



The role of anxious attachment in the continuation of abusive relationships: The potential for strengthening a secure attachment schema as a tool of empowerment

Ayşe I. Kural^{a,*}, Monika Kovacs^b

^a Doctoral School of Psychology, ELTE Eötvös Loránd University, Budapest, Hungary

^b Institute of Intercultural Psychology and Education, ELTE Eötvös Loránd University, Budapest, Hungary

ARTICLE INFO

Keywords:

Attachment
Attachment anxiety
Security priming
Empowerment
Intervention

ABSTRACT

Remaining in an abusive relationship is a strong risk factor for (re)victimization. Due to the relational nature of intimate partner violence attachment theory offers a useful framework for better understanding its dynamics. Within two studies we worked on individual differences regarding imagined attitudes when confronted with intimate partner violence as being the victim. Our first study showed that high level of attachment anxiety is a risk factor for willingness to remain when imagining a hypothetical abusive relationship incidence. The second study presented the effectiveness of security priming in reducing the willingness to remain when imagining being in an abusive relationship and showed that this effect was the strongest in the case of participants with higher levels of attachment anxiety. These findings extend our understanding of the dynamics behind remaining in an abusive relationship and suggest the use of attachment security schemas as an effective technique for inclusion in interventions against (re)victimization.

1. Introduction

The Center for Disease Control and Prevention define intimate partner violence (IPV) as “physical violence, sexual violence, stalking and psychological aggression (including coercive tactics) by a current or former intimate partner (i.e., spouse, boyfriend/girlfriend, dating partner, or ongoing sexual partner)” (Breiding et al., 2015, p. 11). Intimate partner violence is one of the most important public health problems that affects mostly women around the world (World Health Organization, 2018). It is important to focus on the dynamics that lead IPV victims to stay with an abusive partner, because they are subject to physical as well as mental health consequences, including depression, generalized anxiety disorder, post-traumatic stress disorder, inability to work, unwanted pregnancies, miscarriages, and bruises (Anderson, 2008; Cavanaugh et al., 2012). Additionally, IPV is commonly repetitive and its severity as well as frequency tends to increase along with the duration of the relationship (Cochran et al., 2011). In this sense, staying with an abusive partner might increase the risk for (re) victimization and knowledge about the risk factors that contribute to women having repeated experiences of IPV is relatively scarce (Smith & Stover, 2016). To the best of our knowledge, no previous study has empirically tested

an integrative model of the association between IPV and individual differences regarding attachment orientations. Considering the relational nature of IPV and drawing on adult attachment theory, our aim was to explore the underlying factors that contribute to the continuation of a relationship in the presence of IPV. Furthermore, we believe that fostering greater secure attachment patterns among (potential) victims can be combined with other interventions as an effective technique for preventing the recurrence of IPV.

Adult attachment theory is widely applied in this field of research, especially in terms of explaining individual differences (Barbaro et al., 2019). Building on Bowlby's attachment theory (1969), adult attachment theory proposes that internal working models (IWMs)—which provide us with expectations of ourselves or others and which are developed by interactions with caregivers—are carried into future relationships and regulate the functioning of adult relationships. Internal working models reflect the extent to which individuals believe themselves worthy of love and attention from others (the *self-model*) and the extent to which they believe that others will relate to them in a responsive and supportive way (the *other model*) (Henderson et al., 2005). In this sense, adult attachment theory highlights the importance of attachment experiences in early development as a tool that strongly

* Corresponding author at: Eötvös Loránd University, Kazinczy u. 23-27, Budapest 1075, Hungary.

E-mail address: iraz.kural@ppk.elte.hu (A.I. Kural).

<https://doi.org/10.1016/j.actpsy.2022.103537>

Received 17 November 2021; Received in revised form 8 February 2022; Accepted 12 February 2022

Available online 23 February 2022

0001-6918/© 2022 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

influences an individual's ability to establish interpersonal bonds later in life. There is therefore a risk that, as a result of insensitive and inconsistent caregiving, an individual will inherit inappropriate levels of both giving and receiving care, including overdependency or underinvolvement behaviors. Ultimately, the quality of close relationships is due to these IWMs (Feeney, 2008) and IWMs are closely related with essential components of romantic relationships like conflict management and relational aggression (Riggs, 2010).

Research suggests that adult attachment can best be described according to two orthogonal dimensions— attachment avoidance and attachment anxiety with respect to the “deactivation” and “hyperactivation” of the attachment system (Brenner et al., 2021; Mikulincer & Shaver, 2016). Attachment avoidance is characterized by feelings of fear and discomfort with respect to intimacy, as well as high self-reliance and the refusal of dependency on others. Attachment anxiety, on the other hand, reflects a fear of rejection and abandonment, as well as a preoccupation with relationships and intimacy. Individuals that are placed low on the scale of both these dimensions fall into the secure attachment category, whereas others with high levels of anxiety or avoidance are categorized as being insecurely attached (Cassidy & Shaver, 2016).

Dutton and White (2012) explain how attachment theory plays a role in IPV. Studies have shown that many of the individuals who experience IPV demonstrate insecure attachment orientations (Ogilvie et al., 2014; Ponti & Tani, 2019), and these orientations predict both the perpetration of IPV and IPV victimization (Bélanger et al., 2015). For example, compared to their counterparts, individuals high in attachment anxiety are at higher risk of IPV perpetration. Because of their disturbed affect regulation and cognition, they use IPV as a tool to provide proximity when their fear of loss is activated (Barbaro et al., 2019). Individuals high in attachment avoidance, on the other hand, might deliberately use aggressive behaviors or other abusive strategies to control and intimidate their partners, and to prevent them from providing proximity (Gormley & Lopez, 2010).

Despite the extensive body of research on attachment and IPV perpetration, comparatively few studies have been carried out on victimization and attachment. Higher levels of attachment anxiety have been linked to recurrent IPV victimization among women, as it leaves women with a wide range of relational vulnerabilities (Velotti et al., 2018). As attachment anxiety predisposes women to fear separation and abandonment, women high in attachment anxiety have difficulty leaving abusive relationships (Allison et al., 2008; Finkel & Slotter, 2007; Henderson et al., 2005; Shurman & Rodriguez, 2006). Doumas et al. (2008) stated that individuals high in attachment anxiety tend to tolerate violence as a tool to provide proximity—that is, negative treatment might seem more endurable by individuals high in attachment anxiety over perceived emotional distance, separation threats, or actual disengagement.

