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Coping with the Antecedents of a Violent Episode Explains More Variance than Coping with the Violent Episode: Support for Event-Based Approaches to Violence

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Abstract
The effects of intimate partner violence (IPV) impact victims more negatively than perpetrators. However, as current intervention programs do not provide satisfactory solutions to the problem, there is a growing need for interventions based on novel approaches. In this study, the relationships between proximal antecedents, violence victimization, coping, and psychological symptoms were examined, focusing on the "hot moment" of IPV. The study sample consisted of 205 married women who were victims of IPV. Data were collected using the Revised Conflict Tactics Scale, the Proximal Antecedents to Violent Episodes—Victim Form, the Intimate Partner Violence Strategies Index, the Brief Symptom Inventory, the Personality Belief Questionnaire–Short Form, the Two Dimension Social Desirability Scale, and a demographics form. The results revealed that proximal antecedents concerning interaction disagreements significantly predicted both IPV and psychological symptoms after controlling for pathological personality beliefs. They positively preceded violence via interactions with post hoc planned coping strategies. The results also revealed that the temporal conceptualization of coping should occur before IPV following the occurrence of proximal antecedents, offering a new look at the victimization process. This perspective provides a delicate synthesis of event-based behaviorist perspectives of IPV explanations and survivor theory for coping with IPV.

Keywords Intimate partner violence · Proximal antecedents · Coping strategies · Psychological symptoms · Behaviorist perspective

Introduction

The World Health Organization Global Consultation on Violence and Health (1996) defines violence as the intentional use of power against someone to increase negative outcomes. Intimate partner violence (IPV) is a sub-type of violence experienced between couples (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). IPV is a highly prevalent public problem with higher negative outcomes for women (Melton & Belknap, 2003). This study thus focuses on the process of women's IPV victimization.

Numerous studies have pointed to the detrimental effects of IPV on health. Female IPV victims have been reported to suffer higher rates of injury, fainting, pain, digestive system pathologies, functional somatic symptoms, diabetes, cardiovascular diseases, infectious diseases such as HIV/AIDS, post-traumatic stress disorder (PTSD), depression, anxiety disorders, sleep disorders, smoking, and alcohol–substance use and addiction (Campbell, 2002). This overall negative effect on health has been observed in studies using both psychometric and physiological measures (Dutton et al., 2006; Kendall-Tackett, 2009). Consequently, there has been considerable focus on research on IPV studies investigating the process between victimization and health via coping.

IPV and Coping

Current perspectives on coping may be viewed from a transactional approach, which highlights the importance of the individual–environment transaction as an important element

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involving problem- or emotion-focused coping (Lazarus & Folkman, 1984). Female IPV victims use various tactics to cope with violence (Goodman, Dutton, Weinfurt, & Cook, 2003). Some researchers have pointed to the increased use of emotion-focused tactics, such as disengagement coping, as the severity of violence increases (Lewis et al., 2006).

There are a variety of coping-focused intervention programs for female IPV victims. For instance, an empowerment-focused intervention program was designed for 12 weeks (Tiwari et al., 2010). The follow-up results revealed that psychological violence scores were lower in the intervention group compared to a community-service active control group. However, there were no between-group differences in terms of physical and psychological violence scores. Another intervention program was designed composed of 10 group sessions over five weeks and focused on empowerment and social support networks (Miller, Howell, & Graham-Bermann, 2014). The implementation of this intervention was found to elicit lower post-test IPV scores in both groups, even if the decrease was more prominent in the intervention group. Overall, the results of these intervention programs focusing on post-victimization coping revealed no or minimal effects on victimization scores (which was in line with the results of intervention programs with perpetrators; see Babcock, Green, & Robie, 2004b).

At this point, the question arises as to whether the current conceptualizations of coping capture the victimization process. In support of this questioning, even though social support was found to be a milieu of emotion-focused coping for female IPV victims (Swan & Sullivan, 2009), there is current debate asserting that social support does not fit the problem- vs. emotion-focused coping dichotomy (Heaney & Israel, 2008). There is thus a need to transcend traditional approaches to coping while examining coping in the realm of IPV. Namely, there is a need to understand coping tactics specific to IPV victimization.

Survivor theory, which underlines ongoing and continuous efforts to cope with IPV, has the potential to guide new approaches to the issue (Gondolf & Fisher, 1988). Survivor theory suggests that women try to increase their coping tactics as the violence escalates, and the frequency of strategies used is a crucial aspect of coping (Goodman et al., 2003). Another study from Turkey also supported this inference (Taşkale, 2019a).

Even if survivor theory presents an IPV-focused perspective on coping research, studies continue to focus on the research designs, where coping occurs following any crisis or violent episode (Goodman, Smyth, Borges, & Singer, 2009). However, current explanations of IPV underline the importance of event-based approaches in that violence may be foreseen by cues embedded in couple interactions (Byun, 2012). Since the occurrence of a violent episode starts to evolve before the act of violence, there is a possibility that coping also precedes the violent episode (as opposed to succeeding it). Therefore, there is the possibility of a new temporal conceptualization of coping as a precursor to IPV within the victimization process. This new conceptualization is believed to be in line with the current explanations of violence. These are reviewed in the next section.

Current Explanations for the Occurrence of IPV

A comprehensive review of the literature points to the importance of nested ecological approaches to understanding the occurrence of IPV (Dutton, 1995; Stith, Smith, Penn, Ward, & Tritt, 2004). Dutton's (1995) nested ecological theory states that macrosystem, exosystem, microsystem, and ontogenic variables affect its emergence. The results of a meta-analysis revealed that the overall effect sizes were low for the exosystem variables (such as sociodemographics) and high for the ontogenic variables (such as fear or depression), the microsystem variables (such as violence perpetration) being in between (Stith et al., 2004). Event-based perspectives (Byun, 2012) may be viewed as strong support for the studies that follow these ecological models, albeit contradictory at first glance because of their reliance on those variables that are closer to the violent episode. These perspectives highlight the importance of the context and dyadic interactions among couples. Ecological models underline the importance of a holistic perspective, encompassing variables from a number of layers (Bronfenbrenner, 1977). However, they also highlight the explanatory strength of those closer to the violent episode (Flynn & Graham, 2010; Stith et al., 2004). These findings highlight the importance of getting closer to the occurrence or the "hot moment" of IPV to elaborate on its causes.

The hot moment concept has been studied using the terms *situational determinants* (Wilkinson & Hamerschlag, 2005), *precipitants* (Flynn & Graham, 2010), *risk markers* (Riggs, Caulfield, & Street, 2000), and *antecedents* (Byun, 2012) of violence. Studies have shown that the interactional aftermath of a violent event is different for couples who perceive violence as inevitable or avoidable (Eisikovits, 1996). Couples in the former group try to create ways to continue their relationship. Both female victims and the male perpetrators in these couples feel obliged to live together because they lack the resources to separate or are not ready to do so (Chang et al., 2010). In contrast, couples in the latter group experience a change in the power structure during the aftermath of violence. They try to negotiate to their mutual benefit. Accordingly, some authors have argued that (physical) violence does not occur suddenly but as a result of the interaction between couples (Babcock, Costa, Green, & Eckhardt, 2004a). They assert that perpetrators can make educated guesses about the likelihood of these violent episodes. The Proximal Antecedents to Violent Episodes Scale (PAVE) was an outcome of studies to operationalize these arguments.

Twenty different situations were presented to the perpetrators. They were asked to rate the possibility of each situation increasing the likelihood of violence perpetration. The authors hypothesized that IPV had instrumental (power- and control-oriented) and expressive (reactive) antecedents. The scale development study revealed three subscales: violence in order to control, violence out of jealousy, and violence following verbal abuse.

An adaptation study, featuring female victims (instead of male perpetrators) in a Turkish context, also revealed instrumental and expressive domains, respectively interaction and fidelity disagreements (The Proximal Antecedents to Violent Episodes Scale—Victim Form [PAVEV]; Taşkale & Sertel-Berk, 2020). Therefore, the first cross-cultural study adapting the scale reached the hypothesized scale structure supporting its conceptual structure. Both subscales correlated strongly with violence scores (Babcock et al., 2004a; DeWall et al., 2013; Taşkale & Sertel-Berk, 2020). Therefore, examining the hot moment of IPV may be argued to be effective in inferring the occurrence of IPV.

