

Chapter #22

PARENTAL ATTACHMENT AND PHYSICAL INTIMATE PARTNER VIOLENCE IN YOUNG ADULTS: MEDIATIONAL ROLE OF DYSFUNCTIONAL ATTITUDES

Chloe Cherrier¹, Catherine Potard², Alice Richard¹, Emmanuel Rusch³, & Robert Courtois¹

¹EE 1901 QualiPsy, University of Tours, France

²EA 4638 LPPL, University of Angers, France

³EA 7505 EES, University of Tours, France

ABSTRACT

Introduction. Physical Intimate Partner violence (PIPV) is a prevalent problem throughout the world, with serious negative impacts for the victims. A great deal of research is aimed at identifying vulnerability and protective factors among victims. Previous studies have associated PIPV victimization with *insecure* parental attachment. However, little is known about the role of dysfunctional attitudes (DA) in Intimate Partner Violence (IPV). This study aimed to evaluate DA as a mediator between parental attachment and PIPV victimization of young adults. *Methods.* Self-report questionnaires were completed by 915 young French adults to assess their attachment styles, DA (related to sociotropy and autonomy), and history of physical assault. *Results.* Two hundred and six participants (21.1%) reported having been victims of PIPV. Path analyses confirmed the indirect effect of DA in the relationship between parental attachment styles and PIPV victimization in young adults. DA related to sociotropy appeared to be a partial mediator of attachment to the mother and PIPV victimization, while DA related to autonomy appeared to be a partial mediator of attachment to the father and PIPV victimization. *Conclusion.* *Insecure* parental attachment is associated with more DA and a risk of PIPV victimization in emerging adulthood.

Keywords: physical intimate partner violence, dysfunctional attitudes, parental attachment style, young adults.

1. INTRODUCTION

Intimate partner violence (IPV) is a worldwide public health issue that can take different forms: psychological, physical and sexual. Physical intimate partner violence (PIPV), associated with other forms of violence, has serious consequences on mental and physical health. It is defined as “the intentional use of physical force with the potential for causing death, disability, injury, or harm” (Saltzman et al., 1999) in a romantic relationship. It can be used by the intimate partner as an inappropriate strategy to keep control of the relationship and/or the partner. PIPV victims are in a subjugated relationship and do not always have the personal resources to get out of it. In France, women are the main PIPV victims, with 154,000 cases identified in 2018 (MIPROF, 2019). According to the National Survey of Violence Against Women in France (2001), 20% of victims are 20–24 years old. Young adult victims of IPV are exposed to a risk of re-victimization in adulthood (e.g., Smith, White, & Holland, 2003). Young adulthood is a time of discovering oneself and others and of identity building, and is thus a crucial developmental period.

Many studies have examined the vulnerability, risk and protective factors of PIPV (Stith, Smith, Penn, Ward, & Tritt, 2004), and one of the most widely recognized links is parental attachment style. Bowlby's theory (1980) is based on the fact that all human beings continually try to develop bonds of attachment with those around them in order to survive. Three styles of parental attachment have traditionally been described: *secure*, *insecure-avoidant* and *insecure anxious-ambivalent* (Ainsworth, Blehar, Waters, & Wall, 1978). A *secure* attachment to parents enables young adults to form positive interpersonal relationships. Young adults with *insecure* attachment to their parents find it difficult to establish intimate relationships with others and are unable to find the right emotional distance with their partners (too close or too distant). Furthermore, the family environment during childhood determines how individuals construct their representations of the self, of others and of the world around them. These representations are known as internal working models (Pietromonaco & Barrett, 2000); they may change throughout life, but are predefined during childhood and are linked to the type of parental attachment.

