A DYADIC ANALYSIS OF THE ASSOCIATIONS BETWEEN CUMULATIVE CHILDHOOD TRAUMA AND PSYCHOLOGICAL INTIMATE PARTNER VIOLENCE: THE MEDIATING ROLES OF NEGATIVE URGENCY AND COMMUNICATION PATTERNS

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Prior research has suggested associations between cumulative childhood trauma (CCT), negative urgency, communication patterns, and psychological intimate partner violence (P-IPV), but no study has examined these links using a dyadic approach. This study examined the sequential mediation of negative urgency and communication patterns in the link uniting CCT and P-IPV in a sample of 501 heterosexual couples. Results suggest that more CCT events are associated with higher levels of negative urgency, which in turn are associated with a higher tendency to endorse a demand/withdraw and/or demand/demand communication pattern, and to perpetrate P-IPV. Findings support the need to assess CCT, emotional self-control, dyadic and communication patterns, and P-IPV perpetration and victimization in couples seeking help in order to select interventions that will take into account the individual and dyadic nature of P-IPV.

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For couples who demonstrate impaired conflict management and emotion regulation abilities, the risk of conflictual interactions escalating into violent ones is noteworthy (MacIntosh, 2019). For those couples, psychological intimate partner violence (P-IPV) could result from the escalation of dysfunctional verbal interactions (Bartholomew & Cobb, 2011). P-IPV, defined as the use of verbal and nonverbal communication with the intent to emotionally harm and/or exert control over one's partner (Breiding, Basile, Smith, Black, & Mahendra, 2015), has been recognized as one of the most frequent and debilitating form of interpersonal violence with regards to one's physical and psychological health (Rogers & Follingstad, 2014). Even in its less severe and often normalized forms (e.g., insulting, yelling), P-IPV is considered as particularly detrimental as it tends to evoke retaliation and rapidly escalates into more severe violent behaviors (Winstok, 2008). In spite of its deleterious impact, the scientific community and policymakers have paid less attention to P-IPV, compared to physical partner violence, in research and prevention efforts (O’Leary, 2015). The current study thus seeks to better understand this form of partner violence, through an integrative dyadic model examining key individual and relational variables.

A Dyadic Perspective on Psychological Intimate Partner Violence

Traditionally, P-IPV has been understood as the use of abusive and threatening behaviors by men toward women, as a way to maintain a patriarchal domination (Dutton & Corvo, 2006). Yet, this stance does not allow to understand the cases of P-IPV resulting from the escalation of conflicts in couples where both partners contribute to dysfunctional communication patterns (Aaron & Beaulaurier, 2017). Data from a comprehensive literature review (Langhinrichsen-Rohling, Misra, Selwyn, & Rohling, 2012) have shown that 45–95% of couples from the general population who report experiencing IPV state that the nature of their IPV is bidirectional, meaning that partners are both victims and perpetrators of violence. This dyadic type of violence has been recognized as emerging from the escalation of negative exchanges between two partners paired according to certain risk markers, for instance, if they both exhibit affect dysregulation (Langhinrichsen-Rohling, 2010). However, most studies on P-IPV have assumed an individual approach and very few have used the couple as the unit of analysis (see Péloquin, Lafontaine, & Brassard, 2011, for an exception). Considering the relational nature of P-IPV, it may seem insufficient to study this phenomenon without taking into account how each partners’ characteristics affect interactional processes. As such, the presence alone of certain personal characteristics might not necessarily affect one’s experience of P-IPV but might rather contribute to the way one interacts with a romantic partner, thus potentially creating fertile ground for conflicts that escalate in P-IPV. Indeed, the risk of conflicts escalating into P-IPV could be especially salient when one or both partners report a history of childhood interpersonal trauma. As such, cumulative childhood trauma (CCT), the experience of multiple types of childhood interpersonal trauma, and its associated emotional and relational sequelae have been suggested to influence such connections with one’s partner (Liu, Schulz, & Waldinger, 2015).

Cumulative Childhood Trauma and Psychological Intimate Partner Violence

Childhood interpersonal trauma refers to the experience of physical, psychological, and sexual abuse; physical and psychological neglect; witnessing physical or psychological interparental violence; and peers’ bullying during childhood and adolescence (Godbout, Briere, Sabourin, & Lussier, 2014). In 2007, the landmark study of Finkelhor and colleagues draws attention, not only to the high prevalence rates of these experiences but also, to their significant co-occurrence: 30–50% of individuals from the general population disclose having experienced at least two different types of childhood interpersonal trauma. This experience refers to cumulative childhood trauma (CCT) and is operationalized as the total number of different types of childhood trauma experienced (Cloitre et al., 2009). Adverse childhood experiences (Dong et al., 2004) and polyvictimization (Finkelhor et al., 2007) are also terms commonly used to refer to the accumulation of experiences of abuse, neglect, and exposure to violence in childhood.