To sum up, there are two separate lines of research in the current literature: one line focuses on coping with violence and health outcomes, albeit presenting low effect sizes for interventions, while the other focuses on proximal antecedents to violent episodes, presenting higher effect sizes for its explanatory power. The constructs of both research lines have been presented to be cross-culturally valid in Turkish culture (Taşkale & Sertel-Berk, 2019, 2020). A merge of these two separate research lines implicitly proposes a focus on the relationship of health outcomes with antecedents of violence victimization rather than violence victimization. This new focus also necessitates a new temporal conceptualization of coping within the victimization process. Accordingly, coping may be viewed as occurring before the very moment of an IPV episode triggered by the antecedents. Therefore, the current study is designed to scrutinize the importance of antecedents as a starting point of the victimization process, enabling the elaboration of a new temporal conceptualization of coping tactics with a Turkish sample to highlight possible cultural differences based on gender roles (Kumcağız & Dadashzadeh, 2017). However, this attempt should also consider the salience of some confounding variables that have been reported in the literature.

Possible Confounders in IPV Research

Pathological personality beliefs, especially borderline and antisocial personality beliefs, were found to be ontogenic correlates of IPV, explaining significant variance (Spencer, Stith, & Cafferky, 2019). Therefore, pathological personality beliefs that are related to the Axis II personality disorders (Butler, Beck, & Cohen, 2007) are used as a covariate in the study. Social desirability has also been mentioned as a possible confounder in the IPV literature (Visschers, Jaspaert, & Vervaeke, 2017). Thus, the possibility of social desirability is canceled out before starting the analyses.

Hypotheses

The overall study model will include two main hypotheses. *Hypothesis 1:* After controlling for pathological personality beliefs and social desirability, coping will moderate the relationship between proximal antecedents and victimization (1a) but not the relationship between victimization and psychological symptoms (1b), supporting the conceptualization that coping starts just before the violent episode. *Hypothesis 2:* After controlling for pathological personality beliefs and social desirability, regardless of the temporal conceptualization of coping, proximal antecedents will predict victimization (2a) and psychological symptoms (2b), but victimization will not predict psychological symptoms (2c), supporting the conceptualization of proximal antecedents as the foremost predictor of the victimization process.

Method

Participants

A total of 205 married women participated in the study. The mean age was 44.11 ($SD = 10.41$), while the mean age at marriage was 21.71 ($SD = 4.89$), being around 4.74 ($SD = 3.96$) years earlier than their husbands. The mean marriage duration was 19.64 years ($SD = 9.64$). Participants had 2.09 children on average ($SD = 1.17$). The mean year of school attendance was 8.58 years ($SD = 4.22$). The average family income was 4853.22 Turkish Lira ($SD = 2947.57$).[1] Thirty percent of women ($N = 62$) had not worked throughout their lives. The demographic characteristics of the sample are summarized in Table 1.

Instruments

The Revised Conflict Tactics Scales (CTS2) This scale (Straus, Hamby, McCoy, & Sugarman, 1996) has 79 items and 5 subscales (12 items: negotiation, 24 items: physical assault, 12 items: injury, 16 items: psychological aggression, and 14 items: sexual coercion). All items are written as duplicates for victimization and perpetration. Participants rate both the occurrence (*0 = never, 1 = in the past year, and 7 = not in the past year but it did happen before*) and frequency of a violent episode (*0 = none, 1 = once, 2 = twice, 3 = 3–5 times, 4 = 6–10 times, 5 = 11–20 times, 6 = more than 20 times*). Midpoint

[1] The average family income of a comparable four-person family is 6104.54 TL in Turkey according to 2014 statistics (TÜİK, n.d.).

Table 1 Demographic characteristics of the sample

Variables	*X*	*SD*
Age	44.11	10.41
Woman's age at marriage	21.71	4.89
Partner's age at marriage	26.45	5.63
Marriage duration (year)	19.64	9.64
Number of children	2.09	1.17
Woman's school attendance (year)	8.58	4.22
Partner's school attendance (year)	9.81	4.17
Family income (TL)	4853.22	2947.57
Variables	***N***	**%**
Job		
No	62	30.2
Yes, registered	41	20.0
Yes, unregistered	102	49.8
Partner's job		
No	6	2.9
Yes, registered	27	13.2
Yes, unregistered	172	83.5
Victimization before the age of 15		
Physical	71	34.6
Sexual	9	4.4
Emotional	57	27.8

scores were assigned to options 3–5 and a score of 25 to option 6. The Cronbach's alpha values were found to be between .79 (psychological aggression) and .95 (injury). The Turkish adaptation study was conducted by Aba and Kulakaç (2016). The scale structure was found to be the same (Cronbach's alpha values between .89 and .92). Since the issue of interest was violence victimization, victimization scores of subscales related to violence were computed in the current study using chronicity scoring criteria, defined as the sum of lifelong frequency scores. Cronbach's alpha coefficients were between .82 and .93, while Cronbach's alpha coefficient for the full scale was .95. Confirmatory factor analysis revealed a good fit: GFI = .98, RMSEA = .059, IFI = .99, TLI = .98, CFI = .99.

The Proximal Antecedents to Violent Episodes—Victim Form (PAVEV) The victim form of the scale (Taşkale & Sertel-Berk, 2020) is derived from the perpetrator form (Babcock et al., 2004a), writing the exact items from the victim's perspective instead of the perpetrator's. The original scale—the perpetrator form—features 20 items with 3 subscales (10 items: violence for control, 4 items: violence out of jealousy, and 6 items: violence following verbal abuse). The perpetrator form is scored between *1 = not at all likely* and *6 = extremely likely*. It has good reliability, with Cronbach's alphas ranging between .73 and .93. The Cronbach's alpha for the whole scale was .94. The adapted study featuring the PAVEV features 18 items with 2 subscales (15 items: interaction disagreements, e.g., *"My partner tells me not to do something that I want to do,"* and 3 items: fidelity disagreements, e.g., *"I find out that my partner has been flirting with someone,"* representing instrumental and reactive antecedents, respectively). The items that were deleted from the adapted scale because they loaded to more than one factor: *"My partner comes home late"* and *"My partner is physically aggressive towards me first."* Cronbach's alpha coefficients were .96 for the interaction disagreements, .87 for the fidelity disagreements, and .96 for the full scale. The victim form showed adequate test-retest reliability. In the current study, Cronbach's alpha coefficients were .94 for the interaction disagreements, .83 for the fidelity disagreements, and .94 for the full scale. Confirmatory factor analysis revealed a good fit for the full scale: GFI = .85, RMSEA = .086, IFI = .92, TLI = .91, CFI = .92.

The Intimate Partner Violence Strategies Index (IPVSI) This index (Goodman et al., 2003) is composed of 39 items with 6 conceptual dimensions (9 items: formal networks, e.g., *"Stayed in shelter,"* 4 items: legal, e.g., *"Filed or tried to file criminal charges,"* 10 items: security planning, e.g., *"Developed code so others would know I was in danger,"* 4 items: informal networks, e.g., *"Stayed with family or friends,"* 7 items: resistance, e.g., *"Slept separately,"* and 5 items: placating, e.g., *"Tried to avoid an argument with him"*). Respondents answered both whether they used the strategy (*Yes – No*) and how helpful they perceived it (*0 = not helpful at all* to *4 = extremely helpful*). Since the index follows the tradition of induced models instead of latent models (Goodman et al., 2003; Klem, 2000), the authors did not calculate the Cronbach's alpha coefficients, although they showed the convergent validity of the index using the CTS2 (Straus, Hamby, McCoy, & Sugarman, 1996) and the Psychological Maltreatment of Women (Tolman, 1989) scales. The Turkish adaptation of the inventory was conducted by Taşkale and Sertel-Berk (2019). One item was added to the informal networks dimension, resulting in 40 items in total. The added item was *"I talked to my family and friends about what to do when the violence occurs, for example calling the police."* The new item was added to reflect Turkish women's informal activation of formal resources. Analyses revealed that the index dimensions correlated with each other when calculated both as the total number of items used (*r*s .37 to .62, *p*s < .001) and as the total helpfulness score (*r*s .27 to .71, *p*s ≤ .01). The total number of utilized strategies correlated significantly with physical violence scores (*r*s .32 to .55, *p*s ≤ .01). In the current study, the total number of utilized strategies was entered in the models since the examination of the coping acts rather than helps appraisals regarding

the outcomes of the acts is theoretically more convenient for event-based perspectives, as discussed earlier (Taşkale, 2019a).