There are some similarities between dysfunctional attitudes (DA) and distorted working models. Beck's cognitive theory (1976) postulates that childhood maladaptive beliefs will be retained in adulthood and will lead to DA when negative or stressful events occur. DA have often been studied as a component of depressive self-schemas and are defined as negative, excessive and inflexible if-then statements concerning the self (Clark, Beck, & Alford, 1999). Weissman and Beck (1978) developed the Dysfunctional Attitude Scale (DAS) to evaluate these maladaptive self-schemas. Bouvard et al. (1994) carried out a factor analysis of the DAS items and obtained four factors which they termed *seeking the esteem of others*, *the capacity to oppose others*, *independence from others*, and *seeking approval of others*. These types of DA are strongly associated with sociotropy or autonomy personality traits (Esther De Graaf, Roelofs, & Huibers, 2009). Sociotropy is characterized by excessive investment in interpersonal relationships; sociotropic individuals need encouragement and attention from others (cf. the DAS dimensions of *seeking the esteem of others* and *seeking approval by others*). By contrast, autonomy is characterized by independence, self-control and achievement (cf. the DAS dimensions of *the capacity to oppose others* and *independence from others*). DA related to sociotropy are linked to negative self-beliefs, and those related to autonomy are negative beliefs of others (Otani, Suzuki, Matsumoto, & Shirat, 2017). Previous studies have also supported the link between DA and parental attachment styles (Fuhr, Reitenbach, Kraemer, Hautzinger, & Meyer, 2017; Roelofs, Lee, Ruijten, & Lobbestael, 2011). *Insecure* attachment has been found to predict later development of DA in adolescents (Zhou, Arend, Mufson, & Gunlicks-Stoessel, 2020) and young adults (Bosmans, Braet, & Van Vlierberghe, 2010; Hankin, Kassel, & Abela, 2005). *Insecure* attachment to the mother seems more predictive of DA than *insecure* attachment to the father (Ingram, Overbey, & Fortier, 2001). *Insecure* attachment to the same sex parent may increase DA (Ingram et al., 2001; Otani et al., 2011; Otani, Suzuki, Matsumoto, Sadahiro, & Enokido, 2014), but there is no consensus on this point. Otani et al. (2011) found that women with *insecure* attachment to their mother showed greater sociotropy than the others, but in a later study (Otani et al., 2014), they found higher levels of autonomy. For men, no significant association between *insecure* parental attachment and any specific type of DA was found in the earlier study (Otani et al., 2011), but in the second study (Otani et al., 2014), men with *insecure* attachment to the father reported higher autonomy.

Miljkovitch and Cohin (2007) showed that parental attachment and internal working models are lifelong and therefore continue throughout adulthood, notably affecting intimate relationships. Adults who are *insecure* in their relationships retain their childhood working

models. However, *secure* adults tend to adjust their representations to those of their partner. If these “encoded schemas” are negative, they can be the source of various mental health problems (Bosmans et al., 2010), such as depression (Hankin et al., 2005; Otani, Suzuki, Matsumoto, & Shirata, 2018). However, to our knowledge, very few studies have explored the relationships between IPV victimization, especially PIPV, and DA. Kaygusuz (2013) showed that young adults who have negative beliefs about themselves and others are more likely to have non-harmonious and conflicting interpersonal relationships. Dye and Eckhardt (2000) investigated PIPV perpetration in a student population, and its links in particular with DA. No significant difference in DA was observed between the violent and non-violent groups. The authors suggested that future research should investigate whether cognitive distortions are present during affect-inducing partner conflict situations.

The aim of the present study was to examine the mediating role of DA between parental attachment and PIPV in young adults. We hypothesized that *insecure* attachment styles would lead individuals to inappropriate beliefs about themselves and others, resulting in DA that could be a factor of PIPV vulnerability. More specifically, we explored whether the four dimensions of DA (related to sociotropy or autonomy) are mediation variables in the relationship between attachment to the mother or father and PIPV victimization.

2. METHODS

2.1. Procedures and participants

The current study had a cross-sectional design. A self-administered online questionnaire designed for young adults aged 18–30 years old was distributed through various networks (university, sports clubs, professional, etc.). The inclusion criteria were for participants to have been involved at least once in their life in a romantic relationship and to have been in contact with at least one parent. The sample consisted of 915 participants including 84.8% ($n = 776$) women, with an average age of 23.59 years \pm 3.35, and average level of education of 15.07 years \pm 2.70 (corresponding to a bachelor's degree).

2.2. Measures

The Revised Conflict Tactics Scale 2 (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996 translated by Lussier, 1998) was used to measure the level of conflict and abuse between partners. We only used the physical assault subscale and the form for victims (39 items). We used a dichotomous scoring method (yes (1): victim of at least one act of PIPV, no (2): never been a victim of PIPV). *The Inventory of Parent and Peer Attachment* (IPPA; Armsden & Greenberg, 1987 translated by Vignoli & Mallet, 2004) measures young adults' attachment to their mother and father. It has 28 items measuring three dimensions of attachment: communication, trust, and alienation. Based on these dimensions, the scale identifies three attachment styles (Vivona, 2000). In the present study, only *secure* and *insecure* styles were studied. *Insecure-avoidant* and *insecure anxious-ambivalent* styles were combined in the *insecure* category. *The Dysfunctional Attitude Scale* (DAS; Weissman & Beck, 1978, translated by Bouvard et al., 1994) evaluates the level of DA, based on Beck's cognitive theory. We used form A of the scale, which has 29 items investigating 4 factors: DA1 *Seeking the esteem of others*; DA2 *The capacity to oppose others*; DA3 *Independence from others*; DA4 *Seeking approval of others*. DA1 and DA4 refer to the personality dimension of sociotropy, and DA2 and DA3 to autonomy (Esther De Graaf et al., 2009). A high score indicates greater cognitive bias.

