The Role of Mindfulness in the Association Between Intimate Violence, Self-Esteem and Distress Among Adolescents

**Abstract**

**Objectives:** Although dating violence has been recognized as a major public health issue considering its high prevalence and deleterious consequences, little research has been conducted on the potential mechanisms through which dating violence is associated with negative psychological outcomes. The aim of this study was to test the mediational effect of dispositional mindfulness on the relationship between dating violence (victimization and perpetration), psychological distress and self-esteem by including measures of both current and previous dating violence and by controlling for gender, age and dating relationship length. **Methods:** The sample consisted of 227 adolescents (127 girls and 100 boys) aged between 15 and 17 old recruited in a small urban area. They completed measures of previous and current experiences of dating victimization and perpetration, the K10 psychological distress scale, the Self-Description Questionnaire, which measures self-esteem, and the Child and Adolescent Mindfulness Measure. **Results:** The results showed that previous dating violence victimization was associated with lower dispositional mindfulness, which in turn was related to lower self-esteem and higher psychological distress, suggesting a mediation through dispositional mindfulness. **Conclusions:** These results indicate the importance of previous dating violence victimization and its association with lower dispositional mindfulness, leading to lower self-esteem and higher psychological distress in teenagers.

*Keywords*: mindfulness, self-acceptance, dating violence, psychological distress, self-esteem, teenagers.

**The Mediating Role of Dispositional Mindfulness in the Association Between Intimate Violence, Self-Esteem, and Distress Among Adolescents**

Positive dating relationships in adolescence are related to important outcomes as they foster the development of social, emotional, and sexual affirmation skills, in addition to providing increased emotional support, companionship, and intimacy (Mauer & Reppucci, 2019). However, for many teenagers, dating comes with a regrettable downside: dating violence, which is defined by the World Health Organization as “any behavior within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship” (Heise & Garcia-Moreno, 2002, p. 89). Dating violence victimization (i.e., being a victim of dating violence) and perpetration (i.e., perpetrating violence toward the partner) are highly prevalent and associated with a range of negative outcomes (Banyard & Cross, 2008; Meadows et al., 2020; Nahapetyan et al., 2014; Temple et al., 2016; Turner et al., 2020), but very limited research data exist on the potential mechanisms through which dating violence (perpetration and victimization) could be associated with adverse outcomes, such as psychological distress and low self-esteem. Psychological distress and low self-esteem are crucial components of adolescents’ psychological well-being (Jackson & Goossens, 2020). Therefore, comprehensive models integrating mindfulness may shed light on how dating violence may be related to psychological distress and self-esteem.

The highest rates of dating violence are observed during the adolescent period (Johnson et al., 2015). A recent epidemiological study conducted in Canada with 8,194 participants revealed that 62.7% of girls and 49.5% of boys between 14 and 18 years old reported having experienced at least one form (sexual, physical, or psychological) of dating victimization in the past 12 months (Hébert et al., 2017). Rates of dating violence perpetration were also found to be high with 57.7% of girls and 44.0% of boys reporting they inflicted at least one form of dating violence on their partner in the last year (Hébert et al., 2018). Fedina et al. (2016) also observed that 30% of the adolescents they surveyed reported both dating violence victimization and perpetration, highlighting the need to include both victimization and perpetration in studies on dating violence.

The way the first romantic relationships are experienced is important as it may shape future relationships (Gómez, 2011). It thus appears important to include both early and current dating violence experiences when measuring the outcomes associated with victimization and perpetration of such violence. In this context, current dating violence refers to violence that occurred within the past year, and previous dating violence to the violence that occurred before the past year.

Studies on the outcomes of dating violence among adolescents have predominantly focused on psychological distress, which is defined as psychophysiological manifestations of negative emotional states of nervousness, hopelessness, sadness, worthlessness, and/or fatigue (Kessler et al., 2002). Overall, studies show that dating violence victimization and perpetration are associated with higher levels of psychological distress (Banyard & Cross, 2008; Buttar et al., 2013; Chiodo et al., 2012; Meadows et al., 2020; Temple et al., 2016; Turner et al., 2020). Hence, psychological distress may be conceived as an intrapersonal proximal variable that reflects the effects of daily hassles and of pervasive vulnerabilities associated with past negative experiences. However, more information is needed about the mechanisms explaining the association between dating violence and psychological distress.

Even fewer studies have examined the association between dating violence and self-esteem (i.e., an individual’s overall sense of self-worth or personal value; Harter, 2006) among adolescents, and the findings are mixed. Indeed, while some studies have indicated that dating violence victimization was associated with low self-esteem (Ackard et al., 2002, 2003; Pflieger & Vazsonyi, 2006; Van Ouytsel et al., 2017), Ackard et al. (2007) did not find a significant relationship between those variables. Regarding dating violence perpetration, a few studies have indicated that boys who perpetrated dating violence also reported lower self-esteem (Diaz-Aguado & Martinez, 2015; Dosil et al., 2019; Pflieger & Vazsonyi, 2006). However, Foshee et al. (2001) did not observe any significant relationships between dating violence perpetration and self-esteem. Further research is thus needed to clarify those inconsistences, as well as to conceptualize potential mechanisms explaining this association.

Mindfulness, which is often defined as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment”(Kabat-Zinn, 2003, p. 145), might be a relevant mechanism to understand the association between dating violence and psychological outcomes. Mindfulness has been described as a state that emerges during mindfulness practices (e.g., mindfulness meditation) and that can be cultivated through training and practice (Rau & Williams, 2016). It is also a trait that reflects one’s predisposition to be mindful in daily life (i.e., dispositional mindfulness). Dispositional mindfulness appears to be a stable and enduring characteristic over time without intervention (Bravo et al., 2018; Rau & Williams, 2016). More precisely, dispositional mindfulness (trait) refers to stable characteristics, while a mindfulness state refers to temporary states that depend on a person’s situation and context or behaviors (e.g., mindfulness practices) at a particular time. Although mindfulness-based interventions are increasingly popular for enhancing state mindfulness among individuals who perpetrate dating violence (Shorey et al., 2012) or who were exposed to childhood trauma (Follette et al., 2015), more studies are needed to understand the relationship between dispositional mindfulness, dating violence, psychological distress, and self-esteem in adolescents.