Many studies have reported an association between childhood interpersonal trauma and adult P-IPV victimization (Lilly, London, & Bridgett, 2014) and perpetration (Brassard, Darveau, Péloquin, Lussier, & Shaver, 2014; Godbout et al., 2017). However, only a few recent studies have examined the specific impact of CCT on P-IPV. Using a sample of 162 adults seeking treatment for relational or sexual problems, Dugal, Godbout, Bélanger, Hébert, Goulet et al. (2018) examined
the mediating role of cognitive and behavioral affect dysregulation in the association between CCT and P-IPV. They concluded that CCT was linked to higher affect dysregulation and tension-reduction behaviors (e.g., self-injury, impulsivity, risk-taking), which in turn were associated with P-IPV perpetration and victimization. In agreement with Berzenski and Yates (2010), their findings suggest that the link between CCT and P-IPV is mostly driven by the behavioral components of emotion dysregulation (i.e., tension-reduction activities) rather than by its cognitive components (i.e., affect dysregulation). Using a community sample of 241 adults, the same research team (Dugal, Girard et al., 2018) observed that affect dysregulation and maladaptive personality traits (i.e., Machiavellianism, psychopathy, and narcissism) in survivors of CCT were associated with higher negative urgency, defined as the inability to refrain from using rash and maladaptive behaviors when experiencing negative affect despite their possible negative consequences (Whiteside & Lynam, 2001). In turn, negative urgency was associated with higher levels of P-IPV perpetration and victimization. However, no study has yet examined these links using a dyadic approach.

**Negative Urgency**

In order to examine the mechanisms underlying the association between CCT and P-IPV, Bartholomew and Cobb’s (2011) model of partner violence as a dyadic process was used. According to these authors, both partners’ individual backgrounds and dispositional characteristics interact to establish a relationship context that might enable the use of violence in certain situations. More precisely, both partners’ personal backgrounds and dispositions are suggested to affect the perpetration of P-IPV through relational and situational contexts that mediate this relationship. The authors also present both partners’ processes as reciprocally influencing one another. As such, a mediational model in which CCT is related to specific dispositions that are known to impact a couple’s relationship context (e.g., CCT, negative urgency) might offer an operationalization of Bartholomew and Cobb’s (2011) theory. For instance, couples in whom one partner has experienced CCT tend to report experiencing higher levels of negative urgency (Gagnon, Daelman, McDuff, & Kocka, 2013) during conflicts, which are known to be associated with higher levels of P-IPV (Dugal, Girard et al., 2018). However, little is known about the relational contexts that are affected by negative urgency and CCT, and that might contribute to the escalation of conflicts into P-IPV. Indeed, individual dispositions alone are not sufficient to explain partner violence (Bartholomew & Cobb, 2011), rather, it may occur because certain interactional triggers prevent partners from regulating violent impulses.

**Communication Patterns**

Tan, Jarnecke, and South (2017) have observed that high levels of negative urgency are associated with lower levels of constructive communication and higher levels of demand/withdraw and/or mutual withdrawal communication patterns in couples. These communication patterns describe the ways in which couples interact when conflicts arise (Christensen & Shenk, 1991). Constructive communication refers to the use of positive and collaborative behaviors that include the expression of feelings, perspective taking, negotiation, and compromising. Demand/withdraw describes a pattern in which one partner complains, attempts to initiate changes, criticizes and nags, while the other becomes defensive, refuses to discuss an issue or withdraws. A demand/demand pattern refers to partners who reciprocally accuse, criticize, or blame one another (Christensen & Heavey, 1990). In mutual avoidance, both partners avoid a conflictual subject or walk away from each other during conflicts (Crenshaw, Christensen, Baucom, Epstein, & Baucom, 2017).

Research has shown that, as opposed to constructive communication, dysfunctional communication patterns (e.g., demand/withdraw) can lead to an escalation and intensification of conflicts (McGinn, McFarland, & Christensen, 2009), a known risk marker for P-IPV (Winstok, 2008). Indeed, by its impediment of the use of effective conflict resolution strategies, the demand/withdraw communication pattern has been recognized as keeping partners engaged in a vicious cycle of negative interactions (Papp, Kouros, & Cummings, 2009). The use of ineffective communication skills, such as criticizing, blaming, denying responsibility (Fournier, Brassard, & Shaver, 2011), and withdrawal (Pickover et al., 2017) has also been associated with P-IPV. We also know that hostility in one person tends to generate hostile counter-attacks (Winstok, 2008) yet, no study has examined the impact of the demand/demand communication pattern on P-IPV, a pattern in which both partners increasingly criticize, blame, and nag each other.
The Current Study