2.3. Statistical analysis

Data were analyzed using SPSS version 25 and the *process* module developed by Hayes (2018). Participants were divided into two groups: victims of PIPV and non-victims of PIPV. Independent sample *t*-tests and chi-square tests were used to compare the characteristics of the participants in the two groups.

A series of logistic (top-down using the likelihood ratio) and linear regressions were conducted, based on the four steps proposed by Baron and Kenny (1986), to examine whether DA mediate the relationship between parental attachment and PIPV. Next, a bootstrap analysis was performed to demonstrate the indirect (mediated) effect of DA. In this analysis, if the 95% confidence interval (CI) for the indirect effect does not include zero, then it can be concluded that the indirect effect is significant at the 5% level. As the dependent variable was dichotomous, the effect size of the mediation could not be analyzed (MacKinnon, Fairchild, & Fritz, 2007). Models of attachments to the mother and the father were tested separately.

3. RESULTS

3.1. Descriptive and bivariate statistics

Table 1.
Comparison of independent variables between victims of PIPV groups.

Independent variables	Non-victims of PIPV		Victims of PIPV		X^2	<i>t</i>
	<i>n</i>	<i>M</i> ± <i>SD</i> or %	<i>n</i>	<i>M</i> ± <i>SD</i> or %		
Age	709	23.58 ± 3.38	206	23.63 ± 3.28		-.18
Sex	709		206		2.19	
Male	101	14.2	38	18.4		
Female	608	85.8	168	85.6		
Education (years)	709	15.17 ± 2.66	206	14.75 ± 2.83		1.95
Attachment to mother	593		172		13.27***	
Secure	368	62.1	80	46.5		
Insecure	225	37.9	92	53.5		
Attachment to father	531		142		12.35***	
Secure	338	63.7	70	47.6		
Insecure	193	36.3	72	52.4		
DA total	709	3.19 ± 1.00	206	3.43 ± .88		-3.20**
DA1	709	3.41 ± 1.09	206	3.65 ± 1.01		-2.70**
DA2	709	2.68 ± 1.20	206	2.94 ± 1.14		-2.79**
DA3	709	3.12 ± 1.19	206	3.39 ± .99		-3.27**
DA4	709	3.07 ± 1.28	206	3.35 ± 1.19		-2.76**

Data are presented as % or mean ± standard deviation; PIPV: physical intimate partner violence; DA total: Total score of dysfunctional attitudes; DA1: *Seeking the esteem of others*; DA2: *The capacity to oppose others*; DA3: *Independence from others*; DA4: *Seeking approval of others*. ** $p < .01$, *** $p < .001$.

Victims of PIPV represented 21.1% ($n = 206$) of the sample. There was no significant difference between the non-victim group and victims of PIPV group in age, sex or level of education. More victims than non-victims reported an *insecure* style of attachment to the mother (53.5%, $X^2 = 13.27$, $p < .001$), and to the father (52.4%, $X^2 = 12.35$, $p < .001$). Victims also had higher DA scores than non-victims, overall ($t = -3.20$, $p < .01$) and on the

4 dimensions (DA1: $t = -2.70, p < .01$; DA2: $t = -2.79, p < .01$; DA3: $t = -3.27, p < .01$; DA4: $t = -2.76, p < .01$) (Table 1). The young adults with an *insecure* style of attachment to their mother or father had more DA (overall and on the 4 dimensions, $p < .001$) than those with an *secure* style (Table 2).

Table 2.
Comparison of dysfunctional attitudes and parental attachment between victims of PIPV groups.