Furthermore, IPV may function as a tool of affirmation/validation for individuals with high attachment anxiety in terms of their perception of the self and of others. In their study on IPV, childhood maltreatment, attachment styles, and depressive symptoms among women, Smagur et al. (2018) reported that women interpret IPV in a way that is congruent with their negative working models of the self, and that IPV maintains working models that result from childhood maltreatment. From a different perspective, anxiously attached individuals' predominant IWM of the self as unworthy or undeserving of love may “justify” the abuse directed at them (Henderson et al., 2005). As Sandberg et al. (2016) stated, for individuals high in attachment anxiety, a caring and loving relationship might seem unattainable. In some cases, staying with an abusive partner might involve traumatic reenactment of unresolved attachment experiences (Pearlman & Courtois, 2005; van der Kolk, 1996).

1.1. Overview

The present research offers an empirical contribution to our

knowledge of the links between attachment orientations and willingness to stay in an abusive relationship, which is a field that has been insufficiently studied to date. By means of two studies, we explored whether attachment anxiety is a risk factor for remaining in the abusive relationship. In the two studies, the term “abusive relationship” was defined as a relationship in which physical IPV is present, and willingness to stay in the relationship (WSR) is here synonymous with imagining oneself as the victim and imagining oneself supporting the continuation of the relationship despite IPV. What is more, the present study focused on females. Even though IPV rates did not differ among men and women (Straus, 2008), female victims were more likely to suffer more severe consequences (Caldwell et al., 2012; Nybergh et al., 2013; Stöckl et al., 2013), to be injured (Jasinski et al., 2014), and report more physical as well as emotional impairment (Askeland & Heir, 2013).

We are fully aware that a victim is not responsible for the victimization. Following Cattaneo and Goodman's (2005) suggestion, we believe it is important to investigate the risk factors because information about these factors may help practitioners guide (potential) victims in decision making and safety planning and inform the prevention of future IPV relationships. What is more, we also are aware that the variables included in the present study do not fully cover all the dynamics that contribute to the persistence on an abusive relationship (e.g. Capaldi et al., 2012; Pereira et al., 2020). Furthermore, we worked with a non-clinical sample (not with actual survivors of IPV) and based our research on participants' assumptions as discussed with the limitations in the end.

2. Study 1

Adopting methods used by earlier researchers (e.g., Bohner et al., 2010; Ramos et al., 2016), in Study 1 participants were asked to read about an IPV incident involving a fictional friend and they were informed about their friends' decision of leaving the partner. Attachment anxiety predisposes individuals to fear of interpersonal rejection or abandonment, distress, and excessive pursuit of the partner when one's partner is unavailable or unresponsive unlike the individuals high in attachment avoidance, who tend to withdraw from their partners under relationship stress (Cassidy & Shaver, 2016). Considering these patterns, we expect a tendency to stay in the relationship for individuals with greater attachment anxiety but not for attachment avoidance. Indeed, it has been hypothesized that high levels of attachment anxiety among victims of IPV may make it more difficult to leave an abusive relationship (Mikulincer & Shaver, 2016; Park, 2016). In Study 1, we therefore examined whether individuals with attachment difficulties are at increased risk for experiencing IPV by investigating the association between attachment orientations and keeping an abusive relationship.

2.1. Method

2.1.1. Participants

Taking into consideration that we wanted to use multiple regression analysis, inputting a small-to-medium interaction effect size ($\eta^2 = 0.035$) into G*Power determined a sample size of 132 at 95% power (Gravetter & Wallnau, 2007). We included only women who stated they were single, in order to avoid any effect of present relationship patterns, and older than 18. Participants included 150 females (*Mage* = 38.59 years, *SDage* = 12.77 years). Among these participants, 78% were university graduates, whereas 8.7% were high school graduates, 4.7% were university students, 8.7% was other. Within the sample, 84% were Turkish, 16% were Hungarian.

2.2. Procedure

We designed the study using Qualtrics questionnaire design software, and we advertised it on various Facebook pages as a study on “the preferences for a potential romantic partner.” Participation was voluntary. Ethical approval was provided by Eötvös Loránd University.

Participants were first presented with an attachment style questionnaire. Then a scenario (incident) was presented, in which an imaginary close friend was being physically abused by her partner and participants were informed of their friend's decision to leave her partner. Finally, they were provided with willingness to stay in relationship questionnaire. The last questionnaire required answers as if the participants were the victimized close friend. The survey took 10 to 20 min to complete.

2.2.1. Measurements

2.2.1.1. Attachment styles. We used the Experiences in Close Relationships-Revised (ECR-R) scale (Fraley et al., 2000). This 36-item scale comprises 18 attachment anxiety items (e.g., "I'm afraid that I will lose my partner's love"; $\alpha = 0.94$) and 18 attachment avoidance items ("I get uncomfortable when a romantic partner wants to be very close"; $\alpha = 0.95$). Items are scored on a 7-point scale, where higher scores indicate a higher level of anxious and avoidant attachment (1 = strongly disagree, 7 = strongly agree). Low scores on both subscales indicate secure attachment.

2.2.1.2. Scenario. All participants were presented with this scenario; "Imagine that you have a close friend named Mary. One day, when you are spending time together, she confides in you that her partner, Jacob, lost control of his anger during a recent disagreement. Jacob became so angry that he beat Mary. This is not the first time that Mary has confided in you about Jacob's anger and violent behavior; in fact, Mary has discussed with you a similar situation several times in the past. After what happened, Mary told you that she has decided to break up with him."

2.2.1.3. Willingness to stay in the relationship. The assessment scale was developed for the present study. Six items were used to assess how participants would react to the incident if they were the victimized close friend (i.e., Mary)—that is, the extent of their willingness to stay in the relationship (e.g., "If I were her, I'd give him another chance"; $\alpha = 0.79$). A principal component analysis with a varimax rotation was conducted on the 6 items with the present data and a one-factor solution (based on eigenvalues >1) was yielded. All items accounted for 48% of the variance and they all loaded at 0.50 or higher on the factor (see Tables S1 and S2 in Supplementary Material).

2.3. Results and discussion

Table 1 presents bivariate correlations, means, and standard deviations. Recall that the participants answered questions on the WSR as if they were the victim and questions on the ECR about their own attitudes in relationship. In order to determine the association between WSR and attachment orientations, we conducted bivariate correlational analyses. Our findings were in line with our expectations that attachment anxiety and avoidance were positively related with WSR. Indeed, as attachment anxiety or avoidance increased so too did participants' imagined willingness to stay in the relationship.

2.3.1. Willingness to stay in the relationship

We determined the predictive value of each independent variable on willingness to stay in the relationship using hierarchical regression analysis (see Table 2). The overall regression model was significant, $F(6,$

Table 1
Study 1: means, standard deviations and correlations for all variables.

	Mean	SD	1	2	3
1. Attachment anxiety	2.97	1.40	–	0.47**	0.35**
2. Attachment avoidance	2.94	1.24		–	0.22**
3. WSR	1.71	0.79			–

Note. $N = 150$; WSR: willingness to stay in the relationship.
** $p < .001$.

Table 2
Study 1: Hierarchical Multiple Linear Regression Analysis for WSR.

