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Attachment, Trauma, and Mentalization in Intimate Partner Violence: A Preliminary Investigation

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Abstract

Intimate partner violence (IPV) has been examined from a range of theoretical perspectives, including attachment theory, with the aim of assessing psychosocial risk factors. Previous research has shown that a child's exposure to violence in the family is a major predictor of IPV victimization later in life. Furthermore, research on abused and traumatized adult samples has shown high frequencies of unresolved/disorganized attachment styles. In particular, disorganized attachment is associated with major problems of affect regulation and deficits in mentalizing ability. The present research had two aims: (1) to analyze the relationship between childhood trauma and victimization in adulthood; and (2) to investigate attachment and mentalization ability and verify whether specific profiles might allow us to identify risk factors and/or recidivism. A sample of 31 women, recruited through anti-violence centers, were administered the Adult Attachment Interview (AAI) and the Reflective Functioning Questionnaire (RFQ). The Complex Trauma Questionnaire (ComplexTQ) and the Reflective Functioning Scale (RFS) were also applied to the AAI transcripts. Interviews were audiorecorded and transcribed verbatim. Coding was conducted by two trained coders and

certified as reliable for the AAI and RFS. Clinicians completed the Modes of Mentalization Scale (MMS) to assess participants' mentalization style. The data showed a high percentage of women with insecure attachment and lower reflective functioning. The results are discussed in terms of their clinical and theoretical implications—particularly their application to psycho-forensics, through the development of preventive programs and interventions for IPV. Efforts to understand the etiology of IPV and to intervene to prevent recidivism are fundamental in reducing this public health threat.

Keywords: intimate partner violence, attachment, mentalization, trauma, public health

Introduction

Violence against women is a human rights and public health issue, and it is both a cause and a consequence of societal gender inequality (e.g., Garcia-Moreno & Watts, 2011; Sanz-Barbero et al., 2018). It is also a global phenomenon, which carries significant social and financial costs (Garcia-Moreno et al., 2005; Max et al., 2004; Yodanis et al., 2000). Intimate partner violence (IPV), which includes physical, sexual, and emotional abuse and controlling behaviors by an intimate partner, is one of the most common forms of violence against women (WHO, 2013). The World Health Organization (WHO) estimates that almost one-third (30%) of all women have experienced physical and/or sexual violence from a partner during their lifetime, and approximately 38% of female murders are perpetrated by an intimate partner (WHO, 2016).

Research in both clinical and forensic psychology has suggested that there is a relationship between childhood victimization and victimization in adulthood (Martínez-Torteya et al., 2009; Richards et al., 2017; Sen et al., 2019). For instance, experiences of childhood abuse and witnessing IPV in the parental relationship have been identified as risk factors for both IPV perpetration and IPV victimization later in life (e.g., Bensley et al., 2003; Capaldi et al., 2012; Milner et al., 2010). Intra-family victimization tends to have a more serious impact than extra-family victimization; furthermore, this impact is not only emotional, but also cognitive. The impact of childhood abuse seems to be less dependent on the number of events to which minors are exposed (i.e., as witnesses or victims), and more linked to the invasiveness and seriousness of the events (Vagni et al., 2017; Vagni et al., 2018). To explain the link between childhood exposure to violence and adult experiences of violence, several authors (e.g., Kalmuss, 1984; McRae et al., 2017; Straus, 1980) have employed the intergenerational transmission of violence model. Briefly, this model refers to the influence of the family environment on children, who, once exposed to violence, learn to use it or tolerate

it as a consequence of social learning, and adopt beliefs in which violence is devoid of its aggressive nature and normalized in everyday relationships (Black et al., 2010; Franklin & Kercher, 2012; Roberts et al., 2010).

Theories oriented in the social learning framework tend to neglect the actual childhood trauma experiences that have been identified in many IPV victims (e.g., Kong et al., 2018; Widom et al., 2008; Widom et al., 2014). In this regard, attachment theory, with its focus on the complex relational dynamics between caregivers and children and within significant adult relationships, could be a more useful framework to analyze the phenomenon in order to better understand its dynamics and develop more precise and tailored interventions (for a recent review of attachment and IPV, see Velotti et al., 2018).

