagi, K. J., O'Malley Olsen, E., Basile, K. C., & Vivolo-Kantor, A. M. (2015). Teen dating violence (physical and sexual) among high school students: Findings from the 2013 national youth risk behavior survey. *Journal of the American Medical Association Pediatrics, 169*, 474–482. doi:10.1001/jamapediatrics.2014.3577
- Vézina, J., Hébert, M., Poulin, F., Lavoie, F., Vitaro, F., & Tremblay, R. E. (2015).
  History of family violence, childhood behavior problems, and adolescent highrisk behaviors as predictors of girls' repeated patterns of dating victimization in two developmental periods. *Violence Against Women, 21*, 435-459. doi:10.1177/1077801215570481
- Walsh, J. F., & Foshee, V. A. (1998). Selfefficacy, self-determination and victim blaming as predictors of adolescent sexual victimization. *Health Education Research: Theory and Practice, 13*, 139-144. doi:10.1093/her/13.1.139
- Wincentak, K., Connolly, J., & Card, N. (2017). Teen dating violence: A meta-analytic review of prevalence rates. *Psychology of Violence*, 7(2), 224–241. https://doi.org/10.1037/a0040194
- Wolfe, D. A., Scott, K., Wekerle, C., & Pittman, A.
  L. (2001). Child maltreatment: Risk of adjustment problems and dating violence in adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 282-289. doi:http://dx.doi.org/10.1097/00004583-200103000-00007
- Wolfe, D. A., Wekerle, C., Reitzel-Jaffe, D., & Lefebvre, L. (1998). Factors associated with abusive relationships among maltreated and nonmaltreated youth. *Development and Psychopathology*, 10, 61-85.
- Wothke, W. (2000). Longitudinal and multrigroup modeling with missing data. In T. D. Little, K. U. Schnabel, & J. Baumert (Eds.), Modeling longitudinal and multilevel data: Practical issues, applied approaches, and

*specific examples* (pp. 219-240). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Yeager, J. C., & Fogel, J. (2006). Male disclosure

of sexual abuse and rape. *Topics in Advanced Practice Nursing eJournal*, 6. Retrieved from <u>http://www.medscape.com/</u> <u>viewarticle/528821</u>

	<u>Girls</u>		<u>Boys</u>		<u>Total</u>	
Measure		%	%	χ²	%	
Sexual TDV	No	81.5	94.0***	75.68***	86.0	
victimization W2	Yes	18.5***	6.0		14.0	
Acceptance of	No	37.4*	32.2	6.83*	35.5	
general violence	Yes	62.6	67.8*		64.5	
Acceptance of girl-	No	37.6*	33.0	5.34*	35.9	
inflicted violence	Yes	62.4	67.0*		64.1	
Acceptance of boy-	No	75.5	73.8	0.92	74.9	
inflicted violence	Yes	24.5	26.2		25.1	
General Exposure	No	33.5	44.2***	27.06***	37.3	
to IPV	Yes	66.5***	55.8		62.7	
Exposure to mother-	No	40.6	51.9***	28.61**	44.5	
to-father IPV	Yes	59.4***	48.1		55.5	
Exposure to father-to-	No	38.0	46.8**	17.87**	41.1	
mother IPV	Yes	62.0**	53.2		58.9	
Self-Efficacy to	No	4.3	11.9***	51.26***	7.1	
disclose TDV	Yes	95.7***	88.1		92.9	

#### Table 1

Gender Differences in the Prevalence of Variables Dichotomized

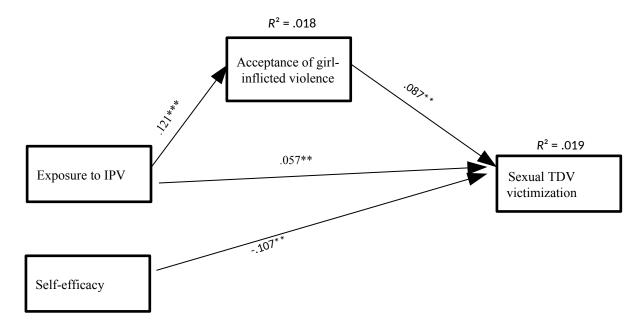
*Note.* TDV = Teen dating violence; IPV = Interparental violence; W2 = Wave 2. This table shows the prevalence of any episodes of TDV, acceptance of teen dating violence (any response other than *"strongly disagree"*), any exposure to IPV and any self-efficacy to disclose violence (any response other than *"not at all confident"*). The total scores of those variables were dichotomized for this table. \* p < .05. \*\* p < .01. \*\*\* p < .001

#### Table 2

Variables	1	2	3	4	5	6	7	8	М	SE
1. Exposure to IPV	-	.90**	.93**	.11**	.10*	.08*	02	.01	2.41	3.21
2. Exposure to mother-to- father IPV	.89**	-	.68**	.12**	.13**	.05	02	.00	1.10	1.64
<ol> <li>Exposure to father-to- mother IPV</li> </ol>	.92**	.64**	-	.08*	.05	.09*	02	.01	1.30	1.86
4. Acceptance of general violence	.10**	.10**	.08**	-	.91**	.65**	07	.04	3.14	3.17
5. Acceptance of girl- nflicted violence	.11**	.11**	.09**	.94**	-	.29**	05	.04	2.55	2.51
<ol> <li>Acceptance of boy- nflicted violence</li> </ol>	.05	.04	.04	.73***	.44**	-	07	.00	.58	1.35
7. Self-efficacy to disclose TDV	04	01	05	04*	03	05	-	01	5.31	1.92
8. Sexual TDV victimization W2	.04	01	.08**	.07*	.09**	.02	09* *	-	0.32	1.95
Μ	3.07	1.41	1.67	2.50	2.02	.48	5.83	0.59	-	-
SE	3.65	1.89	2.16	2.97	2.28	1.16	1.70	1.89	-	-
Range	0-24	0-12	0-12	0-18	0-9	0-9	2-8	0-27	-	-

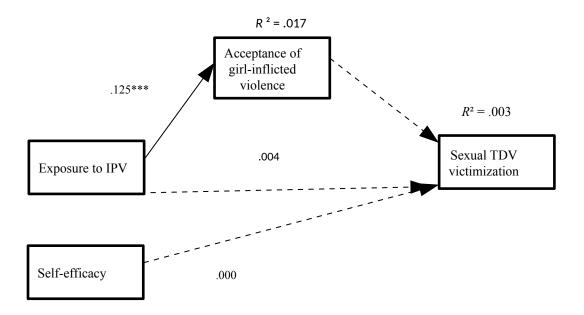
*Note.* TDV = Teen dating violence; IPV = Interparental violence; W2 = Wave 2. Bivariate correlations used in a complex sample design, due to its rationale and representativeness, do not provide results of standard deviations but only of standard error. The results below the diagonal are for girls, while the results above the diagonal are for boys.

\* p < .05 \*\*p < .01\*\*\* p < .001



\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001

**Fig 1a**. Model 1: Best-fitting model from the path analysis for girls. Note. *IPV* = Interparental violence; *TDV* = Teen dating violence. Significant paths are represented by solid lines.



\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001

Fig 1b. Model 2: Best-fitting model from the path analysis for boys. Note. IPV = Interparental violence; TDV = Teen dating violence. Significant paths are represented by solid lines.