Variables	Step 1 (β)	Step 2 (β)	WSR			
			t-Test		95% CI	
			Step 1	Step 2	Step 1	Step 2
Age	0.01	0.11	0.12	1.31	[-0.01, 0.11]	[-0.01, 0.01]
Education	-0.15	-0.17*	-1.86	-2.16	[-0.21, 0.01]	[-0.21, -0.01]
Attachment anxiety		0.34**		3.82		[0.09, 0.29]
Attachment avoidance		0.06		0.75		[-0.07, 0.15]
F	1.79	6.73**				
R ²	0.02	0.15				
ΔR^2		0.13				

Note. $N = 150$; β : standardized coefficients, WSR: willingness to stay in the relationship, CI: confidence interval. * $p > .05$, ** $p < .001$

144) = 0.68, $p < .001$, $R^2 = 0.21$; indicating that the predictors taken together accounted for 21% of the variance in WSR. Attachment anxiety positively and significantly predicted WSR, whereas attachment avoidance did not. Attachment anxiety presented the strongest predictive value for WSR. That is, individuals high in attachment anxiety had the strongest tendency to imagine themselves staying in the relationship.

Our findings of Study 1 were consistent with Cross and Overall's (2018) results which indicated that individuals with high attachment anxiety have a greater tendency to imagine themselves staying in the relationship. Despite the presence of IPV, anxiously attached women imagined staying in the relationship more than avoidantly attached women. Negative views of self, a fixation on separation anxiety, and the excessive need for relationship security that comes with attachment anxiety seem to interfere with IPV perception and tend to result in the imagined continuation of the abusive relationship. On the other hand, IPV may work as a tool for maintaining contact, which is preferred over detachment/break-up that represents a strong threat of separation among individuals with high attachment anxiety (see Velotti et al., 2018). The null finding regarding attachment avoidance and imagined willingness to keep the relationship is complementary with regards to IWMs individuals with high levels of attachment avoidance have. These individuals have a negative view for others as well as repressed relationship needs. Thus, because avoidant individuals show excessive self-reliance and a tendency to withdraw from relationships under relationship stress (Mikulincer & Shaver, 2011), the WSR items might be irrelevant for them.

3. Study 2

The main limitation of Study 1 was its correlational design, which does not allow for the assessment of causality. Study 2 aimed to investigate whether the findings from Study 1 would be reinforced by an experimental design. The association between attachment insecurity and willingness to stay in the abusive relationship in Study 1 suggested a link between attachment security enhancement and leaving the abusive relationship. Indirect evidence (i.e., more positive views of the self and less attachment anxiety, Carnelley & Rowe, 2007) suggests that enhancing attachment security may indeed serve as a technique to enhance the rejection of an abusive relationship. Researchers have demonstrated that security priming alters attachment anxiety, relationship expectations, and views of the self, as well as physiological reactions to perceived threats (Carnelley & Rowe, 2007; Norman et al., 2015; see also Park, 2016). Specifically, we aimed to expand our finding that attachment anxiety appears to be the strongest predictor for staying in an abusive relationship by comparing two conditions: attachment security priming and neutral priming.

Building on the conclusion drawn by Park (2016) that having skills to

maintain secure and supportive relationships would make women less likely to remain in an abusive relationship, in our second study we investigated whether shifting attention to times when attachment needs were met might support this recommendation. Attachment security priming (also known as secure base priming or security priming) involves the clinical or experimental activation or inducement of a secure attachment style using various explicit or implicit methods, including guided visualizations, recall, and the presentation of visual stimuli (Mikulincer & Shaver, 2015; Norman et al., 2015). Accordingly, Roisman et al. (2002) concluded that “earned secure” individuals perform as well as “secure” (i.e., those who are secure from infancy). Also, these authors mentioned that “earned secure” individuals are not only able to overcome their childhood negative experiences, but in applied contexts (relationship break-ups, parenting of their own kids) they perform as well as their “secure” counterparts. Research has shown that attachment security priming has direct and indirect positive impacts. Indeed, Norman et al. (2015) found that attachment security priming modulates the threat-related amygdala reactivity that enhances anxiously attached individuals' fixation on the threat of separation. Accordingly, security priming has been shown to increase attachment security (Lin et al., 2013), which is associated with balanced self-representation (e.g., Psouni et al., 2015), engagement in constructive coping (Psouni & Apetroaia, 2014), self-compassion, and resilience (Oehler & Psouni, 2019).

Corvo et al. (2018) proposed attachment security priming as a possible and effective intervention technique for IPV. Altering IWMs that are negatively predisposed towards the self may enable actual or prospective victims to obtain the skills required to meet attachment needs in ways that are not at the cost of their well-being. Considering the extent to which attachment anxiety, fear of abandonment, and negative evaluations of the self can be attenuated by shifting attention to moments when attachment needs were fulfilled—that is, by evoking attachment security schemas—it may be possible to empower victims.

The findings from Study 1 suggested that attachment anxiety might contribute to hesitancy in terms of rejecting an abusive relationship—that is, attachment anxiety seems to interfere with the way in which an abusive partner is perceived. Study 2 addressed these findings by making the individuals' feelings of being valued, cared for, loved, and secure in a relationship more explicit. We assessed willingness to stay in an abusive relationship across the two different priming conditions (security or neutral). We predicted that exposing individuals to attachment security priming, as compared to neutral priming would result in an increased tendency to reject an abusive partner. We believe that helping women to develop and evoke secure attachment schemas—for example by means of psychological help or self-help groups—can encourage them to reject an abusive relationship by empowering them. Drawing on indirect evidence (i.e., more positive views of the self and less attachment anxiety, Carnelley & Rowe, 2007), we argue that evoking secure schemas using various priming methods can be a powerful and effective technique for inclusion in IPV interventions.

3.1. Method

3.1.1. Participants

Taking into consideration that we would use independent-samples *t*-tests to compare two conditions (secure vs. neutral), inputting a small-to-medium interaction effect size ($\eta^2 = 0.035$) into G*Power determined a sample size of 110 at 95% power. Participants included 230 females (*M*_{age} = 28.77, *SD*_{age} = 9.44, range 18–63). Among these participants, 62.1% were university graduates and the rest were university students. Within the sample, 67% of participants were from Hungary, 14% from Turkey, the rest from Poland, Romania, and Serbia.

3.1.2. Design and procedure

The questionnaire was administered using Qualtrics questionnaire design software. Ethical approval was given by the relevant authority at

the Eötvös Lorand University. We advertised the study on various social media platforms as being related to visualization skills. Participation was voluntary. Participants were first presented with the same demographic questions and the attachment orientations questionnaire from Study 1. Following 5 min distractor task, participants were randomly assigned to one of two experimental conditions (security vs. neutral priming) in a between-subjects design. We then presented the scenario used in Study 1 and participants completed the Willingness to Stay Questionnaire. It took 20 to 30 min to complete whole survey.