According to attachment theory, infants develop internal working models (IWM) on the basis of their relationships with primary caregivers (Bowlby, 1973); these IWMs comprise mental representations of the self, the other, and the relationship between self and other. More specifically, IWMs determine the degree to which individuals believe themselves to be lovable and worthy of affection and believe others to be trustworthy and reliably and affectively responsive. In this framework, several authors (e.g., Bartholomew et al., 2001; Dutton, 2007; Mayseless, 1991) have highlighted the role of insecure attachment patterns (i.e., IWMs characterized by a self-representation as unlovable and a representation of others as unavailable) as a main psychological predictor of IPV, in terms of both perpetration (Dutton, 2011; Fonagy, 2003) and victimization (Henderson et al., 2005; Kuijpers et al., 2012).

Many studies on attachment and IPV have focused on relational dynamics, exploring attachment styles within significant partnerships (i.e., romantic attachment; see Bartholomew, 1990; Bartholomew & Horowitz, 1991; Hazan & Shaver, 1991). According to romantic attachment theory, the coupling of two preoccupied individuals may give rise to aggressive patterns that lead both partners to feel rejected and to try to control the other. On the other

hand, the coupling of a preoccupied person with a dismissive partner may lead to demand-withdraw relational patterns, which may comprise the basis of IPV (Mikulincer & Shaver, 2007). In this line of research, Henderson et al. (2005) found that preoccupied attachment styles were predictive of being both a perpetrator and a victim of IPV. Allison et al. (2008), through an in-depth qualitative study, found that preoccupied individuals often used violence to achieve proximity with a partner they perceived as disengaging from the relationship, whereas dismissing individuals prevalently used violence as a distancing strategy, when they felt their partners were approaching too closely. Doumas et al. (2008) found that violence emerged predominantly between avoidant males and anxious females, and Kuijpers et al. (2012), focusing on IPV victims, found that an avoidant attachment style was a strong predictor of IPV revictimization.

The connection between insecure attachment styles and IPV perpetration and victimization has been confirmed by several studies (e.g., Bifulco et al., 2019; Bonache et al., 2016; Wilson et al., 2013), mostly via the administration of self-report questionnaires (e.g., ECR; Brennan et al., 1998). However, correspondence between self-report and interview measures of attachment is notoriously lacking (de Haas et al., 1994), because self-report measures of attachment capture only conscious dimensions, while unconscious dimensions of attachment remain inaccessible. Since IWMs are pre-eminently unconscious, it is essential for researchers to capture them using alternative techniques, such as the Adult Attachment Interview (AAI; Main et al., 2003). Many authors agree (Carlson et al., 1997; Crowell & Treboux, 1995) that self-report measures fail to reach the same psychodynamic depth as the AAI. As Jacobvitz et al. (2002) underlined: "the AAI classification coding system assesses *adults' unconscious processes for regulating emotion* … Unlike the AAI, the self-report measures of attachment tap adults' conscious appraisals of themselves in romantic relationships" (p. 208).

Only a few studies on IPV victimization and perpetration have focused on early attachment patterns with primary caregivers using autobiographical interviews (e.g., AAI) or projective tests (e.g., the Adult Attachment Projective [AAP]; George & West, 2012). Holtzworth-Munroe et al. (1997) and Babcock et al. (2000) used the AAI and found a prevalence of insecure and unresolved/disorganized attachment patterns in their samples of violent husbands. To our knowledge, the only study that has administered the AAI to IPV victims is that of Alexander et al. (2009), on a sample of 93 victimized women. In this study, the authors did not provide data on attachment classifications; however, they did discuss the high frequency of unresolved/disorganized attachment patterns in their sample. Finally, Pallini et al. (2016) administered the AAP to female victims of IPV and found a striking prevalence of unresolved attachment in 14 out of the 16 women.

There is a growing body of evidence highlighting the negative impact of complex childhood trauma and insecure/disorganized attachment on many adult competencies. For example, studies have drawn a link between complex childhood trauma and poor affect regulation (e.g., Kim & Cicchetti, 2010), fewer references to internal states (Shipman & Zeman, 1999), and mentalizing deficits (Fonagy & Bateman, 2008; Lyons Ruth & Jacobvitz, 2016). *Mentalization* represents "the mental process by which an individual implicitly and explicitly interprets the actions of himself and others as meaningful on the basis of intentional mental states such as personal desires, needs, feelings, beliefs, and reasons" (Bateman & Fonagy, 2004, p. xxi). In particular, mentalization has been conceptualized as a mediator in the relationship between traumatic early attachment experiences and later difficulties with, for example, affect regulation, attention, and self-control (Agrawal et al., 2004; Fonagy, et al., 2002).