The Brief Symptom Inventory (BSI) This scale (Derogatis, 1993) has 53 items and features somatization, obsession–compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism subscales and three global indices: global severity index, positive symptom distress index, and positive symptom total. The items are rated *0 = never* to *4 = so much*. Internal consistency coefficients ranged between .71 and .85. The Turkish adaptation study was conducted by Şahin and Durak (1994). Analyses revealed five subscales: anxiety, depression, negative self, somatization, and hostility. The Cronbach's alphas were .87, .88, .87, .75, and .76, respectively. The total score of the BSI was used in the current study, and the Cronbach's alpha was .97. Confirmatory factor analysis revealed a good fit: GFI = .99, RMSEA = .064, IFI = 1.00, TLI = .99, CFI = 1.00.

The Personality Belief Questionnaire—Short Form (PBQ—SF) This scale (Butler et al., 2007) measures nine personality subscales (shy, dependent, passive-aggressive, obsessive-compulsive, antisocial, narcissistic, histrionic, schizoid, and paranoid personality beliefs). Each subscale was measured by seven items, making a total of 126 items. The items are rated *0 = I don't believe it at all* to *4 = I believe it totally*. The Cronbach's alpha coefficients were .97 for the full scale and between .81 and .92 for the subscales. The Turkish adaptation study revealed the same subscales encompassing 65 items (Taymur, Türkçapar, Örsel, Sargın, & Akkoyunlu, 2011). The Cronbach's alpha coefficients were .92 for the full scale and between .61 and .85 for the subscales. The total personality beliefs score was used in the current study. Cronbach's alpha coefficient was .95. Confirmatory factor analysis revealed a good fit: GFI = .96, RMSEA = .062, IFI = .99, TLI = .97, CFI = .99.

The Two-Dimensional Social Desirability Scale (SDS) This scale (Akın, 2010) is composed of 29 items, with impression management (16 items) and self-deception (13 items) subscales. The Cronbach's alpha coefficients were .96 (impression management) and .95 (self-deception). The scale was originally developed for use in Turkish samples. The test-retest reliability scores were .83 and .79, respectively. Since IPV is part of personal relationships in the private domain (Babcock et al., 2004a), the scale was used to check for the possibility of biased responses of the participants. The Cronbach's alpha was .86. Confirmatory factor analysis revealed a good fit for the full scale: GFI = .85, RMSEA = .049, IFI = .89, TLI = .86, CFI = .88.

Demographics Information Form This was used to collect information about age, education, income, and sociodemographic characteristics. The duration and number of marriages and information about violent experiences in childhood were also included.

Procedure

The study was approved by the Istanbul University Ethics Committee for Social Sciences and Humanities. The authors also contacted the researchers that either developed or adapted the scales in order to obtain their permission to use them. Data were collected via three different methods. The first method introduced the study to attendees of local public arts and crafts courses as a study about marriage and women. Via this method, 257 married women filled out the questionnaires. A total of 72 (28%) women (comparable to prevalence rates reported by Kahya & Taşkale, 2019 and Straus, 2017) checked positive for ever having experienced victimization and were included in the dataset. Another data collection method was an elective undergraduate course on IPV. The students collected data from female IPV victims as partial fulfillment of course credits. The 21 students enrolled in the elective undergraduate IPV course invited a total of 130 women to the study (124 living with a partner and 6 residing in a shelter). Another method of data collection used snowball sampling. A further three women participated in the study via this method, who were reached with the help of institution staff. Three methods of data collection resulted in some differences between study measures, for example, that shelter-residing women reported increased levels of violence victimization, coping, and pathological personality scores compared with the community women. This finding is fully in accordance with earlier IPV studies stating that shelter-residing women are more likely to be victims of intimate terrorism and community sample women are more likely to be victims of situational couple violence (Kelly & Johnson, 2008). So, shelter-residing IPV victims are expected to have higher violence and pathology scores compared with community women (Kahya & Taşkale, 2019; Straus, 2017; Taşkale, 2019b). Therefore, group differences are not attributable to the data collection methods and are considered to pose no problems in the validity of the results. In total, data from 205 married IPV women victims were used in the analyses. The first author and/or an undergraduate student enrolled in the IPV lectures were present throughout the data collection process. All the scales were presented and returned in sealed envelopes. The scales were randomly ordered, except for the demographics information form, which was placed last. It took approximately 45 min for the women to complete the scales.

Data Analysis

There was a low number of missing data ($N = 230$, 0.46%), distributed perfectly randomly ($X^2(16620) = 15{,}734.17$, $p = 1.00$). The mean assignment and the Hot Deck Imputation algorithm were used to handle the missing data for continuous and categorical data, respectively (Joenssen & Bankhofer, 2012). Both methods of missing value replacement are primary options when completely random missing data corresponding to less than 5% of all data is missing. The power analysis—.80 effect size, 5% type I error, and three predictors— revealed that the models had a power of 1.00 (Faul, Erdfelder, Buchner, & Lang, 2009). The hypotheses were analyzed using Model 7 and 14 of the PROCESS macros (Hayes, 2017). When these macros are used, all variables are simultaneously entered into the model together, so all predictor, mediator, moderator, and moderated mediator relationships are scrutinized in a single analysis.

Results

Descriptive Results of the Study Variables

Overall, the majority of the sample scored on the lower end of the victimization scale. Social desirability was mostly not correlated with the main variables of the study; however, resistance ($r(203) = -.25$, $p < .001$) and overall ($r(203) = -.14$, $p < .05$) coping strategies and psychological symptoms ($r(203) = -.30$, $p < .001$) were exceptions. All the variables in the model were found to significantly correlate with pathological personality beliefs. Therefore, only pathological personality beliefs were entered as a covariate in the main analyses. Furthermore, fidelity disagreements were not correlated with most of the coping strategies (placating being an exception; $r(203) = .22$, $p < .01$) and psychological symptoms. Therefore, fidelity disagreements were not used in the models. To sum up, predictors of the moderated mediation models were proximal antecedents (total scores) and interaction disagreements; the mediator was victimization (chronicity total scores), the outcome was psychological symptoms (total scores), and the moderator was coping strategies (total or dimension scores). Pathological personality beliefs (total scores) were used as a covariate. Therefore, all the results reported below present the statistics of the analyses after controlling for pathological personality beliefs.

Results of the Main Analysis

All the study hypotheses were analyzed together and simultaneously via either PROCESS Macro Model 7 or 14, representing the temporal conceptualization of coping before or after the violent episode, respectively (Hayes, 2017). However, the results will be presented separately for ease of tracking.[2]

Hypothesis 1 When the temporal conceptualization of coping was before the violent episode, the relationship between proximal antecedents and victimization was moderated by coping strategies ($B = 0.12$, $SE = 0.04$, $R^2_{interaction} = .02$, $F(1, 200) = 8.44$, $p < .01$) and the relationship between interaction disagreements and victimization was moderated by formal networks ($B = 0.58$, $SE = 0.23$, $R^2_{interaction} = .02$, $F(1, 200) = 6.18$, $p < .05$), legal strategies ($B = 0.79$, $SE = 0.37$, $R^2_{interaction} = .01$, $F(1, 200) = 4.58$, $p < .05$), security planning ($B = 0.40$, $SE = 0.20$, $R^2_{interaction} = .01$, $F(1, 200) = 4.18$, $p < .05$), informal networks ($B = 0.80$, $SE = 0.25$, $R^2_{interaction} = .03$, $F(1, 200) = 10.65$, $p < .01$), resistance ($B = 0.60$, $SE = 0.18$, $R^2_{interaction} = .03$, $F(1, 200) = 10.62$, $p < .01$), and placating ($B = 0.74$, $SE = 0.26$, $R^2_{interaction} = .03$, $F(1, 200) = 8.26$, $p < .01$). As antecedents/interaction disagreements and coping strategy domains increased, so did victimization. Therefore, *Hypothesis 1a* was fully confirmed.

When the temporal conceptualization of coping followed the violent episode, the relationship between victimization and psychological symptoms was not moderated by coping strategies ($B < -0.12$, $SE < 0.01$, $R^2_{interaction} < .01$, $F(1, 199) = 03$, $p > .05$); the relationship between victimization and psychological symptoms was not moderated by formal networks ($B < 0.01$, $SE = 0.01$, $R^2_{interaction} < .01$, $F(1, 199) = 0.02$, $p > .05$), legal strategies ($B < -0.01$, $SE = 0.01$, $R^2_{interaction} < .01$, $F(1, 199) = 0.02$, $p > .05$), security planning ($B < 0.01$, $SE = 0.01$, $R^2_{interaction} < .01$, $F(1, 199) = 0.53$, $p > .05$), informal networks ($B = -0.01$, $SE = 0.01$, $R^2_{interaction} < .01$, $F(1, 199) = 0.65$, $p > .05$), and resistance ($B = 0.01$, $SE = 0.01$, $R^2_{interaction} < .01$, $F(1, 199) = 1.36$, $p > .05$). However, the relationship between victimization and psychological symptoms was moderated by placating ($B = -0.04$, $SE = 0.01$, $R^2_{interaction} = .03$, $F(1, 199) = 8.30$, $p < .01$). As victimization and placating increased, so did psychological symptoms at low levels of placating. However, this relationship became non-significant (in a reverse pattern) at high levels of placating. Therefore, *Hypothesis 1b* was mostly confirmed with the exception of the model with placating as moderator.