Previous literature suggests theoretical linkages between CCT, negative urgency, communication patterns, and P-IPV but no study has examined an integrative model that explores potential direct and indirect associations among these variables. In response to many experts who have suggested to change the perspective of P-IPV from a strict perpetrator–victim perspective to an understanding that would consider the unique and combined effects of both partners’ characteristics and contexts (Bartholomew & Allison, 2006), the current research used a dyadic approach to study P-IPV. In an effort to complement findings from past literature, this study examined the sequential mediation of individual negative urgency and dyadic communication patterns in the association between CCT and P-IPV in a sample of couples from the general population. To account for the interpersonal nature of P-IPV as well as Bartholomew and Cobb’s (2011) consideration of both partners’ processes as reciprocally influencing one another, actor–partner interdependence model (APIM) analyses were used in which both intrapersonal (actor effect) and dyadic (partner effect) associations between variables were explored. It was hypothesized that: (a) partner’s experience of CCT would be associated with both their own (actor effect) and their partners’ (partner effect) higher levels of negative urgency, which in turn would be negatively associated with the use of constructive communication and positively associated with demand/withdraw, mutual avoidance and demand/demand patterns (actor and partner effects); (b) the use of constructive communication would be negatively associated with P-IPV perpetrated by both partners and demand/withdraw, mutual avoidance, and demand/demand patterns would be positively associated with P-IPV perpetrated by both partners (actor and partner effects); (c) both partners’ levels of negative urgency and communication patterns would fully mediate the associations between CCT and P-IPV (actor and partner effects). Considering the dynamic and often bidirectional nature of P-IPV in the general population (Sommer, Babcock, & Sharp, 2017), as well as the high correlation observed between both partners’ experience of childhood trauma (Vaillancourt-Morel, Rellini, Godbout, Sabourin, & Bergeron et al., 2019) and difficulties regulating behaviors when experiencing negative affect (Langhinrichsen-Rohling, 2010), all variables are expected to be positively correlated between partners. The effect of gender on these links was also examined, although no specific hypotheses were put forward, as previous research has found no distinctions between men and women on the studied variables (see Dugal, Girard et al., 2018; Dugal, Godbout et al., 2018).

METHOD

Participants and Procedure

A convenience sample of 501 French-Canadian heterosexual couples (1,002 individuals) were recruited from the general community based on the following criteria: (a) be 18 years old or older and (b) be involved in an intimate relationship. Participants were recruited through a private survey firm who contacted them using telephone numbers from across the province of Québec, Canada. Participants who were eligible and interested in participating in the survey were offered to complete the study online or on the phone. Of the 6,652 participants who met the inclusion criteria and were interested in participating, 1,485 participants (22% response rate) completed the survey, including 501 couples (i.e., the two partners completed the survey).

On average, participants were aged 50 years ($SD = 12.9$, range = 19–86), and had been involved in the current relationship for 22 years (ranging from 0 to 72 years). The majority of couples was either married (58%) or cohabitating (39%) and a total of 84% of participants had children (mean number of children = 2.4, $SD = 1.14$). The participants were primarily Canadian (93%), full-time workers (52%), held a professional studies (40%) or university degree (42%), and earned an annual income ranging between CAD$20,000 and CAD$59,000.

Measures

Participants were asked to provide personal (e.g., age, gender, occupation, sexual orientation, education, annual income) and relationship (e.g., relational status, duration of the relationship) demographic information. All measures were presented in French.

Cumulative childhood trauma. Participants were administered the Cumulative Childhood Trauma Questionnaire (CCTQ; Godbout, Bigras, & Sabourin, 2017), a self-report measure
assessing eight types of childhood interpersonal trauma (sexual, physical, and psychological abuse; physical and psychological neglect; witnessing physical and psychological violence; and bullying). Childhood sexual abuse was measured through two checklist questions assessing whether participants experienced, before the age of 18, any unwanted sexual contact with any person or experienced any sexual contact with a person who is five years older or in a position of authority. Items for all other types of maltreatment were rated on a 7-point Likert-type scale ranging from zero (never) to seven (almost every day), indicating the annual frequency of each type of maltreatment experienced. To assess CCT, each type of childhood interpersonal trauma was dichotomously coded (zero = absence, one = presence) and summed up to obtain a continuous score, ranging from zero to eight, indicating the number of different types of childhood interpersonal trauma experienced. In the current sample, Cronbach’s alpha was .83 for women and .86 for men.

Negative urgency. The negative urgency scale of the abridged UPPS Impulsive Behavior Scale (Whiteside & Lynam, 2001; translated by Billieux et al., 2012;) was used. This scale includes four items rated on a Likert-type scale ranging from one (disagree strongly) to four (agree strongly), that are averaged into a score ranging from 1 to 4, with higher scores indicating higher levels of negative urgency. In the current sample, Cronbach’s alpha was .87 for women and .89 for men.