Some authors have, nevertheless, documented a relationship between dating violence perpetration and low levels of dispositional mindfulness among college students and adolescents (Brem et al., 2018; Shorey et al., 2014). These authors have suggested that rumination and the inability to distance oneself from one’s thoughts may facilitate the translation of violent thoughts into violent behaviors (Brem et al., 2018), thus supporting an association between dating violence perpetration and low dispositional mindfulness. A similar negative relationship between dating violence victimization and dispositional mindfulness may also be plausible. Indeed, the Pain Paradox theory (Briere, 2015; Godbout et al., 2018, 2020) provides a useful theoretical framework to understand the postulated associations between victimization and lower dispositional mindfulness. According to this theory, interpersonal trauma may lead to the use of avoidant behaviors to respond to overwhelming aversive internal experiences, impeding dispositional mindfulness. Trauma-related experiences may paradoxically stimulate the frequency and saliency of the very trauma-related thoughts and feelings that the individual wishes to avoid, potentially leading to a disposition to be less present in the moment, and consequentially to more psychological distress and lower self-esteem (Briere, 2015; Thompson et al., 2011). Although empirical data are needed to support this hypothesized association between dating violence, lower dispositional mindfulness, and lower self-esteem, as well as higher psychological distress, literature on related variables seems to support this assumption.

Notably, some authors have shown that adolescents exposed to interpersonal traumas, including sexual abuse and child maltreatment in the family, exhibited lower levels of dispositional mindfulness (Daigneault et al., 2016; Dion et al., 2018). Studies conducted among adults have also shown that interpersonal traumas experienced in childhood or adolescence are associated with lower dispositional mindfulness (Bolduc et al., 2018; Godbout et al., 2020). Moreover, these studies have shown that dispositional mindfulness acts as a mediator between childhood interpersonal trauma and psychological distress, depressive symptoms (Bolduc et al., 2018), post-traumatic symptoms (Daigneault et al., 2016), and internalizing symptoms (Kroska et al., 2018). Overall, previous results suggest the possibility that mindfulness could act as a mechanism explaining the association between the experience of dating violence and negative psychological outcomes (i.e., psychological distress and low self-esteem) among adolescents, but this hypothesis must be tested empirically.

The overall objective of this study was to examine the mediating role of dispositional mindfulness in the association between dating violence and psychological distress and low self-esteem in an integrated model. More specifically, this study aimed to examine the potential role of dispositional mindfulness as a mediator in four relationships within an integrative model: (1) between dating violence victimization (current and previous) and self-esteem; (2) between dating violence victimization (current and previous) and psychological distress; (3) between dating violence perpetration (current and previous) and self-esteem; and (4) between dating violence perpetration (current and previous) and psychological distress. We hypothesized that both experiences of dating violence (victimization and perpetration) would be associated with lower dispositional mindfulness, which in turn would be associated with higher distress and lower self-esteem. Given the high prevalence rates of dating violence among adolescents and that this violence may perpetuate through adulthood (Gómez, 2011), reliance on this population to test the hypothesized model is particularly relevant.

**Methods**

**Participants**

The subsample used in this study was composed of 227 French-speaking adolescents (127 girls and 100 boys) between 15 and 17 years old (*M* = 15.60, *SD* = .63). They were selected from a sample of 330 participants because they were or had previously been (since age 12) engaged in a dating relationship (Dion et al., 2018). Current dating relationships and those deemed most significant—that had occurred within the previous 12 months—lasted, on average, 8.91 months (*SD* = 10.42). Because of the small subsample (*n* = 6), participants who described themselves as belonging to a gender other than “boy” or “girl” were excluded from the final sample. Students were recruited in 2016 from one of five participating public high schools in a small urban area in Quebec, Canada. Of the 227 adolescents, 95.6% were Canadian, 7.0% Indigenous, .9% Latino, .4% Asian, 2.6% European, .9% Caribbean, and .9% African.

**Procedure**

After providing their informed consent, the participants answered an online survey at school during one of their classes; the survey took less than 40 minutes to complete. All students from the five schools who were present the day of data collection agreed to participate. A research coordinator and research assistants were available to answer individual questions during the data collection. Although family socioeconomic levels were not available to the investigators, participating schools were selected in low to middle socioeconomic settings; deprivation indices vary between 4 and 9, with 1 being the lowest deprivation level and 10 the highest (Ministère de l’Éducation et de l’Enseignement supérieur, 2017).

**Measures**

***Current dating violence***. Victimization and perpetration in current dating relationships— or in the most significant previous relationship that had occurred within the last 12 months—were measured using a French-language adaptation of a questionnaire that has been used successfully to measure dating violence in adolescents (Hébert et al., 2017) by combining items from the Conflict in Adolescent Dating Relationships Inventory, short-form (CADRI-SF; Fernández-González et al., 2012; Wekerle et al., 2009), the CADRI (Wolfe et al., 2001), and the Sexual Experiences Survey (SES; Koss et al., 2007). More specifically, six items came from the CADRI-SF, two items from the CADRI, and six items from the SES. Items from the CADRI and the CADRI-SF described emotional and verbal violence (three items), physical violence (three items), and threatening behaviors (two items), while items from the SES assess behaviors (three items) and tactics (three items) relating to sexual abuse. Again, all the items on the scale were the same for victimization and perpetration but were formulated appropriately for each one. Participants answered each item by reporting how often they experienced the situation described in the statement in their dating relationship. All items were measured using a 4-point Likert scale, ranging from 0 (“Never”) to 3 (“Six times or more”). Total scores vary between 0 and 42, and a higher score represents more frequent dating violence victimization or perpetration. Items can be found in Supplementary Material 1. Some adjustments had to be made to obtain reliability estimates. Indeed, five items from the perpetration scale and three items from the victimization scale had no variance and thus had to be removed to run the reliability analysis. Finally, two items correlated perfectly in the SES section of the victimization scale (with only one participant answering positively to both items; see Supplementary Material 2 for the removed items). This led to the removal of one of the items to run the reliability analysis. Internal consistency without those items was satisfactory, with an ordinal α of .75 for perpetration and of .85 for victimization.

***Previous dating violence.***Victimization and perpetration in previous dating relationships (since age 12, excluding the current or most significant dating relationship that occurred within the last 12 months) were measured using a French-language adaptation of an instrument (Hébert et al., 2011) combining items from the CADRI (Wolfe et al., 2001) and the SES (Koss et al., 2007). Three items measured perpetration (ordinal α = .99) and three others measured victimization (ordinal α = .97). Items can be found in Supplementary Material 1. Participants indicated whether they had experienced the stated physical, psychological, or sexual violence on a dichotomic scale (“1 = Yes” and “0 = No”), with total scores ranging from 0 to 3, where a higher score represents higher previous victimization or perpetration. Participants who had not been in a dating relationship in the past 12 months were given a null value on the “current” dating violence victimization and perpetration variables.

***Psychological distress.*** A French version of the Kessler Psychological Distress Scale (K10; Bougie et al., 2016; Kessler et al., 2002) was used to assess psychological distress. The scale is composed of 10 items measuring emotional states (e.g., nervous, hopeless, depressed). Items can be found in Supplementary Material 1. Participants were asked to indicate how frequently in the last four weeks they had experienced the events stated using a 5-point Likert scale, ranging from 1 (“Never”) to 5 (“Always”). Scores vary between 10 and 50, and a high score represents higher psychological distress. This questionnaire is widely used among adolescents and showed adequate levels of internal consistency in the current study (ordinal α = .90).