Hypothesis 2 When the temporal conceptualization of coping was before the violent episode, the results revealed that proximal antecedents did not predict victimization ($B = 0.79$, $SE = 0.62$). However, when the temporal conceptualization of coping was after the violent episode, namely, if there was no moderator variable in the model, proximal antecedents predicted victimization ($B = 3.06$, $SE = 0.41$). When the temporal

[2] The results of the study beyond the realm of these hypotheses are not presented here. If required, please contact the first author for a detailed report.

conceptualization of coping was before the violent episode, the interaction disagreements domain of proximal antecedents predicted victimization if the moderator was formal networks ($B = 1.87$, $SE = 0.64$), legal strategies ($B = 2.61$, $SE = 0.47$), security planning ($B = 2.52$, $SE = 0.55$), and informal networks ($B = 1.84$, $SE = 0.56$) but not if the moderator was resistance ($B = 1.23$, $SE = 0.66$) or placating ($B = 0.98$, $SE = 0.78$). When the temporal conceptualization of coping was after the violent episode, the interaction disagreements domain of proximal antecedents similarly predicted victimization ($B = 3.50$, $SE = 0.44$). Overall, when the antecedents and the coping increased, so did the victimization, except for resistance and placating coping. Therefore, *Hypothesis 2a* was partly confirmed.

Proximal antecedents predicted psychological symptoms when the temporal conceptualization of coping was either before ($B = 0.44$, $SE = 0.13$) or after ($B = 0.38$, $SE = 0.13$) the violent episode. The interaction disagreements domain of proximal antecedents also predicted psychological symptoms when the temporal conceptualization of coping was before the violent episode ($B = 0.59$, $SE = 0.14$). When the temporal conceptualization of coping was after the violent episode, the interaction disagreements domain of proximal antecedents similarly predicted psychological symptoms if the model was moderated by formal networks ($B = 0.56$, $SE = 0.15$), legal strategies ($B = 0.59$, $SE = 0.15$), security planning ($B = 0.57$, $SE = 0.14$), informal networks ($B = 0.55$, $SE = 0.14$), resistance ($B = 0.49$, $SE = 0.14$), and placating ($B = 0.50$, $SE = 0.15$). Thus, when the antecedents increased, so did psychological symptoms. *Hypothesis 2b* was fully confirmed.

Victimization did not predict psychological symptoms when the temporal conceptualization of coping was either before ($B = 0.01$, $SE = 0.02$) or after the violent episode ($B < 0.01$, $SE = 0.04$). Victimization did not predict psychological symptoms if there was no moderator variable in the model, namely, when the temporal conceptualization of coping was before the violent episode ($B = 0.06$, $SE = 0.02$). Similarly, when the temporal conceptualization of coping was after the violent episode, victimization did not predict psychological symptoms if the model was moderated by formal networks ($B < 0.01$, $SE = 0.03$), legal strategies ($B = 0.02$, $SE = 0.03$), security planning ($B = -0.01$, $SE = 0.03$), informal networks ($B = 0.02$, $SE = 0.03$), and resistance ($B = -0.05$, $SE = 0.04$). However, victimization predicted psychological symptoms if the model was moderated by placating ($B = 0.16$, $SE = 0.06$). In this case, as victimization and placating increased, so did psychological symptoms, except for the high levels of placating, which showed no difference in psychological symptoms in the subject of the victimization. Therefore, *Hypothesis 2c* was partly confirmed.

In summary, the current study revealed interrelationships between IPV antecedents, victimization, coping, and psychological symptoms. The findings were found to be acceptably free from social desirability bias. Pathological personality beliefs were covariates in all models. Since fidelity disagreements did not correlate with the other study variables, they were excluded from the analyses. Apart from this, the results supported *Hypothesis 1* and *Hypothesis 2*, with some minor exceptions. Figures 1 and 2 present a visual summary of the results when the temporal conceptualization of coping was before and after the violent episode, respectively. Tables 2 and 3 present a statistical summary of the study findings visualized in these figures.

Discussion

The results revealed that coping interacts with antecedents of violence (but not with violence victimization). This interaction increases the likelihood of the act of violence. Therefore, the temporal conceptualization of coping should happen before the violent episode. Additionally, the proximal antecedents constitute the starting point of the victimization process and lead to an increased number of psychological symptoms. These findings present useful information and practical implications for future studies.

Discussion Related to Correlational Findings

Pathological personality beliefs were found to correlate with the study variables. Therefore, they were used as a covariate in the models. Earlier studies in the literature also point to significant correlations between personality and antecedents (Babcock et al., 2004a; Taşkale & Sertel-Berk, 2020), IPV (Spencer et al., 2019; Stith et al., 2004), and coping (Goodman et al., 2003; Taşkale & Sertel-Berk, 2019), and health (Spencer et al., 2019; Stith et al., 2004). However, most of the study variables did not correlate with social desirability scores. This finding is consistent with earlier studies from Turkey and the USA (Hamby, 2009; Taşkale & Sertel-Berk, 2019, 2020). Contrary to this general zero-correlation, social desirability bias correlated positively with resistance coping strategy and negatively correlated with psychological symptoms. Resistance coping strategy shares a common basis with mainstream ideologies by stressing the importance of personal efficacy and rejecting the power imbalance among genders. This ideological stance has been observed in studies from the USA and Malaysia (Goodman et al., 2003; Mkandawire-Valhmu et al., 2016). Findings from different cultures report that social desirability is a significant but weak correlate of psychological symptoms (Fastame, Penna, & Hitchcott, 2015; Tausig et al., 2011). Hence, the significant correlation of social desirability with resistance and psychological symptoms was not viewed as a threat to the validity of the results.

The non-significant correlation between fidelity disagreements and victimization has also been reported in other studies