Communication patterns. The abridged version of the Communication Pattern Questionnaire-Short Form (Christensen & Heavey, 1990; translated by Lussier, 1995) was used to measure participants’ perception of communication when attempting to resolve conflicts. For each of the seven items, participants were asked to rate their own and their partner’s behaviors on a 9-point Likert-type scale ranging from 1 (very unlikely) to 9 (very likely), with higher scores indicating a higher likelihood of the communication pattern being present. In order to facilitate the statistical analyses and their interpretation, the current study used dyadic scores averaging each partner’s rating of items for each communication pattern, resulting in five scores: constructive communication (CC; four items), woman demands/man withdraws (WD/MW; four items), man demands/woman withdraws (MD/WW; four items), demand/demand (D/D; two items), and withdraw/withdraw (W/W; two items). In the current sample, Cronbach’s alpha was .68 for CC, .65 for WD/MW, .60 for MD/WW, .68 for D/D and .60 for W/W which is consistent with the measure’s original version (Christensen & Heavey, 1990).

Psychological intimate partner violence. Psychological IPV perpetrated by participants was assessed using 12 items from the Revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996; translated by Lussier, 1997) and the Coercive Control Scale (Johnson, Leone, & Xu, 2014). As no French version of the Coercive Control Scale was developed at the time of the study, a French translation of the questionnaire was created, back-translated to English, and approved as equivalent by a group of three bilingual experts. Participants were asked the frequency, during the last year, at which they inflicted and sustained psychological violence (e.g., insulting, yelling, or threatening) and coercive control (e.g., limited contact with family and friends, prevented from knowing about or having access to the family income) toward their partner. Partners answered on a 6-point Likert-type scale ranging from zero (this never happened) to six (more than 20 times during the past 12 months), with higher scores indicating a higher annual frequency of P-IPV. For P-IPV perpetration by women, their own self-reported P-IPV perpetration as well as their male partner’s accounts of P-IPV victimization were measured (α = .80). The higher of the two self-report scores were used as the measure of P-IPV perpetration by women. The same scoring technique was used for male P-IPV perpetration, with the higher of the two self-report scores provided (i.e., self-reported perpetration by men and their female partner’s report of victimization) (α = .81). For descriptive purposes, we dichotomized scores on every item (zero = absence, one = presence) of the Coercive Control Scale and used a cutoff of five out of nine which allows to assess intimate terrorism, a type of partner violence that refers to the use of coercive control tactics to take general control over the partner (Johnson et al., 2014).

Data Analysis
Descriptive analyses and correlations were conducted using SPSS 22. APIM analyses (Kenny, Kashy, & Cook, 2006) were then conducted to examine the associations between CCT, negative urgency, communication patterns, and P-IPV. APIM analyses were selected for this study because (a) they appropriately control for interdependence of data collected from individuals within a
romantic relationship, (b) they allow the examination of actor (e.g., the association between one’s negative urgency and one’s perpetration of psychological IPV) (c) and partner effects (e.g., the association between one’s negative urgency and one’s partner’s perpetration of psychological IPV), (d) as well as gender differences, in one comprehensive model. In APIM analyses, heterosexual romantic partners are generally expected to be distinguishable by gender, thus forming distinguishable dyads. Yet, before conducting APIM analyses, formal tests of distinguishability must be carried out to confirm this assumption (Kenny et al., 2006). APIM analyses were performed using Mplus, version 7 (Muthén & Muthén, 1998–2012) which is robust to nonnormality and accounts for missing data through the use of maximum likelihood estimation with robust standard errors (MLR). Several fit indices were used to examine whether the specified models were well-adjusted to the data: the comparative fit index (CFI; Bentler, 1990), the root mean square error of approximation (RMSEA; Steiger, 1990), the standardized root mean square residual (SRMR), the chi-square statistic, and the ratio of chi-square to degrees of freedom ($\chi^2/df$). A combination of a nonstatistically significant chi-square value, a CFI value of .90 or higher, a RMSEA value below .06, a SRMR value below .08, and a $\chi^2/df$ less than three indicate good fit (Hu & Bentler, 1999; Kline, 2011). To examine the mediational roles of negative urgency and communication patterns, the magnitude and significance of direct effects (i.e., path coefficients from women’s CCT to P-IPV by men), as well as indirect effects (i.e., the product of the path coefficients from women’s CCT to women’s negative urgency, from women’s negative urgency to demand/demand communication, and from demand/demand communication to P-IPV by men), were computed using 95% confidence intervals and 10,000 bootstrapping samples. The proportions of total effects that were mediated through negative urgency and communication patterns (indirect effect/total effect) were then measured which, in addition to the examination of significance of the indirect effects and improvement in model fit with direct paths removed, allowed to determine the partial or full nature of mediation.

RESULTS

Descriptive Statistics

Data were screened for missing values. Full information maximum likelihood (FIML) estimation method (Enders & Bandalos, 2001) was used in Mplus to account for missing values (less than 1% of the dataset, missing completely at random). Mean scores and bivariate correlations for the study variables are presented in Table 1. Scores for the number of different types of CCT experienced, negative urgency, and the frequency of perpetrated P-IPV did not differ across gender. Correlations between the withdraw/withdraw communication pattern subscale and P-IPV were not statistically significant, this subscale was thus removed from further analyses.