Stein (2006) described the function of mentalization in resiliency, explaining that it can act as a "filtering system" that "allow[s] children to endure and metabolize" adverse

experiences. The ability to understand an adverse experience and its effect on oneself and others may decrease the likelihood that the event will have a negative toll on one's self-concept and expectations of others. Furthermore, an inherent openness to discuss and understand one's own and others' emotional states could increase the likelihood that one will seek help from social relations when faced with a potentially traumatic event. Moreover, the ability to mentalize seems to protect against the development of psychopathology in adults who have experienced abuse or neglect as children (Fonagy et al., 2011; Stein, 2006).

Several studies have underlined that *reflective functioning* (RF) (i.e., the operationalization of the processes underpinning mentalization) plays an important role in regulating the relationship between attachment problems and the quality of affective relationships in adulthood (e.g., Levy, 2005; Levy et al., 2015; Meyer & Pilkonis, 2005; Nazzaro et al., 2017). As Fonagy (2003) affirmed, the development of violence in an adult couple may be the result of deficits in mentalizing and RF, as evidenced by the use of pre-mentalistic modes within the couple's interchanges. More specifically, IPV perpetrators and victims may assume pre-mentalistic positions such as excessive certainty, concrete thinking, teleological thought, and intrusive pseudo-mentalization (Gagliardini & Colli, 2019; Gagliardini et al., 2020). *Excessive certainty* is produced by an overactivation of mentalization, which results in individuals showing acritical confidence about mental states, as if they understand and know others' inner worlds (e.g., "I know that my partner will change"). In *concrete thinking*, thoughts and feelings become too literal, and individuals may struggle to conceive of alternative perspectives (e.g., "I feel abandoned. I am sure you want to leave me."). *Teleological thought* is characteristic of individuals who recognize the presence of mental states only when they are concretized in physical manifestations (i.e., they draw information on the internal world only from external reality). This may also explain self-injurious gestures, which express the possibility of acting on oneself to moderate one's internal state (e.g., "If I

don't get scared, I can't feel the pain"). Finally, *intrusive pseudo-mentalization* is a more malign pre-mentalistic form, in which thoughts and feelings are expressed with an intention to manipulate and intrude on others' lives (e.g., "I know what causes your suffering, and I know also the solution to it").

To our knowledge, no prior study has investigated the role of RF and pre-mentalistic modes in female victims of IPV. Only a handful of studies have investigated the relationship between violence and mentalization, paying more attention to the mentalization of perpetrators (e.g., Levinson & Fonagy, 2004); these studies found an association between male perpetrators of violence against women and impaired RF. In this vein, we believe that it would be fruitful to explore the dimensions of mentalization and RF in IPV victims—not to pathologize or "blame the victim," but to understand the risk factors that may prevent victims from escaping violent relationships. As Goldner et al. (1990) noted, in the case of IPV, many women return to contact their abusive partners; and many others end up in new abusive relationships (Alexander, 2009; Kujipers et al., 2012; for a recent review, see Ørke et al., 2018).

In light of these considerations, the aims of the present study were as follows:

1. to assess the childhood traumatic experiences of female victims of IPV;
2. to investigate and identify the attachment patterns of female victims of IPV; and
3. to examine RF and pre-mentalistic modes in female victims of IPV, in relation to attachment and trauma.

Methods

Procedures

Initially, we mapped all anti-violence centers and shelters in Italy that belonged to associations actively engaged in countering gender-based violence. Given the exploratory aim

of this first part of the study, all Italian regions were involved; after compiling a draft list of 30 anti-violence centers and shelters, we sent each institution an email to recruit them to the study. The study was described as one that would require participants to complete questionnaires and take part in an interview regarding symptoms and experiences in one's family of origin. Of the 30 institutions that were contacted, 10 confirmed their participation in the project. Participation was voluntary and confidential, and no compensation was offered. All assessments took place in individual sessions with a trained clinical psychologist.