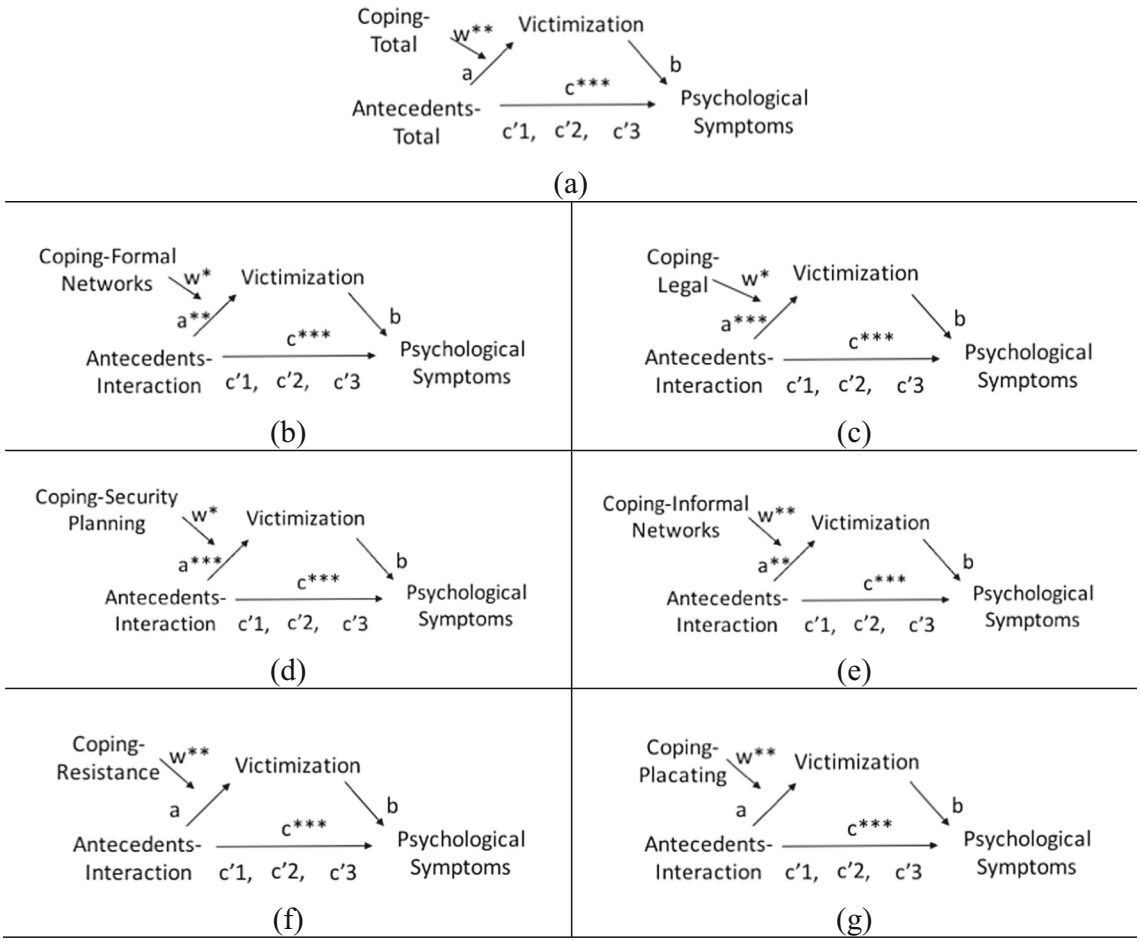

Fig. 1 Relationships between antecedents, victimization, and psychological symptoms after controlling for pathological personality beliefs when temporal conceptualization of coping precedes the violent episode. Note: The constants predicting psychological symptoms are significant in all models. *$p < .05$, **$p < .01$, ***$p < .001$

(Babcock et al., 2004a; Taşkale & Sertel-Berk, 2020). Some researchers have argued the importance of setting and situational factors in understanding reactive antecedents of IPV, namely fidelity disagreements (Taşkale, 2019b). Since they are reactive antecedents to IPV episodes, fidelity disagreements may be viewed as outcomes rather than anticipators of IPV. Similarly, studies point to fidelity as being possible reactions to IPV (Buss & Shackelford, 1997). Another explanation may be the cultural unacceptance of infidelity in Turkish culture (Kumcağız & Dadashzadeh, 2017), perhaps leading participants to score based on guesses instead of real experiences of fidelity disagreements. Hence, these scores may not neatly fit into an event-based model. In addition, results from Western cultures reflect non-significant correlations between fidelity disagreements and IPV (Babcock et al., 2004a). However, most participants in the current study were victims of situational couple violence only, our results, therefore, should not be generalized to other studies where participants experienced coercive controlling violence or intimate terrorism (Kelly & Johnson, 2008).

Discussions

Hypothesis 1 In all models, the effects of moderation were significant when the temporal conceptualization of coping occurred before, as opposed to after, the violent episode (with the exception of placating coping strategy when the temporal conceptualization of coping is after the violent episode). Overall, these results support our new conceptualization of coping before, compared to after, the violent episode in line with current approaches explaining IPV that focus on the proximal antecedents (Babcock et al., 2004a; Byun, 2012).

These results point to significant correlations between IPV and antecedents (Babcock et al., 2004a; Taşkale & Sertel-Berk, 2020) and coping strategies (Goodman et al., 2003; Taşkale & Sertel-Berk, 2019). Moreover, survivor theory presents a meticulous discussion about the positive direction of this significant relationship (Gondolf & Fisher, 1988). The increase (positive trend) of victimization scores as the coping scores increase may be viewed as a genuine

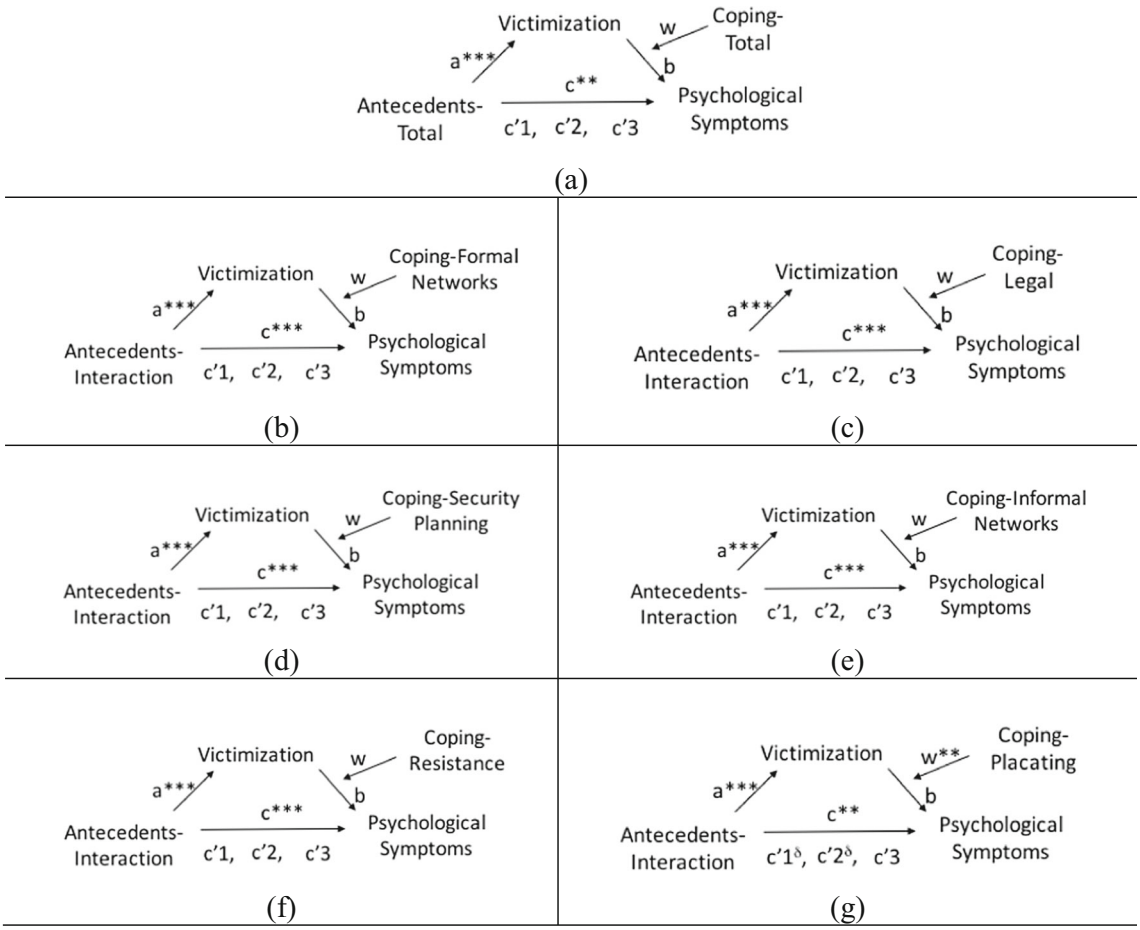

Fig. 2 Relationships between antecedents, victimization, and psychological symptoms after controlling for pathological personality beliefs when temporal conceptualization of coping follows the violent episode. Note: The constants predicting victimization and psychological symptoms (except the model where placating coping strategy is the moderator) are significant in all models. $^{**}p < .01$, $^{***}p < .001$, δ: bootstrapping confidence intervals exclude zero

summary of the efforts of victims, trying different tactics to overcome IPV, and the number and diversity of tactics increases as the violence escalates (Gondolf & Fisher, 1988; Goodman et al., 2003). Therefore, a positive trend among antecedents, coping, and IPV would be expected, especially in a cross-sectional study such as the current one. The current study participants mostly favored continuing their marriages (62.4%, $N = 132$); however, there was a considerable number of participants who were not (37.6%, $N = 77$). Therefore, they need to find ways to continue their marriages while disabling further violence.

Even though this discussion covers why there was no moderation of the relationship between victimization and health by coping strategies and domains, there is still a need to explain moderation by placating. The results imply that when victimization increases to the point where it becomes inevitable, placating represents a barricade against psychological symptoms. Similarly, current approaches to coping favor the conscious use of placating as an active and problem-focused strategy (Zakar, 2012; Zanville, 2006).

Hypothesis 2 Victimization was predicted by interaction disagreements (but not antecedents) only in models where formal networks, legal strategies, security planning, and informal networks (but not resistance, placating, or coping total scores) were the moderator variables when the temporal conceptualization of coping was before the violent episode. When the temporal conceptualization of coping was after the violent episode, victimization was predicted by antecedents and interaction disagreements. Previous studies have demonstrated the underlying alertness of female IPV victims to IPV signals. DePierro, D'Andrea, and Pole (2013) showed that female IPV victims were more alert to IPV-related words, and this alertness was positively related to PTSD. However, the results of this study do not indicate an alertness explanation in the models with antecedents, resistance, and placating strategies as moderators.