In the current sample, 28.2% of participants reported no childhood interpersonal trauma, 47.9% of participants reported having experienced at least two different types of childhood interpersonal trauma and 15.8% reported polyvictimization, with four or more types of maltreatment (Finkelhor et al., 2007). Prevalence rates for every type of childhood interpersonal trauma were similar across gender, except for physical neglect, which was reported by 17% of men and 10% of women, $\chi^2(1) = 9.72, p = .002$, and child sexual abuse, which was reported by 12% of men and 28% of women, $\chi^2(1) = 44.53, p < .001$. Precisely, 9% of men and 7% of women reported physical abuse, 18% of men and 19% of women reported psychological abuse, 31% of men and 33% of women reported psychological neglect, 36% of men and 40% of women reported having witnessed psychological violence, 9% of men and 10% of women reported having witnessed physical violence, and 45% of men and 40% of women reported bullying.

Prevalence rates for perpetration of P-IPV did not significantly differ by gender ($p = .543$): 57% of women and 64% of men reported at least one instance of P-IPV perpetration toward their partner over the past year. Mean scores reflected a frequency of one experience of violence in the past year. A total of 116 couples (23%) reported no P-IPV, 21 couples (4%) reported that P-IPV was only perpetrated by the male partner, 21 couples (4%) reported P-IPV was only perpetrated by the female partner and 343 couples (69%) reported bidirectional P-IPV. Regarding intimate terrorism, using Johnson et al.’s (2014) cutoff, six couples (1%) reported male-perpetrated intimate terrorism, whereas 10 couples (2%) reported female-perpetrated intimate terrorism.
Table 1
Descriptive Statistics and Correlations for Cumulative Childhood Trauma, Negative Urgency, Communication Patterns, and Psychological Intimate Partner Violence

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<td>11. Men P-IPV</td>
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| M                          | 1.88 | 1.76 | 1.78 | 1.71 | 6.77 | 3.89 | 3.57 | 3.04 | 3.09 | .96  | .92  |
| SD                         | 1.78 | 1.78 | .69  | .72  | 1.54 | 1.73 | 1.61 | 1.71 | 1.87 | 1.67 | 1.81 |

Note. CCT, Cumulative childhood trauma; CC, Constructive communication; WD/MW, Woman demands and man withdraws; MD/WW, Man demands and woman withdraws; W/W, Withdraw/withdraw; D/D, Demand/demand; P-IPV, Perpetrated psychological intimate partner violence.

*p < .05.

**p < .01.

***p < .001.
APIM Models

First, the direct links between CCT and P-IPV were examined. Results of a first APIM model showed significant actor and partner effects between CCT and P-IPV in both partners: from women’s CCT to women’s P-IPV ($\beta = .17, p < .001$), from women’s CCT to men’s P-IPV ($\beta = .15, p < .001$), from men’s CCT to men’s P-IPV ($\beta = .10, p = .014$) and from men’s CCT to women’s P-IPV ($\beta = .15, p = .008$). Direct paths explained 6.0% of the variance in women’s P-IPV and 3.7% of the variance in men’s P-IPV.

Second, the integrative mediation model was tested in a single comprehensive model. Results of distinguishability tests using chi-square difference tests ($\chi^2(12) = 23.43, p = .024$) confirmed that actor and partner effects, as well as patterns of variances and covariances, differed significantly for women and men, thus suggesting that the study’s dyads must be treated as distinguishable in the data analysis (see Data S1 for more information about gender differences). Due to possible nonindependence of partners’ residuals for all study variables, they were allowed to correlate between partners. All possible direct paths between partners’ CCT, negative urgency, communication patterns, and P-IPV were tested and only significant paths were included in the final model. When all the variables were entered in the comprehensive model, the constructive communication pattern was no longer significantly associated with other variables, so it was removed from the model in order to improve its fit indices. The proposed model was found to adequately fit the data: CFI = 0.98, RMSEA = 0.03, 95% CI [0.00, 0.05], $\chi^2(16) = 24.15, p = .086$, ratio $\chi^2/df = 1.5$, SRMR = 0.04. The standardized coefficients and percentages of explained variance accounted by the final model are presented in Figure 1. As presented in Figure 1, the model indicated, for both women and men, significant and positive actor effects between CCT and higher levels of negative urgency, but no significant partner effects between these two variables. With regards to the associations between CCT and P-IPV perpetration, results show that higher levels of negative urgency were, in turn, associated with higher scores in WD/MW (actor and partner effects), MD/WW (actor and partner effects), and D/D communication patterns (actor effect). In turn, WD/MW, MD/WW, and the D/D communication patterns were associated with higher P-IPV perpetration (actor effects).