Participants

A national sample of clinical psychologists and psychotherapists with at least 3 years of clinical experience in an anti-violence center were recruited by e-mail. The clinicians were asked to select women they were currently treating who met the following inclusion criteria: (a) ≥ 18 years of age, (b) having no psychotic disorder, and (c) not taking medication for psychotic symptoms. Furthermore, the clinicians had to have seen the women between three and eight times. This criterion allowed us to collect a homogeneous sample of women at the beginning of their process of overcoming violence, with no ongoing psychotherapy. Each clinician provided data for only one woman, in order to minimize rater-dependent variance. The participating clinics and women were required to give informed consent for the processing of sensitive data and participation in the research. The study sample consisted of 31 psychologists/psychotherapists and 31 female victims of IPV. The study received approval from the Ethical Committee of the Department (n°8/2018) (University of Urbino "Carlo Bo").

Measures

Clinical Data Form (CDF)

The CDF is an ad hoc questionnaire that collects a series of relevant variables relating to demographic data, Axis I diagnoses, and etiology. Research has shown that clinician-rated measures predict theoretically relevant criterion variables and reflect reasonable and highly conservative criteria (e.g., Eddy et al., 2004; Nakash-Eisikovits et al., 2002). Specifically, the CDF collects general information on the responding clinician, the patient, and the therapeutic intervention (i.e., duration and number of sessions), as well as demographic data, including the patient's age, race, educational level, socio-economic level, and development history. It also assesses adaptive functioning variables relating to the patient, such as the quality of their love and friendship relationships, their history of intimate partner violence, and variables potentially related to etiology, such as a history of abuse. In addition, the presence or absence of select clinical problems and personality characteristics (e.g., self-harm, problems with intimacy, commitment within close relationships) is indicated.

Adult Attachment Interview (AAI)

The AAI (George et al., 1985; Main et al., 2003) is a semi-structured interview following an hour-long protocol, which explores adults' mental representations of attachment while discussing childhood experiences. After providing an overview of their family composition, respondents are asked to describe their early relationships with parents, supplying five adjectives and supporting these with descriptions of specific incidents. Additionally, interviewees are probed regarding situations of distress (e.g., emotional upset, hurt, illness) and instances of threat or abuse. Following this, questions are posed concerning respondents' early reactions to separation from a caregiver and significant loss. AAI interview transcripts are scored on 13 9-point scales. Five scales assess the "probable childhood experience" with

caregiving figures (i.e., loving, rejecting, neglecting, involving, pushing to achieve), whereas eight scales assess the current mental state with regard to attachment (i.e., idealization, anger, derogation, passivity, lack of memory, meta-cognition, coherence of transcript, coherence of mind). Total AAI score is based on the respondent's ability to produce coherent narratives of childhood experiences with caregivers that produce a classification as secure/autonomous (F), dismissing (Ds), entangled/preoccupied (E), or "cannot classify" (CC), which applies when both dismissing and preoccupied states of mind are indicated in the same transcript. The CC classification can also be characterized by a refusal to engage in the interview, low coherence without strong indices of an insecure state of mind, an equally evidenced combination of insecure and secure strategies, and other anomalies, such as the insertion of frightening events into historical narratives without introduction or context, as though to affect the interviewer (Hesse, 2008; Main et al., 2003; Main et al., 2008). Finally, respondents may also be assigned an unresolved/disorganized state of mind (U), in conjunction with a primary classification, when there are lapses in reasoning or discourse around trauma, as this is considered indicative of a lack of cognitive integration of traumatic experiences (Hesse & Main, 2000; Main & Hesse, 1990; Main et al., 2003). Psychometric testing and meta-analyses have provided evidence of the AAI's stability and discriminant and predictive validity in both clinical and non-clinical populations (Bakermans-Kranenburg & van IJzendoorn, 1993, 2009; Hesse, 2008; Roisman et al., 2007; Sagi et al., 1994; van IJzendoorn, 1995; van IJzendoorn & Bakermans-Kranenburg, 2008). In the present study, each interview was recorded, transcribed verbatim and coded by certified raters (AF, GG, CMV) (ICC=.77) according to the AAI coding and classification system (Main et al., 2003). All transcripts were double-coded, blind to subject conditions. When disagreement arose, a third independent coder categorized the relevant transcript and, following discussion between all coders, a final agreement was reached.