Independent variables		Non-victims of PIPV <i>M</i> ± <i>SD</i>	Victims of PIPV <i>M</i> ± <i>SD</i>	<i>t</i>
DA total	Attachment to the mother			
	<i>Secure</i>	3.05 ± .97	3.31 ± .85	-2.21*
	<i>Insecure</i>	3.31 ± .96	3.58 ± .87	-2.45*
	Attachment to the father			
DA1	<i>Secure</i>	3.04 ± .96	3.34 ± .97	-2.32*
	<i>Insecure</i>	3.44 ± .98	3.56 ± .82	-.91
	Attachment to the mother			
	<i>Secure</i>	3.30 ± 1.04	3.55 ± 1.00	-1.95
DA2	<i>Insecure</i>	3.50 ± 1.10	3.77 ± 1.00	-2.05*
	Attachment to the father			
	<i>Secure</i>	3.28 ± 1.05	3.56 ± 1.13	-2.01*
	<i>Insecure</i>	3.70 ± 1.09	3.72 ± .95	-1.16
DA3	Attachment to the mother			
	<i>Secure</i>	2.49 ± 1.15	2.77 ± 1.03	-2.01*
	<i>Insecure</i>	2.88 ± 1.04	3.12 ± 1.09	-1.67
	Attachment to the father			
DA4	<i>Secure</i>	2.51 ± 1.19	2.90 ± 1.31	-2.43*
	<i>Insecure</i>	2.91 ± 1.12	3.12 ± 1.06	-1.41
	Attachment to the mother			
	<i>Secure</i>	2.96 ± 1.20	3.23 ± .87	-2.42*
DA3	<i>Insecure</i>	3.23 ± 1.15	3.50 ± 1.01	-1.95
	Attachment to the father			
	<i>Secure</i>	2.99 ± 1.19	3.24 ± 1.01	-1.64
	<i>Insecure</i>	3.34 ± 1.20	3.58 ± .99	-1.60
DA4	Attachment to the mother			
	<i>Secure</i>	2.94 ± 1.26	3.18 ± 1.06	-1.63
	<i>Insecure</i>	3.23 ± 1.27	3.58 ± 1.28	-2.17*
	Attachment to the father			
DA4	<i>Secure</i>	2.93 ± 1.26	3.17 ± 1.19	-1.43
	<i>Insecure</i>	3.34 ± 1.28	3.58 ± 1.10	-1.40

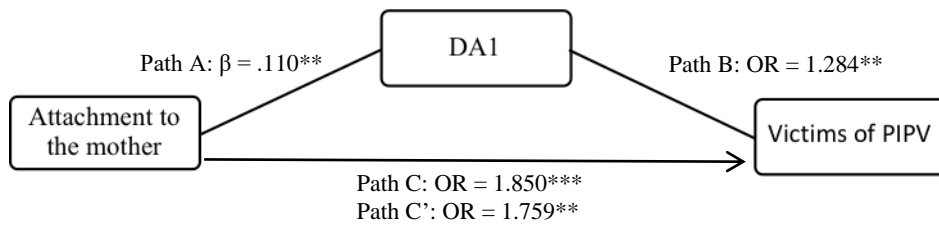
Data are presented as mean ± standard deviation; PIPV: physical intimate partner violence; DA total: Total score of dysfunctional attitudes; DA1: *Seeking the esteem of others*; DA2: *The capacity to oppose others*; DA3: *Independence from others*; DA4: *Seeking approval of others*. * $p < .05$.

3.2. Mediation analysis

The mediating models remained significant after adjusting for age, sex and education. The four dimensions of DA were included in a top-down likelihood-ratio logistic regression

model, with separate models for attachment to the mother and attachment to the father. Only DA1 (sociotropy) for attachment to the mother and DA2 (autonomy) for attachment to the father significantly improved the fit of the model.

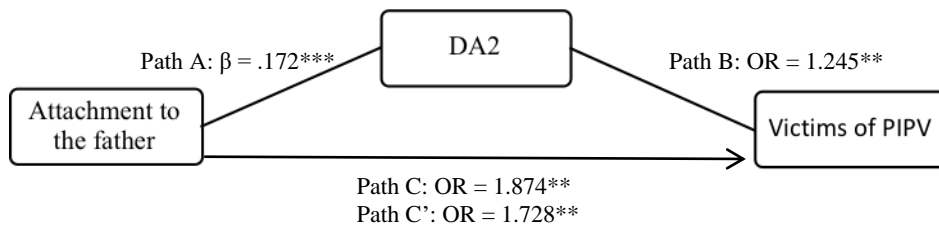
Figure 1.
Adjusted mediation model of dysfunctional attitudes between attachment to mother and PIPV.



β = standardized coefficient; OR= odds ratio; ** $p < .01$, *** $p < .001$. PIPV: physical intimate partner violence; DA1: Seeking the esteem of others.

Attachment to the mother (Figure 1). The first step, the direct path from attachment to the mother, was a significant association with PIPV (OR = 1.850, 95% CI = 1.311 to 2.611, $p < .001$). In the second step, there was a significant association between attachment to the mother and DA1 ($\beta = .110$, $p < .01$). In the third step, higher scores on DA1 were associated with PIPV victimization (OR = 1.284, 95% CI = 1.090 to 1.513, $p < .01$). In the final step, when DA1 was included in the regression model, the association between attachment to the mother and PIPV decreased (OR = 1.759, 95% CI = 1.241 to 2.490, $p < .01$), indicating a partial mediation effect of DA1. Bootstrap confidence intervals showed that the indirect effect of DA1 ($\beta = .059$, 95% CI = .013 to .123) in the association between attachment to the mother and PIPV victimization was significant, indicating partial mediation of the effect of attachment to the mother on PIPV victimization through DA1. More precisely, path analysis showed that an *insecure* style of attachment to the mother was positively associated with DA1, which in turn increased the risk of being a victim of PIPV.