***Self-esteem*.** A brief French version (Hébert et al., 2011) of the Self-Description Questionnaire (SDQ) (Marsh et al., 1988; Statistique Canada, 1995) was used to assess a global measure of the participants’ self-esteem levels (items can be found in Supplementary Material 1). The scale is composed of five items answered on an 8-point Likert scale, ranging from 1 (“Totally false”) to 8 (“Totally true”). Scores range between 5 and 40, where a higher score represents a higher level of self-esteem (ordinal α = .87).

***Mindfulness.***A French version of the Child and Adolescent Mindfulness Measure (CAMM; Dion et al., 2018; Greco et al., 2011), equally suitable and fair for boys and girls (Chiesi et al., 2017), was used to assess dispositional mindfulness. The measure is composed of 10 items answered on a 5-point Likert scale, ranging from 0 (“Always true”) to 4 (“Never true”). Items can be found in Supplementary Material 1. Participants indicated the extent to which the statements of the measure could be applied to their lives. All of the items are reverse scored; the total score can vary from 10 to 50, with higher scores indicating higher levels of dispositional mindfulness. This measure is one of the most frequently used scales to assess mindfulness among adolescents (Pallozzi et al., 2017), and demonstrated good reliability in our current study (ordinal α = .89).

**Data Analyses**

All analyses were performed using R version 4.0.3, including the SEMinR (v. 2.2.0; Ray et al., 2021) and semPLS (v. 1.0-10; Monecke & Leisch, 2012) packages for partial least squares structural equation modeling (PLS-SEM).

***Data Preparation.*** There were .01% missing data points among the sample, which were missing completely at random (Little’s MCAR test ꭓ2 [1,685] = 1,532, *p* = .996). Nonparametric missing value imputation was thus used to estimate missing values, with the *missForest* package for R (Stekhoven & Bühlmann, 2012), which uses a non-parametric method robust to non-normality.

***Statistical Analysis.*** A correlation matrix was computed with the variables included in this study. Descriptive statistics were computed for self-esteem, psychological distress, and dispositional mindfulness. Prevalence rates (i.e., the occurrence of at least one victimization or perpetration experience reflected experienced dating violence) were computed for previous and current dating violence victimization and perpetration for both genders. *T*-tests and chi-square tests were conducted to examine potential differences between boys and girls.

SEM was used to test the hypothesized mediation model. SEM is a statistical method that allows simultaneous testing of both direct and indirect associations among different variables (Kline, 2011). It also estimates covariation among variables, considering all paths simultaneously. More specifically, a saturated model, in which all intercorrelations and direct effects between the variables of the model were specified was conducted using PLS-SEM, which works well with smaller sample sizes, does not have assumptions about normally distributed variables, and increases statistical power (Hair et al., 2019). Paths between dating violence (current and previous victimization and perpetration), and psychological distress and low self-esteem were estimated with dispositional mindfulness as a mediator. The model also included age, gender, and length of the current or most significant relationship as covariates.

Because dating violence scales’ items are either highly homogeneous or semantically redundant, following Hair et al.’s (2016) recommendation, single-item measures for dating violence victimization and perpetration were preferred over multi-items measures. Dispositional mindfulness, psychological distress, and self-esteem, however, were multi-item measures. Indirect effects were computed for the relationships between each dating violence variable (i.e., previous and current victimization and perpetration) and both psychological distress and self-esteem, through dispositional mindfulness. A 5,000-resampling bias-corrected bootstrap with a 95% confidence interval (CI) was computed to examine each indirect effect. The indirect effect is considered significant if the generated interval does not include zero (Preacher & Hayes, 2008).

**Results**

Gender differences were observed (Table 1) with boys reporting higher self-esteem (*t*(228) = -46.458, *p* = .000), lower psychological distress (*t*(228) = -38.523, *p* = .000) and higher dispositional mindfulness (*t*(228) = -65.071, *p* = .000) than girls. Furthermore, girls reported significantly higher current victimization (χ2(1) = 13.13, *p* = .000), current perpetration (χ2(1) = 9.69, *p* = .002) and previous victimization (χ2(1) = 19.47, *p* = .000) than boys. The matrix of correlations between variables of the model can be found in Table 2.

– Table 1 –

– Table 2 –

***Measurement model.*** Before conducting the PLS-SEM, the reliability, convergent validity, and discriminant validity of the scales were tested. First, some indicator loadings (Table 3) were lower than .708 in multi-items constructs (Hair et al., 2019). Those items were therefore dropped (Figure 1).

– Table 3 –

– Figure 1 –

Cronbach’s alphas and composite reliability (ρC) of multi-items constructs were all over the threshold of .7, showing good reliability (Hair et al., 2019). Then, convergent validity was satisfying with average variance explained higher than .50 in all constructs. Finally, discriminant validity was assessed with the heterotrait-monotrait (HTMT) ratio of correlations method, with estimates under .85 between every construct, attesting that constructs are conceptually different (Hair et al., 2019).

***Structural model.*** Evaluation of the structural model was conducted by measuring collinearity with the variance inflation factor (VIF), then by assessing the explained variance in endogenous variables (*R*2) and the predictive relevance (*Q*2). No multicollinearity issues were found as the VIFs of the PLS-SEM ranged between 1.02 to 2.59, which is lower than the cut-off of 3 imposed by Hair et al. (2019). This means that the individual contribution of each variable should be separable (Johnston et al., 2018). The proportion of variance explained in dispositional mindfulness and self-esteem was weak (respectively *R*2 = .155 and *R*2 = .145), but in psychological distress it was moderate (*R*2 = .499) (Table 2). Finally, values of the blindfolding-based cross-validated redundancy measure (*Q*2)higher than 0 show that the predictive model is relevant and accurate; where values of 0, .025 and .05 indicate small, medium, and large predictive relevance of the PLS-path model (Hair et al., 2019). In our model values of *Q*2 for dispositional mindfulness (*Q*2 = .059), self-esteem (*Q*2 = .048), and psychological distress (*Q*2 = .270) mostly demonstrated large predictive accuracy of the path model (Hair et al., 2019).

Results from the PLS-SEM model (see Figure 2) suggested thatprevious victimization was negatively and significantly associated with dispositional mindfulness (*b* = -.308, *p* = .008). Furthermore, we also observed that while dispositional mindfulness was positively associated with self-esteem (*b* = .190, *p* = .011), it was also negatively associated with psychological distress (*b* = -.592, *p* < .001) (see Table 4).