Reflective Functioning Scale (RFS)

In the present study, the RFS (Fonagy et al., 1998) was applied to AAI transcripts to assess RF capacities (George et al., 1985). For this purpose, AAI questions were divided into "demand" and "permit" questions. Demand questions require an RF response (e.g., "Why do you think your parents behaved the way they did during your childhood?"), whereas permit questions allow for a reflective stance (e.g., "Briefly describe what it was like for you in your family as a young child"). Passages were rated in relation to their level of reflection based on a list of indicators illustrating negative or limited, moderate, and high RF. A score was assigned to each demand and permit question if the response was characterized by RF. According to the RFS scoring guidelines, there are four markers of reflecting functioning: "Awareness of the nature of mental states" (marker A), "Explicit effort to tease out mental states' underlying behavior" (marker B), "Recognizing developmental aspects of mental states" (marker C), and "Mental states in relation to the interviewer" (marker D). After rating each identified passage of the AAI, we assigned an overall classification to the interview as a whole, ranging from –1 (negative RF) to 9 (full or exceptional RF). This RFS overall score was used as the main RF component in the present analysis. All transcripts were coded by two certified raters, and inter-rater reliability was excellent (Cohen's k=0.87).

Complex Trauma Questionnaire (ComplexTQ)

The ComplexTQ (Maggiora Vergano et al., 2015) is a 70-item scale used for the retrospective assessment of multi-type maltreatment, measuring lack of care (physical and emotional neglect), abuse (i.e., psychological, physical, sexual), and other traumatic experiences, such as rejection, role reversal, exposure to domestic violence, separation, and loss. The instrument is available in two versions: clinician-report and self-report. The questionnaire assesses adverse experiences from childhood (to the age of 14) involving

maternal, paternal, and other attachment figures, separately. In the current study, the clinician-report version was used and applied to the AAI transcripts. The questionnaire requires approximately 15–20 minutes to complete, depending on the length of the interview transcript. Scores for the presence and frequency of traumatic experiences in each domain are automatically provided by the software.

Modes of Mentalization Scale (MMS)

The MMS (Gagliardini & Colli, 2019; Gagliardini et al., 2020) is a clinician-report assessment of mentalization modes. The scale is comprised of 24 items, which clinicians rate on a 5-point Likert scale ranging from 1 (*not descriptive*) to 5 (*very descriptive*). The MMS evaluates five mentalizing modes: excessive certainty (e.g., a tendency to express excessive certainty about others' thoughts and feelings), concrete thinking (e.g., the use of common sense explanations or clichés to explain affects and feelings), good mentalization (e.g., the ability to describe mental states coherently), teleological thought (e.g., an apparent recognition of the interest of significant others only when it is supported by concrete actions), and intrusive pseudo-mentalization (e.g., the use of thoughts and feelings to manipulate others). In the present study, the MMS factor structure was quite robust, with good internal consistency for each factor, indicated by alpha values ranging from .67–.91.

Data Analytic Procedures

All data were stored in a single database containing the categorical, ordinal, and continuous variables relating to the female victim participants. All statistical analyses considered the type of data available. In particular, general scores were calculated for the various scales, while, for the associations between variables, the chi-squared test was applied and, when appropriate, Fisher's exact test.

Data analysis was carried out using the SPSS Statistics 20 software package for Windows. Initially, all variables and their modalities were labeled (to obtain tables and graphs that were easy to interpret) and the treatment of missing data was defined (9% of the total). In the present case, it was not necessary to correct the non-responses, due to the small sample size. All cases were included in the analyses (n=31).

Results

Demographic Data, Psychological Symptoms, and Traumatic Experiences

The average age of the entire sample of women was 42 years (range: min 29–63, *SD*=11.5). In terms of ethnicity, 90% were Italian and 10% were foreign. The women's level of education was distributed as follows: 23% had attended lower secondary school, 29% had attended upper secondary schools, 16% had interrupted university studies, and 13% had graduated university. As for socio-economic status, 3% were poor, 26% were working class, 48% were middle class, and 3% were upper class. The majority of the women were separated or divorced (35%); aside from this, 16% were married, 16% lived with a companion, 10% were single, and 3% were in a second marriage. The remaining 19% did not provide sufficient information. The women's average duration of the violent relationship was 12 years (range: 6–480 months, *SD*=161.8).