Seven significant mediation effects were found in the comprehensive model (see Table 2). With regards to actor effects, in women, the direct association between their experience of CCT and perpetration of P-IPV (actor effect) remained significant despite the inclusion of negative urgency and communication patterns in the model, suggesting a partial mediation. The sequential indirect effect through women’s negative urgency and WD/MW ($R^2 = 4\%$) and D/D ($R^2 = 20\%$) explained 24% of the total effect of women CCT on perpetration of P-IPV by women, while the direct effect remained significant (76%). In men, the direct association between CCT and P-IPV (actor effect) became nonsignificant after the inclusion of negative urgency, which in turn was associated with MD/WW ($R^2 = 37\%$) and D/D ($R^2 = 63\%$), suggesting full mediation. With regards to partner effects, the direct association between women’s CCT and men’s perpetration of P-IPV (partner effect) remained significant ($R^2 = 75\%$), after the inclusion of women’s negative urgency, which in turn was associated with MD/WW ($R^2 = 7\%$) and D/D ($R^2 = 18\%$), suggesting partial mediation. The direct association between men’s CCT and women’s perpetration of P-IPV (partner effect) became nonsignificant with the inclusion of negative urgency and D/D ($R^2 = 72\%$), suggesting full mediation. However, the indirect effect through negative urgency and WD/MD was nonsignificant.

DISCUSSION

The aim of this study was to examine the mediational roles of individual negative urgency and dyadic communication patterns in the association between CCT and P-IPV perpetration in a sample of heterosexual couples from the general population. This sequential mediation model goes a step further than previous studies by including an examination of the specific proximal processes, both behavioral and interactional, that underlie couples’ experience of P-IPV in the presence of CCT. In line with previous research (Dugal, Girard et al., 2018; Dugal, Godbout et al., 2018), the current results demonstrate how negative urgency plays a role in the interpersonal repercussions of CCT. Yet, they go further as they bring to light some of the relational dynamics that explain the
The link between CCT and P-IPV in adulthood. The percentage of explained variance in P-IPV that CCT offers remains small, which is similar to other studies (e.g., Berzenski & Yates, 2010; Dugal, Girard et al., 2018). Yet, by examining potential mediating variables, not only this study suggests proximal targets to reduce CCT’s detrimental effects on adult relationships but also pinpoints risk markers for P-IPV that can be targeted even in the absence of CCT.

Precisely, results of the current study reveal that, in both women and men, increases in the number of CCT events are associated with higher levels of negative urgency, which in turn are associated with higher endorsement of a demand/withdraw and demand/demand communication pattern, and of P-IPV perpetration. Results also highlight that the link between CCT and P-IPV victimization (i.e., perpetration of P-IPV by the partner) is mediated by higher levels of negative urgency, which are associated with a higher endorsement of withdrawing behaviors in women, and higher demanding behaviors in both partners. As previously put forward, results suggest that as the number of CCT experiences increases, individuals are more likely to have trouble refraining from acting impulsively during conflicts with their partners. Negative urgency might thus prevent those who report CCT from inhibiting impulses of potential hostility and withdrawal in favor of more pro-relationship behaviors (Tan et al., 2017). Indeed, it is recognized that emotional arousal decreases one’s ability to take a step back in order to compromise and negotiate in a collaborative manner or take the other’s perspective (Bloch, Haase, & Levenson, 2014).

In P-IPV perpetration, negative urgency might rather influence partners to use pursuing behaviors, including criticizing, complaining, and nagging, toward a partner who remains silent, tries to avoid the discussion or withdraws (Tan et al., 2017). Particularly, those who report a higher number of CCT experiences generally present higher demands for affection and availability from the partner and an elevated sensitivity to perceived threats of rejection (Godbout et al., 2017). Thus, it is possible that the emotional discomfort experienced during a conflict with a withdrawn partner prevents those with higher CCT to withhold the use of pursuit behaviors when experiencing negative affect toward their partner who will eventually reply with stronger resistance (Baucom et al., 2015). As a result, this polarization of demand/withdraw positions (Baucom, McFarland, & Christensen, 2010) might escalate eventually leading to the use of more violent and coercive strategies from the partner who reports higher CCT experiences and greater endorsement of demanding behaviors (Fournier et al., 2011). The same emotional discomfort experienced in the presence of

Figure 1.
Dyadic Analysis of the role of negative urgency and communication patterns in the association between cumulative childhood trauma and perpetration of psychological intimate partner violence.

Note. P-IPV, Psychological intimate partner violence. All paths are statistically significant at \( p < .001 \).
### Table 2
Estimates of Direct and Indirect Effects with 95% Confidence Intervals and Significance Levels