– Figure 2 –

– Table 4 –

The bootstrap procedure revealed two significant indirect effects. First, previous victimization was negatively and indirectly related to self-esteem through dispositional mindfulness (95% CI = [-.128, -.005]). Second, previous victimization was positively and indirectly related to psychological distress through dispositional mindfulness (95% CI = [.033, .312]).

The use of covariables in the model showed that the model was stable while taking gender, age, and relationship length into account. Results also showed that gender (being a boy) was positively associated with higher self-esteem (*b* = .231, *p* = .001), and negatively associated with psychological distress (*b* = -.188, *p* < .001). In the model, age and dating relationship length were not significant.

**Discussion**

The main goal of this study was to examine an integrative model of the associations between dating violence (victimization and perpetration, both early and current) and psychological distress and self-esteem, through the mediating role of dispositional mindfulness, in a sample of adolescents. The results supported our hypotheses, suggesting a mediating effect of dispositional mindfulness between dating violence and psychological distress as well as between dating violence and self-esteem, but only for previous experiences of dating violence victimization.

Consistent with previous studies indicating the negative effects of dating violence (Ackard et al., 2002, 2003; Banyard & Cross, 2008; Buttar et al., 2013; Chiodo et al., 2012; Meadows et al., 2020; Nahapetyan et al., 2014; Turner et al., 2020; Van Ouytsel et al., 2017), our findings revealed significant correlations between different forms of dating violence (i.e., previous and current victimization, and current perpetration) and higher psychological distress. Previous dating victimization was also associated with lower self-esteem. However, results of the integrative model showed that, when all the dating violence variables were taken into account in the same model, it was specifically the experience of previous victimization that was significantly associated with higher psychological distress and lower self-esteem through lower dispositional mindfulness. It is plausible, as other authors have suggested, that early adversity predisposes a person to subsequent negative psychological outcomes (Chapman et al., 2004), and thus that the effect of early adversity on those negative psychological outcomes could be stronger than current adversity. This finding may also be explained by the stress sensitization theory (Monroe & Harkness, 2005), whose authors proposed that the reactivity threshold for adverse stressors decreases when exposure to the stressor occurred earlier (Rudolph et al., 2008). According to this theory, the effects of current violence may depend on the experience of previous violence, which gives more importance to previous violence than current violence. Our findings suggest that exploring the nuances of dating violence timing may be important, given that dating violence may have different effects depending on the adolescents’ age or developmental stage during exposure and that, to date, there is no gold standard for its screening (Jouriles et al., 2009). Nonetheless, further research is needed to better document the differential associations of early and current relational stressors (in this study, previous and current dating violence) and negative outcomes.

As expected, the results of the mediation model revealed that dispositional mindfulness significantly explained the association between previous dating violence and higher psychological distress as well as between previous dating violence and lower self-esteem. Results showed that an increase in the number of experiences of dating violence victimization in adolescents’ previous dating relationship was associated with lower levels of dispositional mindfulness. In turn, adolescents’ lowered mindfulness disposition was associated with higher psychological distress and lower self-esteem. Results parallel those from other studies, which have shown the mediating role of dispositional mindfulness in the effect of other child maltreatment forms on negative psychological outcomes among adolescents (Daigneault et al., 2016; Dion et al., 2018; Kroska et al., 2018) and adults (Bolduc et al., 2018; Godbout et al., 2020; Kroska et al., 2018). Our finding supports the suggestion that dispositional mindfulness might be a key concept in explaining psychological distress and lower self-esteem among victims of dating violence. These relationships may be understood through the lens of the Pain Paradox theory (Briere, 2015; Godbout et al., 2018, 2020). According to this theory, dating victimization would lead to persistent psychosocial distress or a number of avoidant behaviors in response to overwhelming aversive internal experiences. Therefore, interpersonal trauma could reduce dispositional mindfulness, which, in turn, would be related to increased distress. This distress, however, might paradoxically increase the thoughts and feelings that the person wishes to avoid, which might lead to maintenance or exacerbation of negative internal states marked by lower self-esteem and higher psychological distress (Briere, 2015; Thompson et al., 2011).

Contrary to our expectations, dating violence perpetration was not directly or indirectly associated with outcomes in the integrative model. The few studies conducted in the field have found, however, that perpetration was associated with lower dispositional mindfulness (Brem et al., 2018; Shorey et al., 2014) and psychological distress (Dosil et al., 2019; Meadows et al., 2020; Orth et al., 2010; Temple et al., 2016), although mixed findings were found regarding self-esteem (Diaz-Aguado & Martinez, 2015; Dosil et al., 2019, 2020; Foshee et al., 2001; Lapierre et al., 2019). Our observations may shed light on previous results and inconsistencies. Results of the present study showed that victimization and perpetration are correlated, but that within an integrative model that takes the different forms of dating violence into account (i.e., current and previous dating violence victimization and perpetration), only dating violence victimization remained significantly associated with lower self-esteem and higher psychological distress through dispositional mindfulness. Nonetheless, further studies are needed to confirm those findings.

Gender differences were also observed. Girls reported lower levels of dispositional mindfulness than boys, which is dissonant with studies that did not find gender differences (Chiesi et al., 2017; Greco et al., 2011; Kuby et al., 2015; Tan & Martin, 2016; Viñas et al., 2015), but similar to other studies (Cunha & Paiva, 2012; de Bruin et al., 2014; Robinson et al., 2014) that showed higher levels of dispositional mindfulness in boys compared with girls*.* Girls also reported more psychological distress and lower self-esteem, which aligns with the results of some previous studies (Gentile et al., 2009; Mewton et al., 2016; Orth et al., 2018; Salk et al., 2017). These findings are consistent with the consensus in the literature that reveals a gender gap in mental health outcomes in adolescents around the globe, with girls reporting worse average mental health than boys (Campbell et al., 2020).

During adolescence, a period of changing identity, it can be particularly stressful and challenging for girls who may find it difficult to reconcile contradicting norms of gender equality (e.g., female education and economic participation) and what is traditionally expected for women in terms of femininity and appearance (Greene & Patton, 2020; West & Sweeting, 2003). Results of meta-analyses also indicate that for both lower self-esteem and higher levels of psychological distress, adolescent girls are at greater risk than adolescent boys (Orth et al., 2018; Salk et al., 2017). This gender gap may also be related to a difference in self-reporting psychological difficulties—women have a greater tendency than men to agree with negatively worded self-statements (Magee & Upenieks, 2019) and are less reticent than boys to admit psychological distress (Dumont, 2000).