3.1.3. Measurements

3.1.3.1. Attachment style. Participants completed the same attachment style scale as in Study 1 (for anxiety, $\alpha = 0.92$; for avoidance, $\alpha = 0.89$).

3.1.3.2. Distractor task. To prevent any biasing effect in the first set of the survey, we presented imaginary research that shifted attention away from relationships. The supposed research was about cats and how they imitate human behavior (see Supplementary Material). Participants then answered three open-ended questions (e.g., “How can we improve our research?”)

3.1.3.3. Priming conditions. Participants in the secure condition were asked to visualize and write about one of their secure relationships for 10 min (adapted from Bartz & Lydon, 2004, see Supplementary Material) and how they feel when with her or him. Participants in the neutral condition visualized and wrote for 10 min about their last visit to a supermarket (Mikulincer & Shaver, 2001), which was followed by open-ended questions: e.g., “What was the name of the imagined store?” and “What were you shopping for?”

3.1.3.4. Willingness to stay in the relationship. Participants completed the same WSR scale as in Study 1 ($\alpha = 0.73$).

3.2. Results

Table 3 presents bivariate correlations, means, and standard deviations. Again, recall that the WSR was answered as if the participants were the victim and the ECR was completed reflecting on participants' own attitudes in relationship. To ensure that our findings were not caused by baseline attachment scores, we conducted independent *t*-test analyses on attachment orientations. None of the attachment orientations differed significantly across the two manipulation conditions, anxiety $t(229) = -0.15, p = .879$; avoidance $t(229) = -1.31, p = .191$. In order to determine the associations between attachment orientations and WSR, we conducted bivariate correlational analyses. As in the Study 1, attachment anxiety and attachment avoidance were positively related with WSR, such that individuals who are high in attachment anxiety or avoidance imagined staying in the relationship more than those who were low.

Furthermore, and as expected, participants in the secure priming condition ($n = 96$) reported lower levels of willingness to stay in the relationship compared to participants in the neutral condition (see Fig. 1). The independent *t*-test results showed the aforementioned difference between the two conditions to be statistically significant, $t(229)$

Table 3
Study 2: means, standard deviations and correlations for all variables.

		Mean	SD	1	2	3
1.	Attachment anxiety	2.96	1.15	–	0.48**	0.13*
2.	Attachment avoidance	2.69	0.93		–	0.16*
3.	WSR	1.34	0.51			–

Note. *N* = 230; WSR: willingness to stay in the relationship.

* $p < .05$.

** $p < .001$.

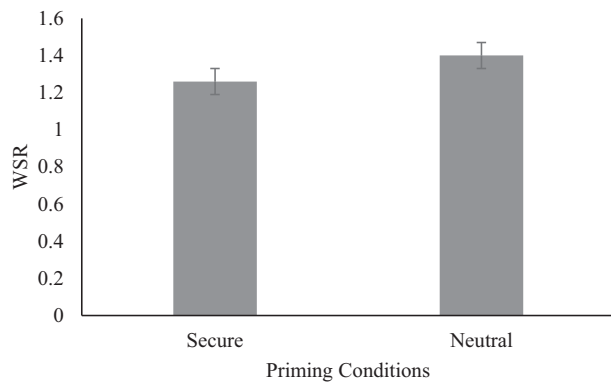


Fig. 1. Study 2: The WSR levels for priming conditions. Note. Error bars represent standard errors of the means.

= -2.02, $p = .045$.

3.2.1. Moderating role of attachment orientations

We also tested for several moderation models using the bootstrapping PROCESS approach of Hayes (2013; Model 1) to examine whether attachment orientation moderates the association between security priming and WSR. We found that attachment anxiety significantly moderated the association between attachment security priming and WSR. Both the whole model, $R^2 = 0.06$, $F(3, 226) = 5.19$, $p = .001$, and the interaction, $B = -0.16$, $t = -2.65$, $p = .008$, 95% CI [-0.27, -0.04], were found to be statistically significant. For highly and moderately anxiously attached women, WSR scores were related to security priming at high attachment anxiety and moderate attachment anxiety levels: $B = -0.32$, $t(228) = -3.32$, $p = .001$, 95% CI [-0.51, -0.12]; $B = -0.13$, $t(228) = -2.04$, $p = .041$, 95% CI [-0.27, -0.01] respectively. However, when participants had lower attachment anxiety scores, WSR and security priming were not significantly associated, $B = 0.04$, $t(228) = 0.44$, $p = .658$, 95% CI [-0.14, 0.23] (see Fig. 2). Attachment avoidance, on the other hand, did not moderate the above mentioned association, $B = -0.11$, $t = -1.55$, $p = .128$, 95% CI [-0.25, 0.03] (see Fig. 3).

3.2.2. Additional analyses

To replicate our findings in Study 1, we further analyzed the priming conditions separately. In the security prime condition, there was not a significant effect of attachment anxiety ($\beta = 0.12$, $SE = 0.04$, $t(96) = p = .313$, 95% CI [-0.12, 0.04]) on WSR. These results illustrate how the security priming negated attachment anxiety's effect. However, in the neutral priming condition, in line with our first study's findings, there was a significant effect of attachment anxiety ($\beta = 0.22$, $SE = 0.04$, $t(134) = p = .006$, 95% CI [0.04, 0.20]) on WSR (see Table 4).

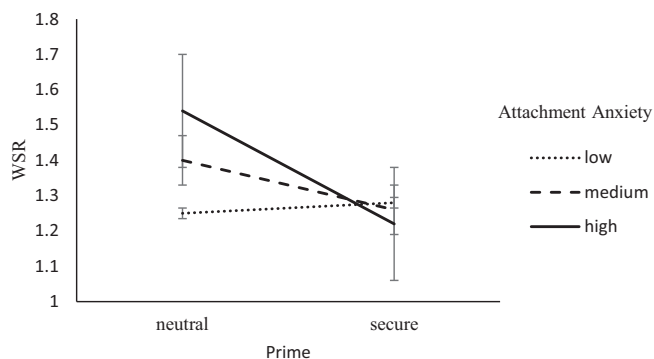


Fig. 2. Study 2: effect of attachment anxiety (± 1 SD) on WSR for neutral and secure conditions. Note. Error bars represent standard error of the means.

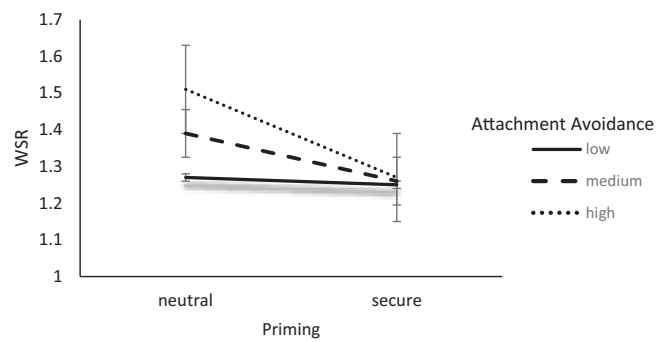


Fig. 3. Study 2: effect of attachment avoidance (± 1 SD) on WSR for neutral and secure conditions.