<table>
<thead>
<tr>
<th>Perpetration of P-IPV</th>
<th>Estimate ($b$)</th>
<th>Standard error ($SE$)</th>
<th>95% CI lower limit</th>
<th>95% CI upper limit</th>
<th>$p$</th>
<th>$R^2$ of effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actor effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women CCT – Women P-IPV</td>
<td>1.461</td>
<td>0.507</td>
<td>0.553</td>
<td>2.565</td>
<td>.004</td>
<td>.76</td>
</tr>
<tr>
<td>CCT – Negative Urgency Women</td>
<td>0.082</td>
<td>0.039</td>
<td>0.027</td>
<td>0.184</td>
<td>.043</td>
<td>.04</td>
</tr>
<tr>
<td>– WD/MW – P-IPV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCT – Negative Urgency Men</td>
<td>0.123</td>
<td>0.062</td>
<td>0.043</td>
<td>0.281</td>
<td>.041</td>
<td>.37</td>
</tr>
<tr>
<td>– MD/WW – P-IPV</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCT – Negative Urgency Women</td>
<td>0.374</td>
<td>0.115</td>
<td>0.183</td>
<td>0.663</td>
<td>.002</td>
<td>.20</td>
</tr>
<tr>
<td>– D/D – P-IPV</td>
<td></td>
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<tr>
<td><strong>Partner effects</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Women CCT – Men P-IPV</td>
<td>1.301</td>
<td>0.456</td>
<td>0.486</td>
<td>2.273</td>
<td>.004</td>
<td>.75</td>
</tr>
<tr>
<td>CCT – Negative Urgency Women</td>
<td>0.100</td>
<td>0.051</td>
<td>0.030</td>
<td>0.231</td>
<td>.054</td>
<td>.28</td>
</tr>
<tr>
<td>– WD/MW – P-IPV</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CCT – Negative Urgency Men</td>
<td>0.126</td>
<td>0.050</td>
<td>0.052</td>
<td>0.251</td>
<td>.011</td>
<td>.07</td>
</tr>
<tr>
<td>– MD/WW – P-IPV</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CCT – Negative Urgency Women</td>
<td>0.254</td>
<td>0.124</td>
<td>0.090</td>
<td>0.574</td>
<td>.036</td>
<td>.72</td>
</tr>
<tr>
<td>– D/D – P-IPV</td>
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</tbody>
</table>

*Note. CI, Confidence interval; CCT, Cumulative childhood trauma; D/D, Demand/Demand; WD/MW, Woman demands and man withdraws; MD/WW, Man demands and woman withdraws; P-IPV, Perpetrated psychological intimate partner violence.*
higher levels of CCT experiences is also associated with higher mutual blaming and criticizing, which in turn is linked with an increased risk of P-IPV perpetration by both partners thus, an increased presence of bidirectional P-IPV. Indeed, childhood victimization experiences may severely compromise the emotional regulatory processes that are primordial to listen and respond efficiently to the needs and vulnerabilities a partner might express without becoming defensive or emotionally overwhelmed (MacIntosh, 2019). As such, experiencing CCT and negative urgency might alter the capacity to listen to a partner and respond to their needs (e.g., demanding behaviors). In turn, defensiveness or the persistence of demand behaviors, often perceived as excessive, may make it difficult for the partner to react in an understanding or calm way, especially if they also have to deal with their own negative emotions (Fruzzetti, 2006). The use of dysfunctional demanding behaviors that are answered by critical, nagging, and blaming counterattacks might thus create fertile ground for the use of increasingly pursuing behaviors, which eventually result in P-IPV perpetrated by both partners.

Results also show that in women, CCT is associated with P-IPV victimization through a sequence of higher negative urgency and a tendency to use more withdrawing behaviors with a pursuing male partner. In victims of partner violence, withholding behaviors might serve to deescalate potentially violent situations or to deal with distress caused by the conflict (Baucom et al., 2015). Perhaps withdrawing behaviors are used to deal with negative emotions experienced with a demanding partner or, as a way to avoid responding in a more aggressive way. Yet, in men, results of indirect effects show that CCT and negative urgency are only associated with P-IPV victimization through the use of more demanding behaviors in front of a demanding female partner.

Another important gender difference observable in this study is that women’s experience of CCT remains directly associated with P-IPV perpetration and victimization (i.e., actor and partner effects) despite the inclusion of the mediational variables, suggesting partial mediation. In men, results show complete mediation. It thus seems that the link between CCT and P-IPV remains significant in women despite mediational processes, whereas in men, the roles of negative urgency and communication patterns totally explain this association. Perhaps the nature of these victimization experiences, which tend to differ by gender (e.g., women report significantly more child sexual abuse than men; Dugal, Godbout et al., 2018), or the choice of mediating variables could explain these results.