We also found a higher prevalence of dating victimization and perpetration among girls. Other studies also found that girls were more likely to experience dating victimization (Haynie et al., 2013; Hébert et al., 2017) and perpetration (Fedina et al., 2016; Haynie et al., 2013; Hébert et al., 2018), while still others found no gender differences in victimization (Fedina et al., 2016). Although these results are specific to our sample, they may also reflect gender differences in boys’ and girls’ reports of violent behaviors that they have experienced in their dating relationships (Hamby, 2016). For instance, it may be that girls are more likely to report minor dating perpetration acts than boys (Hamby & Turner, 2013). Overall, our findings, along with those of past research, point to the complex nature of gender disparities in victimization and adverse outcomes, potentially anchored in incongruence between expectations and reality in supposedly more “gender equal” countries (Campbell et al., 2020). Further research is needed to understand how gender, gender norms, and questionnaire wording may play a role in self-reported rates of dating violence and psychological well-being outcomes.

**Limitations and Future Research**

These findings should be interpreted in light of the study’s limitations. The cross-sectional study design does not allow causal inferences to be made; therefore, longitudinal methods should be used in future to replicate the current results. Nonetheless, although mediation tests in cross-sectional designs may result in biased parameter estimates (Maxwell & Cole, 2007), they can still advance knowledge, especially when analyses are based on well-founded theories (Shrout, 2011), in this case, the Pain Paradox theory (Briere, 2015; Godbout et al., 2018, 2020). A larger, more representative sample that included more diverse groups would also have made the findings more generalizable than the convenience sample used in this study. While we controlled for gender, age, and dating relationship length, a larger sample would have allowed the testing of more control variables (e.g., sexual orientation, sexual orientation discordance, and presence of other forms of early adversity).

Finally, our multiple constructs were measured using common methods (i.e., multiple‐item scales within the same survey) and differed in number between previous and current forms of dating violence (3 vs. 10 items). Therefore, it may have led to spurious associations among the items owing to social desirability, priming effects, and response style (Podsakoff et al., 2012). For example, although self-report measures for dating violence are the most commonly used methods (Scott-Storey, 2011), because perpetration reporting can be influenced by social desirability bias, the prevalence of perpetration may have been underreported. This study nonetheless adds to the nascent body of literature by suggesting that mindfulness might be a key concept for explaining the association between dating violence and psychological well-being. These results should be replicated in larger and more diverse populations, but also using longitudinal study designs to examine the directionality of the associations between dating violence, mindfulness, and wellbeing indicators. Finally, given the high prevalence of dating violence perpetration as well as victimization found in our study and in others (Haynie et al., 2013; Hébert et al., 2017), which may damage youths’ early romantic relationships, policymaking decisions should advocate for programs that aim to prevent dating violence in schools, to reach a maximum number of adolescents.

**Acknowledgment**

We would like to thank the authorities of the school boards, as well as the directors and teachers of each school, for their assistance in the data collection and administration of the project. We are also grateful to all the teens who accepted to participate in this research. Finally, we thank Anita Harman, PhD, from Edanz (<https://www.edanz.com/ac>), and Catherine Hamel for editing a draft of this manuscript.

**Authors’ contributions**

JDi: designed and executed the study, assisted with the data analyses, and wrote the paper. KS: collaborated with the design, analyzed the data, wrote the results section, and collaborated in the writing and editing of the final manuscript. MPD: collaborated with the design and writing of the study. LP, JDub, and NG: collaborated in the writing and editing of the final manuscript. All author approved the final version of the manuscript for submission.

**Data Sharing Declaration**

The data that support the findings of this study are available from the first author. However, restrictions apply to the availability of these data, which were used under license for the current study and are therefore not publicly available. However, data are available upon request from the first author and supplementary material is presented in Appendix.

**Conflicts of Interest**

The authors report no conflict of interests.

**Compliance with Ethical Standards**

**Funding**

This research was supported by a grant from the Université du Québec à Chicoutimi.

**Ethical approval**

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was approved by the IRB of the Université du Québec à Chicoutimi.

**Informed Consent**

Informed consent was obtained from all individual participants included in the study.

**References**

Ackard, D. M., Eisenberg, M. E., & Neumark-Sztainer, D. (2007). Long-term impact of adolescent dating violence on the behavioral and psychological health of male and female youth. *The Journal of Pediatrics*, *151*(5), 476-481. <https://doi.org/10.1016/j.jpeds.2007.04.034>

Ackard, D. M., & Neumark-Sztainer, D. (2002). Date violence and date rape among adolescents: Associations with disordered eating behaviors and psychological health. *Child Abuse & Neglect*, *26*(5), 455-473. <https://doi.org/10.1016/S0145-2134(02)00322-8>

Ackard, D. M., Neumark-Sztainer, D., & Hannan, P. (2003). Dating violence among a nationally representative sample of adolescent girls and boys: Associations with behavioral and mental health. *The Journal of Gender-Specific Medicine: JGSM: The Official Journal of the Partnership for Women's Health at Columbia*, *6*(3), 39-48.

Banyard, V. L., & Cross, C. (2008). Consequences of teen dating violence: Understanding intervening variables in ecological context. *Violence Against Women, 14*(9), 998-1013. <https://doi.org/10.1177/1077801208322058>

Bolduc, R., Bigras, N., Daspe, M.-È., Hébert, M., & Godbout, N. (2018). Childhood cumulative trauma and depressive symptoms in adulthood: The role of mindfulness and dissociation. *Mindfulness, 9*(5), 1594-1603. <https://doi.org/10.1007/s12671-018-0906-3>

Bougie, E., Arim, R., Findlay, L., & Kohen, D. (2016). *Validation de l’échelle de détresse psychologique à 10 questions de Kessler (K10) à partir de l’Enquête auprès des peuples autochtones de 2012.* Statistique Canada. <https://www150.statcan.gc.ca/n1/pub/82-003-x/2016001/article/14307-fra.htm>

Bravo, A. J., Pearson, M. R., Wilson, A. D., & Witkiewitz, K. (2018). When traits match states: Examining the associations between self-report trait and state mindfulness following a state mindfulness induction. *Mindfulness*, *9*(1), 199-211. <https://doi.org/10.1007/s12671-017-0763-5>

Brem, M. J., Wolford-Clevenger, C., Zapor, H., Elmquist, J., Shorey, R. C., & Stuart, G. L. (2018). Dispositional mindfulness as a moderator of the relationship between perceived partner infidelity and women's dating violence perpetration. *Journal of Interpersonal Violence, 33*(2), 250-267. <https://doi.org/10.1177/0886260515604415>

Briere, J. (2015). Pain and suffering: A synthesis of Buddhist and Western approaches to trauma. In V. M. Follette, J. Briere, D. Rozelle, J. W. Hopper, & D. I. Rome (Eds.), *Mindfulness-oriented interventions for trauma: Integrating contemplative practices* (pp. 11-30). The Guilford Press.