Note. Error bars represent standard error of the means.

Table 4

Study 2: Hierarchical Multiple Linear Regression Analysis for WSR for neutral priming condition.

Variables	Step 1 (β)	Step 2 (β)	WSR			
			t-Test		95% CI	
			Step 1	Step 2	Step 1	Step 2
Age	0.01	0.05	0.19	0.62	[-0.01, 0.01]	[-0.01, 0.01]
Education	0.05	0.07	0.63	0.88	[-0.06, 0.11]	[-0.04, 0.12]
Attachment anxiety		0.22*		2.28		[0.01, 0.20]
Attachment avoidance		0.11		1.18		[-0.04, 0.18]
F	0.23	2.99*				
R ²	0.01	0.08				
ΔR^2		0.07				

Note. $N = 150$; β : standardized coefficients, WSR: willingness to stay in the relationship, CI: confidence interval. * $p < .05$

Study 2 examined the association between experimentally enhanced attachment security and willingness to stay in an abusive relationship. Indeed, attachment security causally predicted reduced willingness to stay in the abusive relationship. Conforming and building on indirectly relevant findings (Mikulincer & Shaver, 2015; Park, 2016), we found that imagining a secure and supportive relationship lead women to imagine rejecting an abusive relationship. Building on the work of Corvo et al. (2018), our study has contributed to the newly developed concept of including attachment security priming in IPV interventions to obtain better treatment results, and our second study demonstrated its potential effectiveness.

4. General discussion

Although there is indirect evidence pointing to a link between attachment orientations and IPV victimization, to the best of our knowledge the interrelationships between them have not yet been studied widely. Furthermore, the majority of the studies have approached IPV from the perspective of perpetration (Spencer et al., 2020). In the present studies, we aimed to contribute to the development of a theory on the role of victim-related psychological mechanisms in explaining vulnerability to IPV victimization as a result of remaining in an abusive relationship. The purpose of the present studies was to investigate the individual differences that lie behind the decision to imagine staying in an abusive relationship despite IPV from a (potential) victim's point of view. Due to the relational nature of IPV, we based our predictions on attachment theory. In Study 1 study, we identified

associations between attachment orientations (i.e., anxiety, avoidance) and willingness to stay in the abusive relationship. In Study 2, we identified a causal association between attachment (i.e., anxiety) and WSR with respect to attachment security priming. We hypothesized that attachment security priming would reduce WSR. Overall, the results regarding attachment orientation and WSR as a risk factor for IPV victimization confirmed our theory-based predictions.

Our finding is in line with earlier research that reported victims' attachment anxiety as a risk factor for IPV (see [Velotti et al., 2018](#), for a review). [Velotti et al. \(2018\)](#) also mentioned in their review that the reason for women high in attachment anxiety to prefer staying in an abusive relationship might be the unbearable experience of anxiety that stems from the loss of the partner. Additionally, the tendency individuals with greater levels of attachment anxiety to suffer from low self-esteem and have a negative image of themselves as being underserving of love and care ([Mikulincer & Shaver, 2005](#)) may lead them to think that they do not have sufficient resources to leave an abusive partner. Together with low self-esteem, these characteristics may lead to the self-attribution of blame for IPV.

Similarly, within the concept of tendency for interpersonal victimhood (TIV; [Gabay et al., 2020](#)) attachment anxiety was highlighted as the antecedent of TIV since relationships with attachment figures early in life shape adult working models of interpersonal relations and strongly affect relational attitudes, emotions, and behavioral strategies ([Mikulincer & Shaver, 2016](#)). Based on these working models, women high in attachment anxiety form their relationships with their partners holding negative feelings for the partner, anticipating rejection or abandonment as well as seeking attention and compassion at the same time (see also [Mikulincer & Shaver, 2016](#)). [Gabay et al. \(2020\)](#) noted that these ambivalent feelings individuals with high attachment anxiety have towards the partner might increase the TIV. Thus, the subjective appraisal of IPV based on individual differences in adults' insecure models of attachment may play a role in whether the individual continues or rejects the abusive relationship. Furthermore, our finding appears to be consistent with the attachment literature, which states that anxiously attached individuals are hypersensitive to and preoccupied with intimate relationships compared to individuals that are not high in attachment anxiety ([Mikulincer & Shaver, 2007](#); [Siegel, 2012](#)).

To the best of our knowledge, Study 2 was the first to explore the impact of security priming in terms of increasing the tendency to leave an abusive relationship. We successfully induced feelings of security by the 10 min of visualization followed by related open-ended questions. Our main finding was that security priming (compared to neutral priming) reduced willingness to remain in an abusive relationship. This finding is in line with research that presents induced secure schemas as guiding information processing, feelings, and behavior in orientation-congruent ways, as well as having positive outcomes in the short term ([Carnelley et al., 2016](#); [Mikulincer & Shaver, 2007, 2015](#)). For example, in their studies [Carnelley et al. \(2016\)](#) first primed attachment anxiety and avoidance to test causal relationships between these attachment patterns and depressed and anxious mood. Attachment avoidance-primed participants reported higher anxious mood and anxiety-primed participants reported higher depressed mood as well as anxious mood than secure-primed participants. In their second study, these authors primed attachment security repeatedly (versus a neutral prime). Secure-primed (compared with neutral-primed) participants reported less anxious and depressed mood immediately after priming and one day later.

The priming effect in Study 2 was significant for medium to high attachment anxiety in reducing the tendency to imagine staying in the abusive relationship. We believe that the stronger effect of high attachment anxiety found in Study 2 may be due to the effect of security priming on attachment anxiety, which led to lower scores for dispositional attachment anxiety ([Carnelley & Rowe, 2007](#)). Our finding from Study 2 suggests the effect of security priming on trait-like measures via the activation of secure IWMs. Furthermore, this finding also suggests

that activating secure schemas seems to alleviate the need to continue relationship driven by fear of separation and abandonment ([Rouleau et al., 2019](#); [Schneider & Brimhall, 2014](#)). Future research should examine the trajectory for WSR after more priming sessions because individuals might move towards greater security over longer intervals with more frequent security primes ([Carnelley et al., 2018](#)). According to Carnelley and her colleagues, the effect of one security prime may not persist for long, thus follow-ups for participants over a longer period are needed in order to examine the possible reasons for the maintenance or non-maintenance of their effects.