The total scores for antecedents may not have predicted victimization due to the inclusion of fidelity disagreements, which do not correlate with victimization. As discussed, this may have been a product of the cultural unacceptance of infidelity by Turkish couples (Kumcağız & Dadashzadeh, 2017).

Table 2 Unstandardized coefficients and standard errors of the paths in Fig. 1

Figure number	Path													
	a		b		c		c'1		c'2		c'3		w	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
1a	0.79	0.62	0.02	0.02	0.44***	0.13	0.03	0.03	0.05	0.05	0.07	0.07	0.12**	0.04
1b	1.87**	0.64	0.01	0.02	0.59***	0.14	0.03	0.05	0.04	0.07	0.05	0.09	0.58*	0.23
1c	2.61***	0.47	0.01	0.02	0.59***	0.14	0.04	0.06	0.04	0.07	0.05	0.09	0.79*	0.37
1d	2.52***	0.55	0.01	0.02	0.59***	0.14	0.03	0.06	0.04	0.07	0.06	0.09	0.40*	0.20
1e	1.84**	0.56	0.01	0.02	0.59***	0.14	0.03	0.04	0.04	0.07	0.06	0.10	0.80**	0.25
1f	1.23	0.66	0.01	0.02	0.59***	0.14	0.02	0.04	0.04	0.07	0.06	0.10	0.60**	0.18
1 g	0.98	0.78	0.01	0.02	0.59***	0.14	0.02	0.04	0.04	0.07	0.06	0.10	0.74**	0.26

*$p < .05$, **$p < .01$, ***$p < .001$

The unexpected disappearance of the link between interaction disagreements and victimization when resistance and placating strategies were moderators needs further scrutiny. There seems to be a distinct pattern uniting these two strategies against the other four. The only distinction in the literature regarding IPV coping strategies is the distinction between private vs. public strategies (Goodman et al., 2003): private coping strategies comprise security planning, resistance, and placating, whereas public coping strategies comprise formal networks, legal strategies, and informal networks. Our findings roughly follow this distinction. In all models, including public strategies, interaction disagreements preceded victimization, whereas in two of the models with private strategies, they did not. It may be inferred that the role of security planning more resembled the role of public strategies in these models. When analyzing security planning coping strategy items, it could be said that security planning blurs the public vs. private distinction. Indeed, Cook and Goodman (2006) support the vagueness of this distinction. This may help explain why models featuring security planning reveal results similar to models with formal, legal, and informal network strategies.

However, there is still the question of why interaction disagreements did not predict victimization in the models containing resistance and placating strategies as moderators. The item analysis of the whole IPVSI features an alternative viewpoint. All formal, legal, and informal networks and security planning strategies are so-called post hoc strategies comprising planned actions, like *"I called a mental health counselor for myself."* In contrast, resistance and placating strategies are so-called reactive strategies comprising on-the-spot reactions, like *"I fought back verbally."* Therefore, female IPV victims heavily using these strategies may be less aware of the link between antecedents and IPV episodes. Moreover, they may also have a narrower definition of IPV acts and episodes, resulting in lower scores of victimization. Their low scores, which have narrow variance, may shadow the otherwise significant relationship between interaction disagreements and IPV. Since this article is the first known discussion to distinguish IPV coping strategies as either post hoc planned actions

Table 3 Unstandardized coefficients and standard errors of the paths in Fig. 2

Figure number	Path													
	a		b		c		c'1		c'2		c'3		w	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
2a	3.06***	0.41	<0.01	0.04	0.38**	0.13	<0.01	0.13	−0.01	0.09	−0.02	0.08	−0.12	<0.01
2b	3.50***	0.44	<0.01	0.03	0.56***	0.15	0.01	0.13	0.01	0.09	0.02	0.09	<0.01	0.01
2c	3.50***	0.44	0.02	0.03	0.59***	0.15	0.08	0.10	0.07	0.09	0.07	0.10	−0.01	0.01
2d	3.50***	0.44	−0.01	0.03	0.57***	0.14	−0.02	0.11	0.01	0.08	0.04	0.08	<0.01	0.01
2e	3.50***	0.44	0.02	0.03	0.55***	0.14	0.06	0.13	0.01	0.09	−0.04	0.10	−0.01	0.01
2f	3.50***	0.44	−0.05	0.04	0.49***	0.14	−0.17	0.12	−0.09	0.08	−0.01	0.09	0.01	0.01
2 g	3.50***	0.44	0.16	0.06	0.50**	0.15	0.45$^{\delta}$	0.22	0.21$^{\delta}$	0.12	−0.04	0.09	−0.04**	0.01

**$p < .01$, ***$p < .001$, δ: bootstrapping confidence intervals exclude zero

or simultaneous reactions, future research is needed to thoroughly understand the validity and inferences of this conceptual distinction.

Antecedents and interaction disagreements predicted psychological symptoms. Moreover, this prediction was prominent and was not affected by the temporal conceptualization of coping before or after the violent episode. Even though we know of no study in the literature that analyzes the relationship between antecedents and psychological symptoms, these results could be viewed as foreseeable when the positive relationships of antecedents and psychological symptoms with IPV are considered (Babcock et al., 2004a; Coker et al., 2002; Taşkale & Sertel-Berk, 2020). This positive relationship has been reported as more prominent in interaction disagreements compared with fidelity disagreements, which supports the results of the current study (Babcock et al., 2004a).

The literature contains repetitive and consistent results that show a significant and positive relationship between victimization and psychological symptoms (Coker et al., 2002). At first glance, the results of our study contradict this (except when the moderator was placating when the temporal conceptualization of coping was after the violent episode). However, the current study differs in that it includes antecedents and the interaction of antecedents and coping as well as IPV as predictors of psychological symptoms. Since both antecedents and the interaction between antecedents and coping strategies are significant predictors of victimization, they may have acted as victimization, pulling the variance onto themselves. This inference gained strength when the positive and significant correlations between victimization and psychological symptoms were considered. In line with this inference, when the same conceptual models were run with fidelity disagreements (which are not correlated with IPV) as predictors, psychological symptoms were significantly predicted by victimization (Taşkale, 2019b). As the data have no multicollinearity, antecedents and the interaction between antecedents and coping strategies may be said to mimic victimization. Therefore, interventions targeting antecedents and the interaction between antecedents and coping strategies may have the potential to affect victimization and psychological symptoms.

Limitations

The current study is the first known attempt to analyze simultaneous regressive relationships between antecedents of violence, IPV coping strategies, victimization, and psychological symptoms controlling for pathological personality beliefs. However, it contains some limitations. The most prominent limitation of our study is its attempt to make temporal inferences from cross-sectional research design. There has been no previous study to guide us in the mutual and simultaneous relationships between study variables. We thus had to demonstrate the efficacy of a model including our study variables in a cross-sectional design before moving to prospective longitudinal designs or implementations. This first attempt also helped us gain a high response rate. Also, possible compounding effects of time were eliminated. Our results support a new temporal conceptualization of coping as a precursor to the violent episode in interaction with antecedents to it. Future studies should attempt to uphold our study results by testing our model with longitudinal data that includes continuous measurement procedures. This novel study area, starting with the current study, will hopefully evolve to future implementations that focus on coping with the proximal antecedents of violence. We hope this intricate manipulation in the temporal conceptualization of coping will help us to increase the efficiency of implementations compared to the those used presently, which lack adequate significance or effectiveness (Babcock et al., 2004b; Miller et al., 2014; Tiwari et al., 2010).

A further point is that our study sample was mostly composed of middle-aged, heterosexual, and married female victims of situational couple violence. The current findings should not be generalized to other ages or violence groups or to the victims of intimate terrorism or violence resistance. In addition, we only used data from the victim's perspective; the inclusion of perpetrators and the dynamic between them would be helpful to clearly define the hot moment of IPV in future studies (Loeys, Cook, De Smet, Wietzker, & Buysse, 2014).

Another limitation of the study was relying on self-report measures. However, Kormos and Gifford (2014) stated that if studies use reliable and valid instruments, as in the current study, the use of self-report measures is preferable for measuring behaviors and actions because of their ease of use. We also checked for any social desirability bias, reaching violence scores comparable to other studies in the literature (Kahya & Taşkale, 2019; Straus, 2017). The current study applied a cross-sectional design; however, future cross-sectional, longitudinal, and experimental studies will help researchers foresee causal inferences.