Buttar, A., Clements-Nolle, K., Haas, J., & Reese, F. (2013). Dating violence, psychological distress, and attempted suicide among female adolescents in the juvenile justice system. *Journal of Correctional Health Care, 19*(2), 101–112. <https://doi.org/10.1177/1078345812474639>

Campbell, O., Bann, D., & Patalay, P. (2020). The gender gap in adolescent mental health: A cross-national investigation of 566,827 adolescents across 73 countries. *medRxiv*. Advanced online publication. <https://doi.org/10.1101/2020.06.12.20129312>

Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of Affective Disorders, 82*(2), 217-225. <https://doi.org/10.1016/j.jad.2003.12.013>

Chiesi, F., Dellagiulia, A., Lionetti, F., Bianchi, G., & Primi, C. (2017). Using item response theory to explore the psychometric properties of the Italian version of the Child and Adolescent Mindfulness Measure (CAMM). *Mindfulness, 8*(2)*,* 351-360. <https://doi.org/10.1007/s12671-016-0604-y>

Chiodo, D., Crooks, C. V., Wolfe, D. A., McIsaac, C., Hughes, R., & Jaffe, P. G. (2012). Longitudinal prediction and concurrent functioning of adolescent girls demonstrating various profiles of dating violence and victimization. *Prevention Science: The Official Journal of the Society for Prevention Research*, *13*(4), 350-359. <https://doi.org/10.1007/s11121-011-0236-3>

Cunha, M., & Paiva, M. J. (2012). Text anxiety in adolescents: The role of self-criticism and acceptance and mindfulness skills. *The Spanish Journal of Psychology, 15*(2), 533-543. <https://doi.org/10.5209/rev_sjop.2012.v15.n2.38864>

Daigneault, I., Dion, J., Hébert, M., & Bourgeois, C. (2016). Mindfulness as mediator and moderator of post-traumatic symptomatology in adolescence following childhood sexual abuse or assault. *Mindfulness, 7*(6), 1306-1315. <https://doi.org/10.1007/s12671-016-0571-3>

de Bruin, E. I., Zijlstra, B. J. H., & Bögels, S. M. (2014). The meaning of mindfulness in children and adolescents: Further validation of the Child and Adolescent Mindfulness Measure (CAMM) in two independent samples from The Netherlands. *Mindfulness, 5*(4), 422-430. <https://doi.org/10.1007/s12671-013-0196-8>

Diaz-Aguado, M. J., & Martinez, R. (2015). Types of adolescent male dating violence against women, self-esteem, and justification of dominance and aggression. *Journal of Interpersonal Violence, 30*(15), 2636–2658. <https://doi.org/10.1177/0886260514553631>

Dion, J., Paquette, L., Daigneault, I., Godbout, N., & Hébert, M. (2018). Validation of the French version of the Child and Adolescent Mindfulness Measure (CAMM) among samples of French and Indigenous youth. *Mindfulness, 9*(2), 645-653. <https://doi.org/10.1007/s12671-017-0807-x>

Dion, J., Smith, K., Pelletier S., Chayer Y., Gagnon, D., & Côté, K. (2018). Effets du programme « Les Couloirs de la violence amoureuse ». *Université du Québec à Chicoutimi*.

Dosil, M., Jaureguizar, J., & Bermaras, E. (2019). Variables related to victimization and perpetration of dating violence in adolescents in residential care settings. *The Spanish Journal of Psychology*, *22*(e36), 1-10. <https://doi.org/10.1017/sjp.2019.35>

Dosil, M., Jaureguizar, J., Bernaras, E., & Sbicigo, J. B. (2020). Teen dating violence, sexism, and resilience: A multivariate analysis. *International journal of environmental research and public health*, *17*(8), 2652. <https://doi.org/10.3390/ijerph17082652>

Dumont, M. (2000). Expérience du stress à l'adolescence. *International Journal of Psychology, 35*(5), 194-206. <https://doi.org/10.1080/00207590050171139>

Fedina, L., Howard, D. E., Wang, M. Q., & Murray, K. (2016). Teen dating violence victimization, perpetration, and sexual health correlates among urban, low-income, ethnic, and racial minority youth. *International Quarterly of Community Health Education, 37*(1), 3-12. <https://doi.org/10.1177/0272684X16685249>

Fernández-González, L., Wekerle, C., & Goldstein, A. L. (2012). Measuring adolescent dating violence: Development of ‘conflict in adolescent dating relationships inventory’ short form. *Advances in Mental Health*, *11*(1), 35-54. <https://doi.org/10.5172/jamh.2012.11.1.35>

Follette, V. M., Briere, J., Rozelle, D., Hopper, J. W., & Rome, D. I. (Eds.). (2015). *Mindfulness-oriented interventions for trauma: Integrating contemplative practices*. Guilford Publications.

Foshee, V. A., Linder, F., MacDougall, J. E., & Bangdiwala, S. (2001). Gender differences in the longitudinal predictors of adolescent dating violence. *Preventive Medicine*, *32*(2), 128-141. <https://doi.org/10.1006/pmed.2000.0793>

Gentile, B., Grabe, S., Dolan-Pascoe, B., Twenge, J. M., Wells, B. E., & Maitino, A. (2009). Gender differences in domain-specific self-esteem: A meta-analysis. *Review of General Psychology*, *13*(1), 34-45. <https://doi.org/10.1037/a0013689>

Godbout, N., Bakhos, G., Dussault, É., & Hébert, M. (2020). Childhood interpersonal trauma and sexual satisfaction in patients seeing sex therapy: Examining mindfulness and psychological distress as mediators. *Journal of Sex & Marital Therapy, 46*(1), 43-56. <https://doi.org/10.1080/0092623X.2019.1626309>

Godbout, N., Therriault, C., Dion, J., & Hébert, M. (2018). Interventions axées sur la pleine conscience pour les survivants de traumas interpersonnels en enfance. In A. Devault, & G. Pérodeau (Eds.), *Pleine conscience et intervention clinique* (pp. 201-220). Presses de l’Université Laval (PUL).

Gómez, A. M. (2011). Testing the cycle of violence hypothesis: Child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. *Youth & Society*. *43*(1), 171-192. <https://doi.org/10.1177/0044118X09358313>

Greco, L. A., Baer, R. A., & Smith, G. T. (2011). Assessing mindfulness in children and adolescents: Development and validation of the Child and Adolescent Mindfulness Measure (CAMM). *Psychological Assessment, 23*(3), 606-614. <https://doi.org/10.1037/a0022819>

Greene, M. E., & Patton, G. (2020). Adolescence and gender equality in health. *Journal of Adolescent Health, 66*(1), S1-S2. <https://doi.org/10.1016/j.jadohealth.2019.10.012>

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage publications.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>

Hamby, S. (2016). Self-report measures that do not produce gender parity in intimate partner violence: A multi-study investigation. *Psychology of Violence*,*6*(2), 323-335. <https://doi.org/10.1037/a0038207>

Hamby, S., & Turner, H. (2013). Measuring teen dating violence in males and females: Insights from the national survey of children’s exposure to violence. *Psychology of Violence*,*3*(4), 323-339. <https://doi.org/10.1037/a0029706>

Harter, S. (2006). The Development of Self-Esteem. In M. H. Kernis (Ed.), *Self-esteem issues and answers: A sourcebook of current perspectives* (pp. 144–150). Psychology Press.