The present study is not without limitations. First our research design was based on a unidirectional physical IPV scenario. Although we investigated the relationships between attachment and IPV, other important correlates, such as poverty or lack of social support, may shed further light on this issue. In addition, our results are based on hypothetical rather than on real victimization. Our results suggest that individuals with high attachment anxiety may appraise separation as being more stressful than IPV. Although relevant research has presented a similar pattern regarding attachment anxiety and IPV victimization for both hypothetical and real victimization ([Bartholomew & Allison, 2006](#); [Bond & Bond, 2004](#)), future studies should consider examining attachment anxiety as risk factor to (re)victimization among actual victims of IPV for generalizability. Another important limitation of our study is not including a manipulation check after secure-neutral primes. Even though manipulation checks support researchers to reassure if the priming has the intended effect, [Hauser et al. \(2018\)](#) mentioned that manipulation checks to test the validity might be problematic and threaten validity. What is more, we did show the effect of priming was not due to attachment orientations because priming groups did not differ significantly in terms of attachment anxiety and avoidance.

As another generalizability issue, we included single heterosexual women, meaning that we focused exclusively on IPV at the hands of a male partner. Relevant research has recently included female aggression on male partners ([Crane et al., 2014](#)) and IPV within same-sex couples ([Luca et al., 2018](#)). Therefore, we believe that our predictions should be further investigated within same-sex couples as well as with male victims, expanding our work to all contexts of IPV. Finally, we handled attachment orientations as well as IWMs as trait-like constructs. Although research in recent years suggests attachment representations to be dynamic and relationship-specific leading people to hold distinct working models in different relationships ([Fraleigh et al., 2011](#)), the consensus is that dispositional attachment and situational attachment interact as well as accumulate and form experience with the present partner ([Slootmaeckers & Migerode, 2018](#)).

The findings of the present study have implications for practice. Because earlier studies have suggested that IPV is a dyadic process in which the characteristics of both partners, such as emotional aggression, frustration and anger increase risk ([Kuijpers et al., 2012](#)), all factors should be considered when conducting risk assessments. Our findings from Study 1 showed that victims' attachment orientations are important factors that can contribute to the continuation of an abusive relationship, which may increase the possibility of IPV revictimization. Because attachment anxiety was the strongest predictor of WSR, we believe that including this victim-related factor among risk assessment tools may improve IPV (re)victimization risk prediction.

Furthermore, inclusion of victim-related factors in risk assessment may improve treatment or support activities that are based on the victim's characteristics. Indeed, our second study proposes attachment security priming as an effective technique for inclusion in IPV (re)victimization prevention by reducing WSR despite an abusive partner. Interventions should be aimed at the psychoeducation of attachment orientations, related needs, as well as their effect on the perception of intimate relationships, and at minimizing these needs among anxiously attached women. Instead of using hyperactivation strategies, including remaining in a dysfunctional relationship, to cope with unpleasant experiences or threats, it may be advisable to focus on more effective

coping styles as a strategy for reducing the risk of (re)victimization, such as problem-focused coping styles.

The present research contributes to our understanding of attachment theory as it shows that recalling security-inducing representations can lead to reduced willingness to stay in an abusive relationship in a non-clinical sample. There is great need to strengthen women's appraisals of themselves versus others, as well as to alleviate their relational needs, due to the high prevalence of IPV and (re)victimization among women, to encourage them to reject abusive relationships. In this sense, it is important to further examine the effects of security priming in this context, particularly as primes are easy to understand and administer, even in text form, require a small amount of time, and can be used alongside other treatments.

Declarations

We have no known conflict of interest to disclose.

No funding was received for conducting this study.

The authors have no relevant financial or non-financial interests to disclose.

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

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.actpsy.2022.103537>.