The female participants presented a history of their traumatic experiences via the Complex-TQ measure, which examined the different forms of trauma they had experienced in their first 14 years of life. The results showed that 94% of the sample had experienced at least one form of trauma during that time: 3% had experienced one form of trauma, 6% had experienced two forms of trauma, 13% had experienced three forms of trauma, and 72% of the sample had experienced four or more forms of trauma. Only 6% of the sample had not

experienced any form of early trauma. The most frequent forms of traumatic experiences reported by our sample were paternal neglect, rejection, and excessive maternal involvement; neither premature loss nor a high frequency of sexual abuse were prevalent.

Attachment and IPV

With respect to attachment, only 23% of the sample had a secure state of mind (F), while 77% had an insecure or disorganized state of mind: 13% had a dismissing attachment style (Ds), 19% had a preoccupied attachment style (E), and 45% had a disorganized attachment style (U or CC). Accordingly, 55% of the sample had an organized state of mind (F, Ds, E) and 45% had a disorganized (U or CC) state of mind. In relation to the disorganized classification, 13% of the sample had a cannot classify (CC) style, while 26% had an unresolved attachment style due to bereavement or trauma (U) and 6% had a U/CC classification.

This distribution of AAI classifications differed statistically from international normative values (Bakermans-Kranenburg & van Ijzendoorn, 2009) (X^2 [$_{df}$=3]=19,70; p<0.001), but not international clinical values (Cassiba et al., 2013) (X^2 [$_{df}$=3]=1,23; p=0,747). A statistically significant difference also emerged in comparison with the Italian normative sample, but not the Italian clinical sample (respectively: X^2 [$_{df}$=3]=97.99; p<0.001 and X^2 [$_{df}$=3]=4.26; p=0.235).

With respect to the proportion of organized to disorganized AAI classifications in the present sample, this was found to differ significantly from that of an international normative sample (X^2 [$_{df}$=1]=21.03; p<0.001); however, it did not significantly differ from that of an international clinical sample (X^2 [$_{df}$=1]=0.92; p=0.338). The same was true of the Italian samples: the proportion demonstrated for the present sample was significantly different from that of the Italian normative sample (X^2 [$_{df}$=1]=63.12; p<0.001), but not the Italian clinical sample (X^2 [$_{df}$=1]=2.82; p=0.093) (Table 1). In other words, the attachment distribution in our

sample suggested that IPV women may resemble clinical samples more closely than non-normative samples.

Table 1. *Comparison with Data in the Literature Concerning AAI Classifications (Bakermans-Kranenburg & van Ijzendoorn, 2009; Cassibba et al., 2013)*

Reflective Functioning and Intimate Partner Violence

The presence and level of RF were investigated on the basis of respondents' answers to the AAI. In our sample, RF reached an average score of M=2.7 (range: 1–6, SD=1.9), suggesting the presence of a range of non-reflective answers characterized by naive/simplistic and bizarre/unintegrated mental states. As the average score (2.7) was less than 3, it could be considered *borderline*: even though participants used the language of mental states, they provided no material to support the assumption that they understood the implications of their statements, which tended to be either simplistic or stereotyped (e.g., Interviewer: "Why do you think your father behaved as he did during your childhood?"; Subject: "Fathers are all the same, just not interested"). In other cases, participants became overtly defensive in response to questions about mental states underlying their own and/or others' actions. In these situations, participants seemed to perceive the interview as an attack, and became quite hostile in response to mild interrogation (e.g., Interviewer: "Why do you think your parents behaved as they did?" Subject: "How do you expect me to know? You tell me, you are the psychologist!"). For the most part, participants failed to process references to mental states and their impacts on behavior and frequently evaded questions about mental states (e.g., Interviewer: "Did you ever feel pushed away or ignored?"; Subject: "I really don't know how to answer that question").

Considering the four AAI classifications, a statistically significant difference in RF emerged between groups ($F[3, 27]=5.251$, p=0.006). The multiple post-comparisons revealed

a significant difference between F and E, whereby F was greater than E (F: *n*=7, *M*=4.86, *SD*=0.69; E: *n*=6, *M*=2.17, *SD*=1.47; Cohen's d=2.34; pBonferroni=0.035), and between F and U/CC, whereby F was greater than U/CC (U/CC: *n*=14, *M*=4, *SD*=1.92; Cohen's d=1.98; pBonferroni=0.004) (Figure 1). With respect to the comparison between organized and disorganized classifications, the multiple post-comparisons demonstrated that organized participants had a higher average RF score than did disorganized participants (ORG: *n*=15, *M*=3.47, *SD*=1.59; DISORG: *n*=16, *M*=2.06, *SD*=2.02; Cohen's d=0.77; *p*=0.041).