Haynie, D. L., Farhat, T., Brooks-Russell, A., Wang, J., Barbieri, B., & Iannotti, R. J. (2013). Dating violence perpetration and victimization among U.S. adolescents: Prevalence, patterns, and associations with health complaints and substance use*. Journal of Adolescent Health, 53*(2),194–201. <https://doi.org/10.1016/j.jadohealth.2013.02.008>

Hébert, M., Blais, M., & Lavoie, F. (2011). *Enquête sur le Parcours amoureux des jeunes [Quebec Youth Romantic Relationships Study].* Université du Québec à Montréal.

Hébert, M., Blais, M., & Lavoie, F. (2017). Prevalence of teen dating victimization among a representative sample of high school students in Quebec. *International Journal of Clinical and Health Psychology, 17*(3), 225-233. <https://doi.org/10.1016/j.ijchp.2017.06.001>

Hébert, M., Lapierre, A., Lavoie, F., Fernet, M., & Blais, M. (2018). La violence dans les relations amoureuses des jeunes. In J. Laforest, P. Maurice, & L. M. Bouchard (Eds.), *Rapport québécois sur la violence et la santé* (pp. 97-129). Institut national de santé publique du Québec.

Heise, L., & Garcia-Moreno, C. (2002). Violence by intimate partners. In E. G. Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), *World report on violence and health* (pp. 87-122). World Health Organization.

Jackson, S., & Goossens, L. (Eds.). (2020). *Handbook of adolescent development*. Routledge.

Johnson, W. L., Giordano, P. C., Manning, W. D., & Longmore, M. A. (2015). The age-IPV curve: Changes in the perpetration of intimate partner violence during adolescence and young adulthood. *Journal of Youth and Adolescence*, *44*(3), 708-726. <https://doi.org/10.1007/s10964-014-0158-z>

Johnston, R., Jones, K., & Manley, D. (2018). Confounding and collinearity in regression analysis: A cautionary tale and an alternative procedure, illustrated by studies of British voting behaviour. *Quality & Quantity, 52*(4), 1957-1976. <https://doi.org/10.1007/s11135-017-0584-6>.

Jouriles, E. N., Platt, C., & McDonald, R. (2009). Violence in adolescent dating relationships. *The Prevention Researcher*, *16*(1), 3-7.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*(2), 144-156. <https://doi.org/10.1093/clipsy.bpg016>

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L. T., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*(6), 959-976. <https://doi.org/10.1017/S0033291702006074>

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & 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. <https://doi.org/10.1111/j.1471-6402.2007.00385.x>

Kroska, E. B., Miller, M. L., Roche, A. I., Kroska, S. K., & O’Hara, M. W. (2018). Effects of traumatic experiences on obsessive-compulsive and internalizing symptoms: The role of avoidance and mindfulness. *Journal of Affective Disorders, 225*, 326-336. <https://doi.org/10.1016/j.jad.2017.08.039>

Kuby, A. K., McLean, N., & Allen, K. (2015) Validation of the Child and Adolescent Mindfulness Measure (CAMM) with non-clinical adolescents. *Mindfulness, 6*(6), 1448-1455. <https://doi.org/10.1007/s12671-015-0418-3>

Lapierre, A., Paradis, A., Todorov, E., Blais, M., & Hébert, M. (2019). Trajectories of psychological dating violence perpetration in adolescence. *Child Abuse & Neglect*, *97*, 104167. <https://doi.org/10.1016/j.chiabu.2019.104167>

Magee, W., & Upenieks, L. (2019). Gender differences in self-esteem, unvarnished self-evaluation, future orientation, self-enhancement and self-derogation in a US national sample. *Personality and Individual Differences*, *149*, 66-77. <https://doi.org/10.1016/j.paid.2019.05.016>

Marsh, H. W., Byrne, B. M., & Shavelson, R. J. (1988). A multifaceted academic self-concept: Its hierarchical structure and its relation to academic achievement. *Journal of Educational Psychology, 80*(3), 366-380. <https://doi.org/10.1037/0022-0663.80.3.366>

Mauer, V. A., & Reppucci, N. D. (2019). Legal and psychological approaches to understanding and addressing teen dating violence. In B. H. Bornstein, & M. K. Miller (Eds.), *Advances in Psychology and Law: Volume 4* (pp. 277-317). Springer International Publishing. <https://doi.org/10.1007/978-3-030-11042-0_9>

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation.*Psychological Methods, 12*(1), 23-44. <https://doi.org/10.1037/1082-989X.12.1.23>

Meadows, A. L., Coker, A. L., Bush, H. M., Clear, E. R., Sprang, G., & Brancato, C. J. (2020). Sexual violence perpetration as a risk factor for current depression or posttraumatic symptoms in adolescents. *Journal of Interpersonal Violence*. <https://doi.org/10.1177/0886260520908028>

Mewton, L., Kessler, R. C., Slade, T., Hobbs, M. J., Brownhill, L., Birrell, L., Tonks, Z., Teeson, M., Newton, N., Chapman, C., Allsop, S., Hides, L., McBride, N., & Andrews, G. (2016). The psychometric properties of the Kessler Psychological Distress Scale (K6) in a general population sample of adolescents. *Psychological Assessment*, *28*(10), 1232–1242. <https://doi.org/10.1037/pas0000239>

Ministère de l’Éducation et de l’Enseignement supérieur (2017). *Indices de défavorisation des écoles publiques, 2016-2017.* Écoles primaires et secondaires. <http://www.education.gouv.qc.ca/fileadmin/site_web/documents/PSG/statistiques_info_decisionnelle/Indices_PUBLICATION_20162017_final.pdf>

Monecke, A. & Leisch, F. (2012). semPLS: Structural equation modeling using partial least squares. *Journal of Statistical Software,* *48*(3), 1-32. <https://doi.org/10.18637/jss.v048.i03>

Monroe, S. M., & Harkness, K. L. (2005). Life stress, the "kindling" hypothesis, and the recurrence of depression: Considerations from a life stress perspective. *Psychological Review, 112*(2), 417-445. <https://doi.org/10.1037/0033-295X.112.2.417>

Nahapetyan, L., Orpinas, P., Song, X., & Holland, K. (2014). Longitudinal association of suicidal ideation and physical dating violence among high school students. *Journal of Youth and Adolescence, 43*(4), 629-640. <https://doi.org/10.1007/s10964-013-0006-6>