References

- Allison, C., Bartholomew, K., Maysless, O., & Dutton, D. (2008). Love as a battlefield — attachment and relationship dynamics in couples identified for male partner violence. *Journal of Family Issues*, 29, 125–150. <https://doi.org/10.1177/0195213X07306980>
- Anderson, K. L. (2008). Is partner violence worse in the context of control? *Journal of Marriage and Family*, 70, 1157–1168. <https://doi.org/10.1111/j.1741-3737.2008.00557.x>
- Askeland, I. R., & Heir, T. (2013). Early dropout in men voluntarily undergoing treatment for intimate partner violence in Norway. *Violence and victims*, 28(5), 822–831. <https://doi.org/10.1891/0886-6708.vv-d-12-00137>
- Barbaro, N., Sela, Y., Atari, M., Shackelford, T. K., & Zeigler-Hill, V. (2019). Romantic attachment and mate retention behavior: The mediating role of perceived risk of partner infidelity. *Journal of Social and Personal Relationships*, 36, 940–956. <https://doi.org/10.1177/0265407517749330>
- Bartholomew, K., & Allison, C. J. (2006). An attachment perspective on abusive dynamics in intimate relationships. In M. Mikulincer, & G. S. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex* (pp. 102–127). The Guilford Press.
- Bartz, J., & Lydon, J. (2004). Close relationships and the working self-concept: Implicit and explicit effects of priming attachment on agency and communion. *Personality and Social Psychology Bulletin*, 30, 1389–1401.
- Bélanger, C., Mathieu, C., Dugal, C., & Courchesne, C. (2015). The impact of attachment on intimate partner violence perpetrated by women. *American Journal of Family Therapy*, 43(5), 441–453. <https://doi.org/10.1080/01926187.2015.1080130>
- Bohner, G., Ahlborn, K., & Steiner, R. (2010). How sexy are sexist men? Women's perception of male response profiles in the ambivalent sexism inventory. *Sex Roles*, 62, 568–582. <https://doi.org/10.1007/s11199-009-9665-x>
- Bond, S. B., & Bond, M. (2004). Attachment styles and violence within couples. *Journal of Nervous & Mental Disease*, 192, 857–863. <https://doi.org/10.1097/01.nmd.0000146879.33957>
- Breiding, M., Basile, K. C., Smith, S. G., Black, M. C., & Mahendra, R. (2015). *Intimate partner violence surveillance: Uniform definitions and recommended data elements*. Retrieved from. Centers for Disease Control and Prevention <https://www.cdc.gov/violenceprevention/pdf/intimatepartnerviolence.pdf>.
- Brenner, I., Bachner-Melman, R., Lev-Ari, L., Levi-Ogolic, M., Tolmacz, R., & Ben-Amity, G. (2021). Attachment, Sense of Entitlement in Romantic Relationships, and Sexual Revictimization Among Adult CSA Survivors. *Journal of Interpersonal Violence*, 36(19–20), 720–743. <https://doi.org/10.1177/0886260519875558>
- Caldwell, J. E., Swan, S. C., & Woodbrown, V. D. (2012). Gender differences in intimate partner violence outcomes. *Psychology of Violence*, 2(1), 42–57. <https://doi.org/10.1037/a0026296>
- Capaldi, D. M., Knoble, N. B., Shortt, J. W., & Kim, H. K. (2012). A systematic review of risk factors for intimate partner violence. *Partner Abuse*, 3(2), 1–27. <https://doi.org/10.1891/1946-6560.3.2.e4>
- Carnelley, K. B., Beijunar, M.-M., Otway, L., Baldwin, D. S., & Rowe, A. C. (2018). Effects of repeated attachment security priming in outpatients with primary depressive disorders. *Journal of Affective Disorders*, 234, 201–206. <https://doi.org/10.1016/j.jad.2018.02.040>
- Carnelley, K. B., Otway, L. J., & Rowe, A. (2016). The effects of attachment priming on depressed and anxious mood. *Clinical Psychological Science*, 1–18.
- Carnelley, K. B., & Rowe, A. C. (2007). Repeated priming of attachment security influences later views of self and relationships. *Personal Relationships*, 14(2), 307–320.
- Cassidy, J., & Shaver, P. R. (2016). *Handbook of Attachment (3rd ed.)*. The Guilford Press.
- Cattaneo, L. B., & Goodman, L. A. (2005). Risk Factors for Reabuse in Intimate Partner Violence: A Cross-Disciplinary Critical Review. *Trauma, Violence, & Abuse*, 6(2), 141–175. <https://doi.org/10.1177/1524838005275088>
- Cavanaugh, C., Messing, J., Petras, H., Fowler, B., La Flair, L., Kub, J., Agnew, J., Fitzgerald, S., Bolyard, R., & Campbell, J. (2012). Patterns of violence against women: A latent class analysis. *Psychological Trauma: Theory, Research, Practice and Policy*, 4, 169–176. <https://doi.org/10.1037/a0023314>
- Cochran, J. K., Sellers, C. S., Wiesbrock, V., & Palacios, W. R. (2011). Repetitive intimate partner victimization: An exploratory application of social learning theory. *Deviant Behavior*, 32(9), 790–817. <https://doi.org/10.1080/01639625.2010.538342>
- Corvo, K., Sonkin, D., & Cooney, M. (2018). Attachment security priming and domestic violence: Augmenting biopsychosocial treatment of perpetrators. *Partner Abuse*, 9, 202–212. <https://doi.org/10.1891/1946-6560.9.2.202>
- Crane, C. A., Hawes, S. W., Mandel, D. L., & Easton, C. J. (2014). The occurrence of female-to-male partner violence among male intimate partner violence offenders mandated to treatment: A brief research report. *Violence and Victims*, 29(6), 940–951. <https://doi.org/10.1891/0886-6708.VV-D-12-00136>
- Cross, E. J., & Overall, N. C. (2018). Women's attraction to benevolent sexism: Needing relationship security predicts greater attraction to men who endorse benevolent sexism. *European Journal of Social Psychology*, 48(3), 336–347. <https://doi.org/10.1002/ejsp.2334>
- Doumas, D. M., Pearson, C. L., Elgin, J. E., & McKinley, L. L. (2008). Adult attachment as a risk factor for intimate partner violence: The “mispairing” of partners’ attachment styles. *Journal of Interpersonal Violence*, 23, 616–634. <https://doi.org/10.1177/0886260507313526>
- Dutton, D. G., & White, K. R. (2012). Attachment insecurity and intimate partner violence. *Aggression and Violent Behavior*, 17(5), 475–481. <https://doi.org/10.1016/j.avb.2012.07.003>
- Feeney, J. A. (2008). Adult romantic attachment: Developments in the study of couple relationships. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 456–481). The Guilford Press.
- Finkel, E. J., & Slotter, E. B. (2007). An attachment theory perspective on the perpetuation of intimate partner violence. *DePaul Law Review*, 56(3), 895–907. <https://via.library.depaul.edu/law-review/vol56/iss3/7>
- Fraleigh, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships-Relationship Structures questionnaire: a method for assessing attachment orientations across relationships. *Psychological assessment*, 23(3), 615–625. <https://doi.org/10.1037/a0022898>
- Fraleigh, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78(2), 350–365.
- Gabay, R., Hameiri, B., Rubel-Lifschitz, T., & Nadler, A. (2020). The tendency for interpersonal victimhood: The personality construct and its consequences. *Personality and Individual Differences*, 165, Article 110134. <https://doi.org/10.1016/j.paid.2020.110134>
- Gormley, B., & Lopez, F. G. (2010). Psychological abuse perpetration in college dating relationships: Contributions of gender, stress, and adult attachment orientations. *Journal of Interpersonal Violence*, 25(2), 204–218. <https://doi.org/10.1177/0886260509334404>
- Gravetter, F. J., & Wallnau, L. B. (2007). *Statistics for the behavioral sciences (7th ed.)*. Thomson Wadsworth.
- Hauser, D. J., Ellsworth, P. C., & Gonzalez, R. (2018). Are manipulation checks necessary? *Frontiers in Psychology*, 9, 998. <https://doi.org/10.3389/fpsyg.2018.00998>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. Guilford Press.
- Henderson, A., Bartholomew, K., Trinke, S., & Kwong, M. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence*, 20, 219–230. <https://doi.org/10.1007/s10896-005-5985-y>
- Jasinski, J., Blumenstein, L., & Morgan, R. (2014). Testing Johnson's typology: is there gender symmetry in intimate terrorism? *Violence and victims*. 29(1), 73–88. <https://doi.org/10.1891/0886-6708.vv-d-12-00146>
- Kuijpers, K., van der Knaap, L., & Winkel, F. (2012). Risk of revictimization of intimate partner violence: The role of attachment, anger and violent behavior of the victim. *Journal of Family Violence*, 27, 33–44. <https://doi.org/10.1007/s10896-011-9399-8>
- Lin, W. N., Enright, R. D., & Klatt, J. S. (2013). A forgiveness intervention for Taiwanese young adults with insecure attachment. *Contemporary Family Therapy*, 35(1), 105–120.
- Luca, R., Giulia, G., Angela, C. M., Eva, G., & Piera, B. (2018). When intimate partner violence meets same sex couples: A review of same sex intimate partner violence. *Frontiers in Psychology*, 9, 1506. <https://doi.org/10.3389/fpsyg.2018.01506>
- Mikulincer, M., & Shaver, P. R. (2005). Attachment Security, Compassion, and Altruism. *Current Directions in Psychological Science*, 14(1), 34–38. <https://doi.org/10.1111/j.0963-7214.2005.00330.x>
- Mikulincer, M., & Shaver, P. R. (2011). An attachment perspective on interpersonal and intergroup conflict. In J. P. Forgas, A. W. Kruglanski, & K. D. Williams (Eds.), *The psychology of social conflict and aggression* (pp. 19–35). Psychology Press.

- Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology, 81*, 97–115.
- Mikulincer, M., & Shaver, P. R. (2007). Boosting attachment security to promote mental health, prosocial values, and inter-group tolerance. *Psychological Inquiry, 18*, 139–156. <https://doi.org/10.1080/10478400701512646>
- Mikulincer, M., & Shaver, P. R. (2015). The psychological effects of the contextual activation of security-enhancing mental representations in adulthood. *Current Opinion in Psychology, 1*, 18–21.
- Mikulincer, M., & Shaver, P. R. (2016). *Attachment in adulthood: Structure, dynamics, and change* (2nd ed.). Guilford Press.
- Norman, L., Lawrence, N., Iles, A., Benattayallah, A., & Karl, A. (2015). Attachment-security priming attenuates amygdala activation to social and linguistic threat. *Social Cognitive & Affective Neuroscience, 10*, 832–839.
- Nybergh, L., Taft, C., Enander, V., & Krantz, G. (2013). Self-reported exposure to intimate partner violence among women and men in Sweden: results from a population-based survey. *BMC Public Health, 13*(845). <https://doi.org/10.1186/1471-2458-13-845>
- Oehler, M., & Psouni, E. (2019). “Partner in prime”? Effects of repeated mobile security priming on attachment security and perceived stress in daily life. *Attachment & Human Development, 21*(6), 638–657. <https://doi.org/10.1080/14616734.2018.1517811>
- Ogilvie, C. A., Newman, E., Todd, L., & Peck, D. (2014). Attachment & violent offending: A meta-analysis. *Aggression and Violent Behavior, 19*(4), 322–339. <https://doi.org/10.1016/j.avb.2014.04.007>
- Park, C. J. (2016). Intimate partner violence: An application of attachment theory. *Journal of Human Behavior in the Social Environment, 26*(5), 488–497. <https://doi.org/10.1080/10911359.2015.1087924>
- Pearlman, L. A., & Courtois, C. A. (2005). Clinical applications of the attachment framework: Relational treatment of complex trauma. *Journal of traumatic stress, 18* (5), 449–459. <https://doi.org/10.1002/jts.20052>
- Pereira, M., Azeredo, A., Moreira, D., Brandão, I., & Almeida, F. (2020). Personality characteristics of victims of intimate partner violence: A systematic review. *Aggression and Violent Behavior, 52*, Article 101423. <https://doi.org/10.1016/j.avb.2020.101423>
- Ponti, L., & Tani, F. (2019). *Journal of Child and Family Studies, 28*, 1425–1432.
- Psouni, E., & Apetroaia, A. (2014). Measuring scripted attachment-related knowledge in middle childhood: The secure base script test. *Attachment & Human Development, 16* (1), 22–41.
- Psouni, E., Di Folco, S., & Zavattini, G. C. (2015). Scripted secure base knowledge and its relation to perceived social acceptance and competence in early middle childhood. *Scandinavian Journal of Psychology, 56*(3), 341–348.
- Ramos, M., Barreto, M., Ellemers, N., Moya, M., & Ferreira, L. (2016). What hostile and benevolent sexism communicate about men’s and women’s warmth and competence. *Group Processes & Intergroup Relations, 21*, 159–177. <https://doi.org/10.1177/1368430216656921>
- Riggs, S. A. (2010). Childhood emotional abuse and the attachment system across the life cycle: What theory and research tell us. *Journal of Aggression, Maltreatment & Trauma, 19*(1), 5–51.
- Roisman, G. I., Padrón, E., Sroufe, L. A., & Egeland, B. (2002). Earned-Secure Attachment Status in Retrospect and Prospect. *Child Development, 73*, 1204–1219. <https://doi.org/10.1111/1467-8624.00467>
- Rouleau, E., Barabe, T., & Blow, A. (2019). Creating structure in a time of intense stress: Treating intimate partner violence. *Journal of Couple & Relationship Therapy, 18*(2), 148–169.
- Sandberg, J. G., Novak, J. R., Davis, S. Y., & Busby, D. M. (2016). The brief accessibility, responsiveness, and engagement scale: A tool for measuring attachment behaviors in clinical couples. *Journal of Marital and Family Therapy, 42*, 106–122. <https://doi.org/10.1111/jmft.12151>
- Schneider, C., & Brimhall, A. S. (2014). From scared to repaired: Using an attachment-based perspective to understand situational couple violence. *Journal of Marital and Family Therapy, 40*(3), 367–379.
- Shurman, L. A., & Rodriguez, C. M. (2006). Cognitive-affective predictors of Women’s readiness to end domestic violence relationships. *Journal of Interpersonal Violence, 21* (11), 1417–1439. <https://doi.org/10.1177/0886260506292993>
- Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). The Guilford Press.
- Slootmaeckers, J., & Migerode, L. (2018). Fighting for connection: Patterns of intimate partner violence. *Journal of Couple & Relationship Therapy, 17*(4), 294–312. <https://doi.org/10.1080/15332691.2018.1433568>
- Smagur, K. E., Bogat, G. A., & Levendosky, A. A. (2018). Attachment insecurity mediates the effects of intimate partner violence and childhood maltreatment on depressive symptoms in adult women. *Psychology of Violence, 8*, 460–469. <https://doi.org/10.1037/vio0000142>
- Smith, L. S., & Stover, C. S. (2016). The moderating role of attachment on the relationship between history of trauma and intimate partner violence victimization. *Violence Against Women, 22*(6), 745–764. <https://doi.org/10.1177/1077801215610863>
- Spencer, C. M., Keilholtz, B. M., & Stith, S. M. (2020). The association between attachment styles and physical intimate partner violence perpetration and victimization: A meta-analysis. *Family Process, 59*(1), 1–15. <https://doi.org/10.1111/famp.12545>
- Stöckl, H., Devries, K., Rotstein, A., Abrahams, N., Campbell, J., Watts, C., & Moreno, C. G. (2013). The global prevalence of intimate partner homicide: a systematic review. *Lancet, 382*(9895), 859–865. [https://doi.org/10.1016/S0140-6736\(13\)61030-2](https://doi.org/10.1016/S0140-6736(13)61030-2)
- Straus, M. A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review, 30*(3), 252–275. <https://doi.org/10.1016/j.childyouth.2007.10.004>
- van der Kolk, B. A. (1996). The complexity of adaptation to trauma: Self-regulation, stimulus discrimination, and characterological development. In B. A. van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 182–213). The Guilford Press.
- Velotti, P., Zobel, S. B., Rogier, G., & Tambelli, R. (2018). Exploring relationships: A systematic review on intimate partner violence and attachment. *Frontiers in Psychology, 9*, 1116. <https://doi.org/10.3389/fpsyg.2018.01116>
- World Health Organization. (2018). Violence against women. Retrieved from <http://www.who.int/news-room/fact-sheets/detail/violence-against-women>.