Figure 2.
Adjusted mediation model of dysfunctional attitudes between attachment to father and PIPV.



β = standardized coefficient; OR= odds ratio; ** $p < .01$, *** $p < .001$. PIPV: physical intimate partner violence; DA2: The capacity to oppose others.

Notes Figure 1 and Figure 2: Path A: Test of whether parental attachment is a significant predictor of DA. Path B: Test of whether DA are a significant predictor of PIPV victimization. Path C: Test of whether parental attachment is a significant predictor of PIPV victimization. Path C': Test of whether parental attachment and DA together are significant predictors of PIPV victimization.

Attachment to the father (Figure 2). The first step, the direct path from attachment to the father was a significant association with PIPV (OR = 1.874, 95% CI = 1.292 to 2.717, $p < .01$). In the second step, there was a significant association between attachment to the father and DA2 ($\beta = .172$, $p < .001$). In the third step, higher scores on DA2 were associated with PIPV victimization (OR = 1.245, 95% CI = 1.069 to 1.450, $p < .01$). In the final step, when DA2 was included in the regression model, the association between attachment to the father and PIPV decreased (OR = 1.728, 95% CI = 1.185 to 2.519, $p < .01$), indicating partial mediation. Bootstrap confidence intervals showed that the indirect effect of DA2 ($\beta = .091$, 95% CI = .026 to .173) in the association between attachment to the father and PIPV victimization was significant, indicating partial mediation of the effect of attachment to the father on PIPV victimization through DA2. More precisely, path analysis showed that an *insecure* style of attachment to the father was positively associated with DA2, which in turn increased the risk of being a victim of PIPV.

4. DISCUSSION, LIMITATIONS AND IMPLICATIONS

The current study examined the mediating role of DA in the relationship between parental attachment and PIPV victimization. In our sample, 21.1% of the participants had already been victims of at least one act of PV by one of their partners. The prevalence of victims of PIPV varies from 9% to 49% across studies (WHO, 2010). In this study, we were interested to see whether there was a history of PIPV in the life of young adults, in order to determine whether negative beliefs that developed during childhood could be a vulnerability factor for PIPV later in life. The results showed that participants' sex was not associated with PIPV victimization, as both women and men had experienced PIPV, highlighting the fact that physical victimization is not specific to women. These results support those of previous studies (Straus, 2008). They also show that *insecure* attachment to the father or mother increased the risk of being a victim of PIPV by 1.9 compared to *securely* attached participants. Parental attachment is an important vulnerability factor for PIPV victimization (Velotti, Zobel, Rogier, & Tambelli, 2018). Young adults with *insecure* parental attachment have a greater propensity to have DA as a whole (Hankin et al., 2005). When DA was included in the mediational model, only DA1 (sociotropy) - *Seeking the esteem of others* - for attachment to the mother and DA2 (autonomy) - *The capacity to oppose others* - for attachment to the father increased the model's significance. These results are similar to those in the literature, showing that *insecure* attachment to the mother is related more to sociotropy (Otani et al., 2011, 2014), and that attachment to the father is related more to autonomy (Otani et al., 2014). Indirect paths of both mediation models were significant using the bootstrap method. *Insecure* attachment to the mother would lead to more DA1 (sociotropy), with a 1.3 increase in the risk of being a victim of PIPV at least once in a lifetime. Similarly, *insecure* attachment to the father would lead to more DA2 (autonomy), increasing by 1.2 the risk of being a victim of PIPV at least once in a lifetime. These mediations are partial. These first results in the field of IPV can be compared with results obtained in studies of mental health disorders, such as depression (Hankin et al., 2005; Otani et al., 2018).

These findings suggest that approval and dependence patterns formed during young adulthood may be induced by insecure relationships with the mother, which may in turn be related to victimization by an intimate partner. By contrast, greater autonomy, notably the capacity to oppose others, is likely to be induced by *insecure* relationships with the father, in turn related to physical victimization by an intimate partner. These findings are in accordance with those of Stith et al. (2004), who suggested that young adults' personal

characteristics could represent vulnerabilities increasing the risk of being a victim of PIPV. Based on the current results, DA could compromise the ability of young adults to have harmonious romantic relationships, because they will tend to be drawn to partners who fit their dysfunctional internal working models, heightening their vulnerability to PIPV experiences.