Orth, U., Erol, R. Y., & Luciano, E. C. (2018). Development of self-esteem from age 4 to 94 years: A meta-analysis of longitudinal studies. *Psychological Bulletin*, *144*(10), 1045-1080. <http://dx.doi.org/10.1037/bul0000161>

Orth, U., Trzesniewski, K. H., & Robins, R. W. (2010). Self-esteem development from young adulthood to old age: A cohort-sequential longitudinal study. *Journal of Personality and Social Psychology*, *98*(4), 645-658. <https://doi.org/10.1037/a0018769>

Pallozzi, R., Wertheim, E., Paxton, S., & Ong, B. (2017). Trait mindfulness measures for use with adolescents: A systematic review. *Mindfulness, 8*(1), 110-125. <https://doi.org/10.1007/s12671-016-0567-z>

Pflieger, J. C., & Vazsonyi, A. T. (2006). Parenting processes and dating violence: The mediating role of self-esteem in low- and high-SES adolescents. *Journal of Adolescence*, *29*(4), 495-512. <https://doi.org/10.1016/j.adolescence.2005.10.002>

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, *63*, 539-569.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879–891. <https://doi.org/10.3758/brm.40.3.879>

Rau, H. K., & Williams, P. G. (2016). Dispositional mindfulness: A critical review of construct validation research. Personality and Individual Differences, 93, 32-43. <https://doi.org/10.1016/j.paid.2015.09.035>

Ray, S., Danks, N., & Calero Valdez, A. (2021). SEMinR: Domain-specific language for building, estimating, and visualizing structural equation models in R. *Social Science Research Network*. <http://dx.doi.org/10.2139/ssrn.3900621>

Robinson, J. M., Ladd, B. O., & Anderson, K. G. (2014). When you see it, let it be: Urgency, mindfulness and adolescent substance use. *Addictive Behaviors, 39*(6), 1038-1041. <https://doi.org/10.1016/j.addbeh.2014.02.011>

Rudolph, K. D., Flynn, M., & Abaied, J. L. (2008). A developmental perspective on interpersonal theories of youth depression. In J. R. Z. Abela & B. L. Hankin (Eds.), *Handbook of depression in children and adolescents* (pp. 79-102). The Guilford Press.

Salk, R. H., Hyde, J. S., & Abramson, L. Y. (2017). Gender differences in depression in representative national samples: Meta-analyses of diagnoses and symptoms. *Psychological Bulletin*, *143*(8), 783-822. <https://doi.org/10.1037/bul0000102>

Scott-Storey, K. (2011). Cumulative abuse: Do things add up? An evaluation of the conceptualization, operationalization, and methodological approaches in the study of the phenomenon of cumulative abuse. *Trauma, Violence, & Abuse, 12*(3), 135-150. <https://doi.org/10.1177/1524838011404253>

Shorey, R. C., Elmquist, J., Zucosky, H., Febres, J., Brasfield, H., & Stuart, G. L. (2014). Experiential avoidance and male dating violence perpetration: An initial investigation. *Journal of Contextual Behavioral Science, 3*(2), 117-123. <https://doi.org/10.1016/j.jcbs.2014.02.003>

Shorey, R. C., Zucosky, H., Brasfield, H., Febres, J., Cornelius, T. L., Sage, C., & Stuart, G. L. (2012). Dating violence prevention programming: Directions for future interventions. *Aggression and Violent Behavior, 17*(4), 289-296. <https://doi.org/10.1016/j.avb.2012.03.001>

Shrout, P. E. (2011). Commentary: Mediation analysis, causal process, and cross-sectional data. *Multivariate Behavioral Research*, *46*(5), 852-860. <https://doi.org/10.1080/00273171.2011.606718>

Statistique Canada. (1995). *Enquête longitudinale nationale sur les enfants. Matériel d’enquête pour la collecte des données de 1994 – 1995. Cycle 1*. <https://www150.statcan.gc.ca/n1/fr/pub/89f0077x/89f0077x1996001-fra.pdf?st=zPoWEMga>

Stekhoven, D. J., & Bühlmann, P. (2012). MissForest--non-parametric missing value imputation for mixed-type data. *Bioinformatics*, *28*(1), 112-118. <https://doi.org/10.1093/bioinformatics/btr597>

Tan, L. B., & Martin, G. (2016). Mind full or mindful: A report on mindfulness and psychological health in healthy adolescents. *International Journal of Adolescence and Youth, 21*(1), 64-74. <https://doi.org/10.1080/02673843.2012.709174>

Temple, J. R., Choi, H. J., Elmquist, J., Hecht, M., Miller-Day, M., Stuart, G. L., Brem, M., & Wolford-Clevenger, C. (2016). Psychological abuse, mental health, and acceptance of dating violence among adolescents. *Journal of Adolescent Health, 59*(2), 197-202. <https://doi.org/10.1016/j.jadohealth.2016.03.034>

Thompson, R. W., Arnkoff, D. B., & Glass, C. R. (2011). Conceptualizing mindfulness and acceptance as components of psychological resilience to trauma. *Trauma, Violence, & Abuse, 12*(4), 220-235. <https://doi.org/10.1177/1524838011416375>

Turner, J., Johnson, C., & Gleason, P. (2020). *Examining the effects of intimate partner violence on psychological distress between genders*. Scientia Moralitas Research Institute.

Van Ouytsel, J., Ponnet, K., & Walrave, M. (2017). The associations of adolescents' dating violence victimization, well-being and engagement in risk behaviors. *Journal of Adolescence, 55*, 66-71. <https://doi.org/10.1016/j.adolescence.2016.12.005>

Viñas, F., Malo, S., González, M., Navarro, D., & Casas, F. (2015). Assessing mindfulness on a sample of Catalan-speaking Spanish adolescents: Validation of the Catalan version of the Child and Adolescent Mindfulness Measure. *Spanish Journal of Psychology, 18*(46), 1-8. <https://doi.org/10.1017/sjp.2015.48>

Wekerle, C., Leung, E., Wall, A.-M., MacMillan, H., Boyle, M., Trocme, N., & Waechter, R. (2009). The contribution of childhood emotional abuse to teen dating violence among child protective services-involved youth. *Child Abuse & Neglect, 33*(1), 45-58. <https://doi.org/10.1016/j.chiabu.2008.12.006>

West, P., & Sweeting, H. (2003). Fifteen, female and stressed: Changing patterns of psychological distress over time. *Journal of Child Psychology and Psychiatry*, *44*(3), 399-411. <https://doi.org/10.1111/1469-7610.00130>

Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A.-L. (2001). Development and validation of the Conflict in Adolescent Dating Relationships inventory. *Psychological Assessment, 13*(2), 277-293. <https://doi.org/10.1037/1040-3590.13.2.277>