Last, as reported in Figs. 1 and 2, the significance of a constant in the models predicting victimization and psychological symptoms may imply that there are other significant predictors not included as variables. Therefore, future studies should extend the current results via annexing more predictors from different levels (Stith et al., 2004). This will help practice nested ecological approaches.

Yet, the current study does have some strengths. First, it incorporated recent approaches of and measures for IPV explanations and coping (Babcock et al., 2004a; Goodman et al., 2003; Stith et al., 2004; Taşkale & Sertel-Berk, 2019, 2020), and it provides a new behavioristic conceptualization for IPV research incorporating event-based approaches and survivor theory. Similarly, the Turkish adaptations of these measures represent the first cross-cultural use of both. Therefore, the study creates a fresh perspective on IPV from a behaviorist and cross-cultural point of view.

As another strength, our study results present a cross-cultural implication for the measurement and conceptualization of fidelity disagreements. Similar to earlier studies, fidelity disagreements did not fit with the hypothesized model (Taşkale & Sertel-Berk, 2020). Turkish women seem to view infidelity to their husbands as culturally unacceptable and non-valid (Kumcağız & Dadashzadeh, 2017).

Lastly, IPV was measured encompassing all violence-related dimensions of the scale (the CTS2) in the current study. Even though constants predicting victimization and psychological symptoms were significant, the explained variances in the models were high compared to other national and international studies (Kahya, 2018; Stith et al., 2004; Taşkale & Soygüt, 2016; Taşkale & Soygüt, 2017). These results were obtained when the effects of pathological personality beliefs were canceled out and the effects of social desirability bias were checked for. Therefore, our behavioristic model posits a stronger effect size while explaining the victimization process.

Implications

This study states the availability of an event-based behavioristic perspective to understanding the occurrence of IPV. Further highlighting its theoretical importance, this fresh and explanatory powerful perspective also has implications for field practice. The current study helps social workers in terms of reframing the lived experiences of the victims. It presents a delicate portrayal of IPV victims' chaotic experiences. IPV victimization is a process where victimized women need to survive a process full of many ups and downs (Chang et al., 2010). Female IPV victims may feel obliged to endure current and future violence before they feel empowered to leave the violent relationship, and there may be barriers to leaving the relationship. They may decide not to leave the relationship because there are pros for its continuing. The current study indicates that coping with IPV involves a process in which efforts to cope increase as the violence escalates. So, the increasing need to cope with IPV does not signal inadequacy; rather, it indicates the spirit of a survivor who copes with the issue utilizing whatever means necessary. Female IPV victims try implicitly to understand the previous violent episodes to predict possible future occurrences during this process. Being able to see this complex and chaotic picture will help both victimized women and social workers to overcome their feelings of lack of success and inadequacy. Therefore, the dissemination and communication of the study results have the potential to help actors fighting against IPV to overcome emotional obstacles. Further, methods for coping with antecedents of violence may differ from those coping with the violent episode itself. Our study may thus present an alternative perspective to the current IPV interventions, most of which show no or minimal effect (Babcock et al., 2004b). Future interventions that follow our proposed model may provide a novel approach to combating violence against women. We anticipate this new approach will warrant future optimism for efficient results.

The current study can also help the way social workers intervene in IPV victimization. Following a behavior-focused model for understanding a violent episode between a couple presents a concrete and easy-to-intervene model for social workers in the field. The concrete operational nature of behavioristic approaches will aid social workers in communicating the problem with victims, and the methods for coping with antecedents may differ from those for coping with the violent episode itself.

Conclusion

The study results reveal the suitability of transactional theories from a behavioristic perspective to study coping with IPV. The interaction between antecedents and post hoc planned coping strategies strongly predicts the occurrence of IPV and is, thus, a starting point from which to consider affecting the IPV process. Since earlier studies have revealed a relatively negligible impact of IPV intervention studies (e.g., Babcock et al., 2004b), it would be informative to test the efficacy of intervention models following these behavior-oriented event-based approaches.

Data Availability The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declaration

Conflict of Interest On behalf of all authors, the corresponding author states that there are no conflicts of interest.

References

Aba, Y., & Kulakaç, Ö. (2016). Çatışmaların Çözümüne Yaklaşım Ölçeği: Geçerlik ve güvenirlik çalışması [The revised conflict tactics scales (CTS2): Validity and reliability study]. *Bakırköy Tıp Dergisi [Medical Journal of Bakırköy], 12*(1), 33–43.

Akın, A. (2010). İki Boyutlu Sosyal İstenirlik Ölçeğinin geliştirilmesi ve psikometrik özelliklerinin araştırılması [Two-Dimensional Social Desirability Scale: The study of validity and reliability]. *Gazi Üniversitesi Eğitim Fakültesi Dergisi [Gazi University Faculty of Education Journal], 30*(3), 771–784.

Babcock, J. C., Costa, D. M., Green, C. E., & Eckhardt, C. I. (2004a). What situations induce intimate partner violence? A reliability and validity study of the proximal antecedents to violent episodes (PAVE) scale. *Journal of Family Psychology, 18*(3), 433–442.

Babcock, J. C., Green, C. E., & Robie, C. (2004b). Does batterers' treatment work? A meta-analytic review of domestic violence treatment. *Clinical Psychology Review, 23*(8), 1023–1053.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*(7), 513–531.

Buss, D. M., & Shackelford, T. K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology, 72*(2), 346–361.

Butler, A. C., Beck, A. T., & Cohen, L. H. (2007). The personality belief questionnaire-short form: Development and preliminary findings. *Cognitive Therapy and Research, 31*(3), 357–370.

Byun, S. (2012). What happens before intimate partner violence? Distal and proximal antecedents. *Journal of Family Violence, 27*(8), 783–799.

Campbell, J. C. (2002). Health consequences of intimate partner violence. *The Lancet, 359*, 1331–1336.

Chang, J. C., Dado, D., Hawker, L., Cluss, P. A., Buranosky, R., Slagel, L., McNeil, M., & Scholle, S. H. (2010). Understanding turning points in intimate partner violence: Factors and circumstances leading women victims towards change. *Journal of Women's Health, 19*(2), 251–259.

Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Brandt, H. M., & Smith, P. H. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine, 23*(4), 260–268.

Cook, S. L., & Goodman, L. A. (2006). Beyond frequency and severity: Development and validation of the brief coercion and conflict scales. *Violence Against Women, 12*(11), 1050–1072.

DePierro, J., D'Andrea, W., & Pole, N. (2013). Attention biases in female survivors of chronic interpersonal violence: Relationship to trauma-related symptoms and physiology. *European Journal of Psychotraumatology, 4*(1), 19135.

Derogatis, L. R. (1993). *The brief symptom inventory (BSI): Administration, scoring, and procedures manual*. Minneapolis: National Computer Services.

DeWall, C. N., Finkel, E. J., Lambert, N. M., Slotter, E. B., Bodenhausen, G. V., Pond Jr., R. S., et al. (2013). The voodoo doll task: Introducing and validating a novel method for studying aggressive inclinations. *Aggressive Behavior, 39*, 419–439.

Dutton, D. G. (1995). *The domestic assault of women: Psychological and criminal justice perspectives*. Vancouver, BC: UBC Press.

Dutton, M. A., Green, B. L., Kaltman, S. I., Roesch, D. M., Zeffiro, T. A., & Krause, E. D. (2006). Intimate partner violence, PTSD, and adverse health outcomes. *Journal of Interpersonal Violence, 21*(7), 955–968.

Eisikovits, Z. (1996). The aftermath of wife beating: Strategies of bounding violent events. *Journal of Interpersonal Violence, 11*(4), 459–474.

Fastame, M. C., Penna, M. P., & Hitchcott, P. K. (2015). Life satisfaction and social desirability across the late life span: What relationship? *Quality of Life Research, 24*(1), 241–244.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149–1160.

Flynn, A., & Graham, K. (2010). "Why did it happen?" a review and conceptual framework for research on perpetrators' and victims' explanations for intimate partner violence. *Aggression and Violent Behavior, 15*, 239–251.

Gondolf, E. W., & Fisher, E. R. (1988). *Battered women as survivors. An alternative to treating learned helplessness*. Toronto: Lexington Books.

Goodman, L., Dutton, M. A., Weinfurt, K., & Cook, S. (2003). The intimate partner violence strategies index: Development and application. *Violence Against Women, 9*, 163–186.

Goodman, L. A., Smyth, K. F., Borges, A. M., & Singer, R. (2009). When crises collide: How intimate partner violence and poverty intersect to shape women's mental health and coping? *Trauma, Violence, & Abuse, 10*(4), 306–329.