Limitations. Several limitations should be borne in mind. First, the sample was composed solely of young French adults, which may reduce the generalizability of the findings. Secondly, self-report questionnaires reflect a subjective perception and may be influenced by social desirability, and a multi-method approach would be preferable (e.g., semi-structured interviews). Furthermore, the scoring method used to evaluate PIPV was dichotomous and it was therefore not possible to test the size of the indirect effects. Participants were mainly female, and it is possible that the lack of difference in PIPV experiences between women and men was biased. Considering the relational nature of partner violence in young adults, it also seems important to take into account the potential relationship dynamics involved in the participants' experiences, such as dyadic adjustment. In this study, we focused only on PIPV victims, but it would be interesting to study other forms of violence and the bi-directionality of PIPV among young adults. Finally, the cross-sectional nature of the data restricted our ability to test causal relations and to understand the mechanisms behind the path leading from emotional insecurity to IPV. It would be useful to replicate this research in a different cultural context, to examine whether these interactions are culturally specific. Additional research is needed to determine cognitive and emotional vulnerability factors in the risk of PIPV among insecurely attached individuals.

Implications. No published studies have investigated the link between PIPV and DA. Young adults with *insecure* internal working models will tend to have DA and to turn to partners with the same profile, thus increasing the risk of dysfunctional relationships. The current study provides an exploratory basis for appropriate prevention or intervention programs for young adults. For example, while it does not seem possible to act on the attachment of young adults to their parents, we can try to act on their beliefs and representations in an attempt to deconstruct them. Universal prevention programs to strengthen life skills such as cognitive skills (e.g. critical thinking, problem solving and decision-making) or even emotional skills (e.g. being aware of oneself, of one's history and one's limits), could be moderated and reduce dysfunctional beliefs or attitudes built up since childhood. Thus, this research provides some initial ideas for interventions to prevent IPV, and particularly PIPV, in young adults.

5. CONCLUSION

Insecure parental attachment and DA can be factors of vulnerability to PIPV. Further analysis of the results shows that dysfunctional sociotropic attitudes appear to partially mediate attachment to the mother and PIPV victimization among young adults, while dysfunctional autonomous attitudes appear to partially mediate attachment to the father and PIPV.

REFERENCES

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. N. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum Associates. <https://doi.org/10.4324/9780203758045>
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427–454. <https://doi.org/10.1007/BF02202939>
- Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research. Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. International Universities Press. <https://doi.org/10.1176/appi.psychotherapy.1977.31.4.633>
- Bosmans, G., Braet, C., & Van Vlierberghe, L. (2010). Attachment and symptoms of psychopathology: Early maladaptive schemas as a cognitive link? *Clinical Psychology and Psychotherapy*, 17(5), 374–385. <https://doi.org/10.1002/cpp.667>
- Bouvard, M., Cottraux, J., Charles, S., Ciadella, P., Guerin, J., & Aimard, G. (1994). Etude de validation sur une population française de l'échelle d'attitudes dysfonctionnelles de Weissman et Beck (DAS forme A) [Validation study on a French population of the Weissman and Beck dysfunctional attitude scale (DAS form A)]. *Journal de Thérapie Comportementale et Cognitive*, 4(4), 127–135.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3, Loss, sadness, and depression*. New York: Basic book.
- Clark, D. A., Beck, A. T., & Alford, B. A. (1999). Scientific Foundations of Cognitive Theory and Therapy of Depression. In John Wiley & Sons (Ed.), *Clinical Psychology*. John Wiley & Sons. [https://doi.org/10.1016/s0272-7358\(00\)00063-5](https://doi.org/10.1016/s0272-7358(00)00063-5)
- Dye, M. L., & Eckhardt, C. I. (2000). Anger, irrational beliefs, and dysfunctional attitudes in violent dating relationships. *Violence and Victims*, 15(3), 337–350. <http://www.ncbi.nlm.nih.gov/pubmed/11200106>
- Esther De Graaf, L., Roelofs, J., & Huibers, M. J. H. (2009). Measuring dysfunctional attitudes in the general population: The dysfunctional attitude scale (form A) revised. *Cognitive Therapy and Research*, 33(4), 345–355. <https://doi.org/10.1007/s10608-009-9229-y>
- Fuhr, K., Reitenbach, I., Kraemer, J., Hautzinger, M., & Meyer, T. D. (2017). Attachment, dysfunctional attitudes, self-esteem, and association to depressive symptoms in patients with mood disorders. *Journal of Affective Disorders*, 212, 110–116. <https://doi.org/10.1016/j.jad.2017.01.021>
- Hankin, B. L., Kassel, J. D., & Abela, J. R. Z. (2005). Adult attachment dimensions and specificity of emotional distress symptoms: Prospective investigations of cognitive risk and interpersonal stress generation as mediating mechanisms. *Personality and Social Psychology Bulletin*, 31(1), 136–151. <https://doi.org/10.1177/0146167204271324>
- Hayes, A. F. (Ed.) (2018). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: The Guilford Press.
- Ingram, R. E., Overbey, T., & Fortier, M. (2001). Individual differences in dysfunctional automatic thinking and parental bonding: Specificity of maternal care. *Personality and Individual Differences*, 30(3), 401–412. [https://doi.org/10.1016/S0191-8869\(00\)00032-5](https://doi.org/10.1016/S0191-8869(00)00032-5)
- Kaygusuz, C. (2013). Irrational beliefs and abuse in university students' romantic relations. *Egitim Arastirmalari - Eurasian Journal of Educational Research*, 51, 141–156.
- Lussier, Y. (1997). *Traduction française du CTS2* [A French translation of the CTS2]. Unpublished manuscript, Université du Québec à Trois-Rivières, Trois-Rivières, Québec, Canada.
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation Analysis. *Annual Review of Psychology*, 58(1), 593–614. <https://doi.org/10.1146/annurev.psych.58.110405.085542>