Despite these few gender differences, the presence of many similarities between women and men on all of the study variables and the high bidirectionality of P-IPV observed in this sample also emphasize the need to call the gender perspective of partner violence (e.g., Dobash & Dobash, 1979) into question when examining general population samples. This presence of bidirectionality brings to light the reality of male victimization by female partners, an issue that remains downplayed and potentially underestimated. Yet, studies have also shown that the repercussions of men’s use of partner violence on women tends to be more damaging than perpetration by women (Straus, 2009). The low frequency of P-IPV and intimate terrorism in this sample also puts forward the possibility that the type of P-IPV investigated in this study is situational couple violence, a product of the escalation of conflicts (Johnson, 2008). In situational couple violence, aggression can be viewed as the only means to express anger to a partner or to get their attention. Thus, the current results emphasize the relevance of moving from a simple perpetrator–victim conceptualization of IPV to a more dyadic approach that allows the consideration of the interactive nature of psychologically violent couples. This interactive nature can also be observed through the positive correlations that were found between both partners’ variables. Such results could suggest potential partner pairings or assortative mating based on P-IPV risk markers. For instance, results indicate that individuals with a history of CCT or high negative urgency tend to have a partner who shows a similar profile. Such pairings parallel the results of Langhinrichsen-Rohling’s, 2010 study that presented violence as perpetrated by both partners as a result of difficulties in regulating emotions and behaviors in the two partners. These difficulties would prevent the partners from putting a stop to the chain of negative reciprocity experienced in conflicts that escalate into violence. Our results support this hypothesis. Results also show that despite results from previous studies (Tan et al., 2017), constructive and withdraw/withdraw communication patterns did not explain the link between CCT, negative urgency and P-IPV, when examined in an integrative model also including the demand/withdraw and demand/demand patterns. These results further highlight the
significance of pursuing behaviors in the negative reciprocity that may lead to the escalation of couple conflicts in P-IPV, as opposed to mutual withdrawing that might rather be associated with partners who retreat from a difficult interaction. The results do not, however, allow us to specify the factors that lead partners to take the position of the “demander” or the “withdrawer.” Perhaps, clarification of the function of these communication patterns could help better understand their impact on P-IPV. The examination of this function through the lens of attachment-based relational dynamics could suggest interesting avenues: attachment anxiety, related to both CCT (Godbout et al., 2017) and negative urgency (Cyr, Carrier Emond, Nolet, Gagnon, & Rouleau, 2018), has been associated with P-IPV perpetration through the demand/withdraw communication pattern (Fournier et al., 2011).

Limitations and Future Directions
Results of this study should be appreciated considering its limitations. First, the directionality between the variables was postulated based on theoretical ground and previous data, but the cross-sectional design prevents from inferring causation. Future studies should examine these associations using longitudinal designs. Second, the use of self-report measures may enhance social desirability and recall biases (Stone & Shiffman, 2002). Even if the use of actor–partner interdependence models might have reduced these biases, future studies should consider collecting data through observational methods. Third, the low reliability of the communication patterns scale may question the questionnaire’s ability to measure couple communication validly. These low alpha coefficients can be explained by the small number of items in each subscale and have been observed in previous studies (see Crenshaw et al., 2017). Future studies using observational methods to measure communication patterns could help rescind this limitation. Fourth, the current study examined P-IPV in the general population so the results may not apply to couples from social services and agency samples (i.e., male batterer programs, shelters, police, and legal agencies), as these tend to report more severe forms of violence (Johnson, 2008). Finally, the mean age of participants and mean duration of relationships were high, potentially preventing the generalization of results to younger couples.

Implications
The high prevalence of CCT and P-IPV reported by participants stresses the need to increase awareness, education and prevention efforts in the general population about the adult emotional and interpersonal effects of CCT as well as their impact on P-IPV experienced in both women and men. Results also emphasize the importance of training therapists to systematically assess multiple forms of childhood trauma, emotional self-control, dyadic communication patterns, and P-IPV perpetration and victimization in both partners of couples seeking help in order to select interventions that will take into account both the individual and the dyadic nature of P-IPV. Results also underscore that interventions aiming at decreasing negative urgency and better self-regulate negative emotions, such as dialectical behavior therapy (Linehan, 1993) and other mindfulness or mentalization-based techniques (e.g., Huprich, Nelson, Paggeot, Lengu, & Albright, 2017), could be emphasized to prevent P-IPV in the presence of CCT. Most importantly, the dyadic nature of the study’s results emphasizes the significance of aiming at more dyadic approaches to the treatment of P-IPV. The study’s findings suggest that couple interventions (e.g., Cognitive-Behavioral Couple Therapy; Baucom, Epstein, Kirby, & LaTaillade, 2015) aimed at enhancing communication skills could prevent the escalation of conflicts in couples who report CCT and negative urgency. Novel therapeutic approaches, such as the Developmental Couple Therapy for Complex Trauma (MacIntosh, 2019), that consider the specific challenges of couple therapy with trauma survivors, could also be used to address these issues. This therapeutic model maintains that the experience of CCT alters the development of affect regulation and mentalization abilities, which significantly potentiates the risk of couple conflicts escalating into violence. Thus, by offering a couple intervention aiming at increasing affect regulation and mentalization skills in order to decrease conflict and promote constructive communication, the emotional and relational repercussions of CCT might be alleviated.
Conclusion

The current research suggests that CCT is associated with negative urgency and dysfunctional communication patterns in adulthood, which in turn are associated with higher levels of P-IPV perpetration and victimization. These findings emphasize the need to assess CCT, emotional self-control and communication patterns in perpetrators and victims of P-IPV and support the relevance of developing dyadic approaches to the treatment of P-IPV.

REFERENCES


SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article:

**Data S1.** Gender differences.