Hamby, S. (2009). The gender debate about intimate partner violence: Solutions and dead ends. *Psychological Trauma: Theory, Research, Practice, and Policy, 1*(1), 24–34.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). NY: Guilford Press.

Heaney, C. A., & Israel, B. A. (2008). Social networks and social support. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research and practice* (4th ed., pp. 189–210). San Francisco: Jossey-Bass.

Joenssen, D. W., & Bankhofer, U. (2012, July). Hot deck methods for imputing missing data. In *International workshop on machine learning and data mining in pattern recognition* (pp. 63–75). Berlin: Springer.

Kahya, Y. (2018). Intimate partner violence victimization and perpetration in a Turkish female sample: Rejection sensitivity and hostility. Journal of Interpersonal Violence. Advance online publication. 088626051878649.

Kahya, Y., & Taşkale, N. (2019). The difficulties in emotion regulation, separation anxiety and impulsivity as predictors of women's intimate partner violence experiences. *Dusunen Adam: The Journal of Psychiatry and Neurological Sciences, 32*, 101–112.

Kelly, J. B., & Johnson, M. P. (2008). Differentiation among types of intimate partner violence: Research update and implications for interventions. *Family Court Review, 46*(3), 476–499.

Kendall-Tackett, K. (2009). Psychological trauma and physical health: A psychoneuroimmunology approach to etiology of negative health effects and possible interventions. *Psychological Trauma: Theory, Research, Practice, and Policy, 1*(1), 35–48.

Klem, L. (2000). Structural equation modeling. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 227–260). Washington, DC: American Psychological Association.

Kormos, C., & Gifford, R. (2014). The validity of self-report measures of proenvironmental behavior: A meta-analytic review. *Journal of Environmental Psychology, 40*, 359–371.

Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (2002). *World report on violence and health*. Geneva: World Health Organization.

Kumcağız, H., & Dadashzadeh, R. (2017). Attitudes and correlates of Turkish college students in relation to female honour. *Journal of Education Practice, 8*(4), 121–128.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.

Lewis, C. S., Griffing, S., Chu, M., Jospitre, T., Sage, R. E., Madry, L., & Primm, B. J. (2006). Coping and violence exposure as predictors of psychological functioning in domestic violence survivors. *Violence Against Women, 12*(4), 340–354.

Loeys, T., Cook, W., De Smet, O., Wietzker, A., & Buysse, A. (2014). The actor-partner interdependence model for categorical data: A user friendly guide to GEE. *Personal Relationships, 21*, 225–241.

Melton, H. C., & Belknap, J. (2003). He hits, she hits: Assessing gender differences and similarities in officially reported intimate partner violence. *Criminal Justice and Behavior, 30*(3), 328–348.

Miller, L. E., Howell, K. H., & Graham-Bermann, S. A. (2014). The effect of an evidence-based intervention on women's exposure to intimate partner violence. *American Journal of Orthopsychiatry, 84*(4), 321–328.

Mkandawire-Valhmu, L., Bauer, W. S., Stevens, P. E., Galvao, L. W., Grande, K. M., Yerges, A., Emer, L., Mwenyekonde, T., & Weinhardt, L. (2016). Rural Malawian women's resistance to systematic oppression, violence, and abuse by their husbands. *Journal of Interpersonal Violence, 35*(1–2), 268–293.

Riggs, D. S., Caulfield, M. B., & Street, A. E. (2000). Risk for domestic violence: Factors associated with perpetration and victimization. *Journal of Clinical Psychology, 56*(10), 1289–1316.

Spencer, C. M., Stith, S. M., & Cafferky, B. (2019). Risk markers for physical intimate partner violence victimization: A meta-analysis. *Aggression and Violent Behavior, 44*, 8–17.

Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression and Violent Behavior, 10*, 65–98.

Straus, M. A. (2017). The conflict tactics scales and its critics: An evaluation and new data on validity and reliability. In *Physical violence in American families* (pp. 49–74). New York: Routledge.

Straus, M. A., Hamby, S. L., McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*, 283–316.

Swan, S. C., & Sullivan, T. P. (2009). The resource utilization of women who use violence in intimate relationships. *Journal of Interpersonal Violence, 24*(6), 940–958.

Şahin, N. H., & Durak, A. (1994). Kısa Semptom Envanteri: Türk genÇleri iÇin uyarlanması [brief symptom inventory: Adaptation for Turkish young people]. *Türk Psikoloji Dergisi [Turkish Psychology Journal], 9*, 44–56.

Taşkale, N. (2019a, July). Suitability of behaviorist perspectives to study coping with intimate partner violence. In *Oral presentation, the 16th European congress of psychology (ECP)*. Moscow: Russia.

Taşkale, N. (2019b). *Şiddet mağduriyeti ve sağlık sonuçları arasındaki ilişkide kullanılan başa çıkma yöntemlerinin biçimlendirici rolü [The moderator role of coping strategies in the relationship between violence victimization and health outcomes]* (unpublished doctoral dissertation). Istanbul University, Istanbul.

Taşkale, N., & Sertel-Berk, Ö. (2019). Eş Şiddetine Karşı Yöntemler Endeksi'nin (EŞYE) Türkçe geçerlik ve güvenirlik çalışması [The Turkish validity and reliability study of the Intimate Partner Violence Strategies Index (IPVSI)]. *Klinik Psikoloji Dergisi [Journal of Clinical Psychology Research], 3*(2), 69–91.

Taşkale, N., & Sertel-Berk, H. Ö. (2020). Şiddet Olaylarının Yakın Öncülleri Ölçeği Mağdur Formu'nun (ŞOYÖM) Türkçe geçerlik ve güvenirlik çalışması [the Turkish validity and reliability study of the proximal antecedents to violent episodes victim form (PAVEV)]. *Klinik Psikoloji Dergisi [Journal of Clinical Psychology Research], 4*(1), 12–33.

Taşkale, N., & Soygüt, G. (2016). Kadın sığınma evlerinde kalan şiddet mağduru kadınlar: Demografik ve sosyoekonomik bir inceleme [Shelter-residing violence victim women: A demographic and socioeconomic examination]. *Türk Psikoloji Yazıları [Turkish Psychological Articles], 19*(Special Issue), 3–15.

Taşkale, N., & Soygüt, G. (2017). Risk factors for women's intimate partner violence victimization: An examination from the perspective of the Schema therapy model. *Journal of Family Violence, 32*(1), 3–12.

Tausig, M., Subedi, J., Broughton, C., Pokimica, J., Huang, Y., & Santangelo, S. L. (2011). The continued salience of methodological issues for measuring psychiatric disorders in international surveys. *International Journal of Mental Health and Addiction, 9*, 229–239.

Taymur, İ., Türkçapar, M. H., Örsel, S., Sargın, E., & Akkoyunlu, S. (2011). Kişilik İnanç Ölçeği-Kısa Formunun (KİÖ-KF) Türkçe çevirisinin üniversite öğrencilerinde geçerlilik, güvenirliği [validity and reliability of the Turkish version of the personality belief questionnaire- short form (PBQ-SF) in the university students]. *Klinik Psikiyatri [Clinical Psychiatry], 14*, 199–209.

Tiwari, A., Fong, D. Y. T., Yuen, K. H., Yuk, H., Pang, P., Humphreys, J., & Bullock, L. (2010). Effect of an advocacy intervention on mental health in Chinese women survivors of intimate partner violence: A randomized controlled trial. *JAMA, 304*(5), 536–543.

Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and Victims, 4*, 159–177.

TÜİK. (n.d.). *İşgücü girdi, işgücü maliyeti ve kazanç istatistikleri [Labor force input, labor cost and earnings statistics]*. Retrieved from: http://www.tuik.gov.tr/PreTablo.do?alt_id=1008. Retreived on 16.12.2020.

Visschers, J., Jaspaert, E., & Vervaeke, G. (2017). Social desirability in intimate partner violence and relationship satisfaction reports: An exploratory analysis. *Journal of Interpersonal Violence, 32*(9), 1401–1420.

Wilkinson, D. L., & Hamerschlag, S. J. (2005). Situational determinants in intimate partner violence. *Aggression and Violent Behavior, 10*, 333–361.

World Health Organization Global Consultation on Violence and Health. (1996). *Violence: A public health priority*. Geneva: World Health Organization. (document no: WHO/EHA/ SPI.POA.2).

Zakar, R. (2012). *Intimate partner violence against women and its implications for women's health in Pakistan*. Hamburg: Disserta Verlag.

Zanville, H. A. (2006). The relationship between risk and coping among survivors of intimate partner violence. (Unpublished Ph. D. Dissertation). VA, USA: Goerge Mason University.

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