- Miljkovitch, R., & Cohin, E. (2007). L'attachement dans la relation de couple : une continuité de l'enfance [Attachment in the couple relationship: a continuation of childhood]. *Dialogue, 1*(175), 87–96.
- Mission Interministerielle pour la PROtection des Femmes contre les violences et la lutte contre la traite des être humains (MIPROF) (2019, November). La violence au sein du couple et les violences sexuelles en 2018 [Intimate partner violence and sexual violence in France in 2018]. La lettre de l'observatoire national des violences faites aux femmes No. 14. Retrieved from <https://arreteonslesviolences.gouv.fr/>
- National Survey of Violence Against Women in France. (2001). Nommer et compter les violences envers les femmes : une première enquête nationale en France. [Appointing and counting violence against women: a first national survey in France]. *Population & Sociétés, 364*, 4.
- Otani, K., Suzuki, A., Kamata, M., Matsumoto, Y., Shibuya, N., Sadahiro, R., & Enokido, M. (2011). Parental overprotection increases sociotropy with gender specificity in parents and recipients. *Journal of Affective Disorders, 136*(3), 824–827. <https://doi.org/10.1016/j.jad.2011.09.033>
- Otani, K., Suzuki, A., Matsumoto, Y., Sadahiro, R., & Enokido, M. (2014). Affectionless control by the same-sex parents increases dysfunctional attitudes about achievement. *Comprehensive Psychiatry, 55*(6), 1411–1414. <https://doi.org/10.1016/j.comppsy.2014.04.003>
- Otani, K., Suzuki, A., Matsumoto, Y., & Shirata, T. (2017). Relationship of negative and positive core beliefs about the self with dysfunctional attitudes in three aspects of life. *Neuropsychiatric Disease and Treatment, 13*, 2585–2588. <https://doi.org/10.2147/NDT.S150537>
- Otani, K., Suzuki, A., Matsumoto, Y., & Shirata, T. (2018). Marked differences in core beliefs about self and others, between sociotropy and autonomy: Personality vulnerabilities in the cognitive model of depression. *Neuropsychiatric Disease and Treatment, 14*, 863–866. <https://doi.org/10.2147/NDT.S161541>
- Pietromonaco, P. R., & Barrett, L. F. (2000). The Internal Working Models Concept: What Do We Really Know about the Self in Relation to Others? *Review of General Psychology, 4*(2), 155–175. <https://doi.org/10.1037/1089-2680.4.2.155>
- Roelofs, J., Lee, C., Ruijten, T., & Lobbestael, J. (2011). The mediating role of early maladaptive schemas in the relation between quality of attachment relationships and symptoms of depression in adolescents. *Behavioural and Cognitive Psychotherapy, 39*(4), 471–479. <https://doi.org/10.1017/S1352465811000117>
- Saltzman, L. E., Fanslow, J. L., McMahon, P. M., Shelley, G. A., Gerberding, J. L., Binder, S., Hammond, W. R., Ann, M., Layout, B., & Lord, B. B. (1999). *Intimate partner violence surveillance: Uniform definitions and recommended data elements, version 1.0*. (Issue 1). Retrieved from <http://www.cdc.gov/ncipc/>
- Smith, P. H., White, J. W., & Holland, L. J. (2003). A longitudinal perspective on dating violence among adolescent and college-age women. *American Journal of Public Health, 93*(7), 1104–1109. <https://doi.org/10.2105/ajph.93.7.1104>
- 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*. <https://doi.org/10.1016/j.avb.2003.09.001>
- 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.chilyouth.2007.10.004>
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2). *Journal of Family Issues, 17*(3), 283–316. <https://doi.org/10.1177/019251396017003001>
- 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*(JUL). <https://doi.org/10.3389/fpsyg.2018.01166>
- Vignoli, E., & Mallet, P. (2004). Validation of a brief measure of adolescents' parent attachment based on Armsden and Greenberg's three-dimension model. *Revue Européenne de Psychologie Appliquée, 54*(4), 251–260. <https://doi.org/10.1016/j.erap.2004.04.003>