Figure 1. Reflective functioning in AAI classifications

Furthermore, RF was found to differ significantly between participants who had experienced trauma and those who had not. More specifically, those who had experienced more than four forms of trauma had a higher average RF value (*n*=18, *M*=3.56, *SD*=1.58) than those who had not experienced any trauma (*n*=9, *M*=2.11, *SD*=1.76; Cohen's d=0.87, *p*=0.041). We opted for this specific grouping for the comparison, on the basis of Murphy et al. (2014) and Finkelhor et al. (2007), who identified the co-occurrence of four or more forms of adversity as a marker of high traumatization.

In relation to mentalizing modes, which were obtained from the clinician report (MMS), we observed the sample averages presented in Table 2. When comparing these modes of mentalization with those of a clinical sample of individuals with personality disorders (Gagliardini & Colli, 2019; Gagliardini et al., 2020), we found no significant differences between samples.

Table 2. *Description of Pre-Mentalizing Modalities*

Discussion

The first aim of the present study was to assess the traumatic childhood experiences of female victims of IPV. On this point, we observed that 71% of our sample had experienced four or more forms of maltreatment during childhood. Participants' narratives highlighted a continuity between experiences of child maltreatment and violent intimate relationships in adult life. These findings are in line with the literature, which reports a correlation between various types of abuse (Dong et al., 2004; Felitti et al., 1998; Giovanardi et al., 2018; Higgins & McCabe, 2001) and suggests that adult victims of violence often experienced more than one type of abuse during childhood (Finkelhor et al., 2007; Renner & Slack, 2006; Renner & Whitney, 2012; Widom et al., 2014). Exposure to complex trauma, characterized by early and repeated abuse and/or neglect across multiple categories, can have pervasive consequences for mental health, including internalizing, externalizing, post-traumatic, and dissociative disorders in both the short and the long term (Cook et al., 2005; Finkelhor et al., 2007, 2009; Herman, 1992; Van der Kolk et al., 2005). In the present sample, the most frequent forms of traumatic experiences reported by participants were paternal neglect, rejection, and excessive maternal involvement. However, it is useful to reflect on the fact that our sample did not report events of premature loss or a high frequency of experiences of sexual abuse, suggesting that a central aspect of victimization in adulthood may be prolonged exposure to multiple and cumulative forms of maltreatment. This would seem to support the possibility of the intergenerational transmission of maltreatment, as observed elsewhere in the literature (Speranza & Maggiora Vergano, 2015; Zeanah & Zeanah, 1989).

The second aim of the research was to analyze female IPV victims' early attachment representations. The literature shows that the application of attachment theory may address the

psychological component of IPV as both a potential antecedent and a potential consequence of abuse (Henderson et al., 1997). In the present study, several important findings emerged from our analysis of the AAI transcripts. First, the majority of the sample was characterized by an insecure attachment style (68%), confirming previous studies showing an overrepresentation of insecure attachment among female IPV victims (Henderson et al., 2005; Kuijpers et al., 2012; Smagur et al., 2018). In fact, in transmitting early attachment patterns with a primary caregiver to adult attachment to an intimate partner, participants seemed to be influenced by their childhood models in terms of the extent to which they felt worthy of attention or believed others to be available for support. Women with an insecure pattern were further divided into those with preoccupied attachment (19%) and those with avoidant attachment (13%). The former provided a confused and non-objective picture of their history, seemed to distance themselves from experiences and attachment relationships in which they appeared to still be involved and entangled, and used passive and vague discourse; the latter provided narratives that generally appeared less fluent and convincing, characterized by a lack of affectivity.

It is important to underline that a large portion of the sample (45%) was comprised of women with a disorganized classification. In particular, the women in this category demonstrated interrupted discourse related to trauma (abuse) in childhood, with significant slips during discussion of these experiences or a more generalized rupture revealing extreme contradictions or an inability to maintain an organized position (typical of CC classifications)—in some cases with low consistency between stories, thoughts, and comments. In comparing the proportion of organized to disorganized AAI classifications in our sample with that of national and international samples reported in the literature, we found our sample to significantly differ from both international and Italian normative samples, but not clinical ones (Bakermans-Kranenburg & van IJzendoorn, 2009; Cassiba et al., 2013).