- Vivona, J. M. (2000). Parental attachment styles of late adolescents: Qualities of attachment relationships and consequences for adjustment. *Journal of Counseling Psychology, 47*(3), 316–329. <https://doi.org/10.1037/0022-0167.47.3.316>
- Weissman, A., & Beck, A. (March, 1978). The Dysfunctional Attitude Scale: A Preliminary Investigation. *Paper Presented at the Annual Meeting of the American Educational Research Association*, 1–33, Toronto, Ontario, Canada. <https://eric.ed.gov/?id=ED167619>
- World Health Organization. (2010). *Preventing intimate partner and sexual violence against women. Taking action and generating evidence*. Retrieved from https://www.who.int/violence_injury_prevention/publications/violence/9789241564007_eng.pdf
- Zhou, Y., Arend, J., Mufson, L., & Gunlicks-Stoessel, M. (2020). Change in dysfunctional attitudes and attachment in interpersonal psychotherapy for depressed adolescents. *Psychotherapy Research, 1*–9. <https://doi.org/10.1080/10503307.2020.1756513>

AUTHORS' INFORMATION

Full name: Chloe Cherrier

Institutional affiliation: EE 1901 QualiPsy, University of Tours, France

Institutional address: Faculté Arts et Sciences Humaines, 3 rue des Tanneurs, BP 4103 – 337041 Tours cedex 1

Short biographical sketch: Chloe Cherrier is a PhD student in psychology in the Quality of Life and Psychological Health unit (QualiPsy). Her research interest focuses mainly on IPV among young adults and particularly the links with parental attachment and cognitive skills. She also works in the community FRAPS Centre-Val de Loire (*Fédération Régionale des Acteurs en Promotion de la Santé* / regional federation of health promotion Actors) and conduct educational programs on emotional and sexual life with young people.

Full name: Alice Richard

Institutional affiliation: EE 1901 QualiPsy, University of Tours, France

Institutional address: Faculté Arts et Sciences Humaines, 3 rue des Tanneurs, BP 4103 – 337041 Tours cedex 1

Short biographical sketch: Alice Richard is a post-graduate student in Clinical Psychology and Psychopathology at the University of Tours. She is involved in the research of Chloe Cherrier, a PhD student in psychology in the QualiPsy unit, sharing her interest in IPV among young adults and its links with parental attachment and cognitive skills.

Full name: Robert Courtois

Institutional affiliation: EE 1901 QualiPsy, University of Tours, France

Institutional address: Faculté Arts et Sciences Humaines, 3 rue des Tanneurs, BP 4103 – 337041 Tours cedex 1

Short biographical sketch: Robert Courtois is an associate professor / senior lecturer in psychopathology and clinical psychology. He is also a part-time hospital psychiatrist (Psychiatric University Clinic, University Hospital of Tours, France). He manages the CRIAVS Centre-Val de Loire (*Centre de ressources pour les intervenants auprès des auteurs de violences sexuelles* / regional resource center for people working with sexual offenders).

Full name: Catherine Potard

Institutional affiliation: EA 4638 *Laboratoire de Psychologie des Pays de la Loire* (regional Psychology Research Laboratory), University of Angers

Institutional address: Université d'Angers, Maison de la Recherche Germaine Tillion, 5 bis, boulevard Lavoisier, 49045 Angers Cedex 1, France

Short biographical sketch: Catherine Potard is currently Associate Professor of Psychology at the University of Angers, principal member of the regional psychology research laboratory (EA 4638)

C. Cherrier, C. Potard, A. Richard, E. Rusch, & R. Courtois

and associate member of the Emerging Team QualiPsy (EE 1901). She is also a psychologist in the Resource Centre for people working with perpetrators of sexual violence - CRIAVS – Centre-Val de Loire (University Hospital of Tours, France). Her research topics focus on the study of psychological risk, vulnerability, and protective factors in the development and maintenance of risk behaviors and interpersonal violence during developmental transition periods such as adolescence and early adulthood.

Full name: Emmanuel Rusch

Institutional affiliation: EA 7525 *Education Ethique Santé* (EES - Education Ethics Life), University of Tours

Institutional address: Faculté Arts et Sciences Humaines, 3 rue des Tanneurs, BP 4103 – 337041 Tours cedex 1

Short biographical sketch: Emmanuel Rusch is an university professor and director of EES unit. He is also doctor in public health and hospital practitioner in hospital of Tours. He is president of FRAPS and of the French Society of Public Health.