Insecure modes of attachment seem to generate feelings of security. This apparent paradox can be explained if we assume that attachment derives from mental representations of others. Attachment to abusive or negligent figures can be expected from children whose experiences of safety are connected with feelings of being understood by a cruel and destructive parent, and whose understanding is very poor. In such cases, increased social support and the development of secure romantic relationships should be a central aspect of treatment later in life.

The literature shows that a higher number of traumatic experiences in childhood is associated with a greater likelihood of presenting a disorganized state of mind (Euser et al., 2010; Giovanardi et al., 2018; Lingiardi et al., 2017). With respect to the third objective of the present study, we hypothesized that, during development, female victims of IPV may have inhibited RF due to the difficulties in their care system. Indeed, the AAI transcripts of our sample presented evidence of poor RF, pointing to participants' difficulties reflecting and giving meaning to their experiences. This observation was supported by the results of the RFS, which produced a sample average overall score that was questionable or low (M=2.7). Participants presented a lack of RF represented by little or no hostility (most did not perceive the task as intrusive), a refusal to investigate internal states (i.e., non-recognition), or representations of mental states as one-dimensional, which rarely reflected contrasting emotions, conflict, or uncertainty about the beliefs and feelings of others (i.e., ingenuity or simplistic RF).

Considering the different AAI classifications, a statistically significant difference emerged between participants with secure versus preoccupied attachment, and between participants with secure versus disorganized attachment. Recent research has shown that secure attachment facilitates mentalization (Fonagy et al., 2011). From this perspective, secure attachment is likely related to optimal and flexible mentalization, since people with this

classification tend to process social information in an objective and reflective manner (Fonagy & Luyten, 2009). In contrast, higher levels of anxiety and concern may hinder mentalization about significant others (Hunefeldt et al., 2013). When individuals receive no support in developing secure attachment (i.e., support in acquiring adequate capacity to understand the psychological states of significant others), they may be unable to reflect on or resolve experiences of abuse.

With respect to RF, participants with organized attachment styles had a higher average RF score than women with disorganized attachment. However, while disorganized attachment is associated with less RF relative to organized attachment, the presence of poly-victimization is not necessarily indicative of reflective malfunction. In our sample, a higher number of trauma experiences was associated with better RF; to understand this apparently counterintuitive result, we should underline that the relationship between trauma and mentalizing is neither simplistic nor deterministic. On the one hand, mentalizing abilities stem from positive caregiving experiences, usually associated with secure attachment (Fonagy et al., 2012); on the other hand, mentalizing capacity is a moderating factor in the relationship between early traumatic experiences and later developments (e.g., Nazzaro et al., 2017). Thus, it is possible that some women in the present sample who had suffered several forms of trauma had nonetheless good mentalizing abilities that, in the context of their therapeutic work at the anti-violence center, helped them to cope with their negative experiences. Another explanation could be that the RFS struggled to differentiate authentic mentalization from more subtle forms of pseudo-mentalization (Fonagy et al., 1998; Taubner et al., 2013). The extreme consequence of this pre-mentalizing representation of reality can be a dissociation of thoughts and feelings from reality, to the extent that they lose their meaning (Gagliardini & Colli, 2019). Thus, we cannot exclude the possibility that participants who had experienced several forms of trauma practiced a stronger form of pseudo-mentalization. As a partial confirmation of this, the data

relating to pre-mentalizing methods in which pseudo-mentalization appears in the form of *excessive certainty* and *intrusive pseudo-mentalization* (see Gagliardini & Colli, 2019) indicated that the entire sample scored equal to or higher than a group with patients with personality disorders. However, this finding requires further scrutiny in a larger study.

Limitations and Future Research

The present study includes some limitations. First, the lack of a comparison group did not allow us to generalize the results; thus, we could only consider them preliminary results. Second, the low number of participants did not enable us to achieve statistical significance in some comparisons, despite the fact that the tested difference was high. Further, the small sample size, by reducing the statistical relevance of the study, may have generated type II errors, leading us to incorrectly consider some results and differences as not relevant/significant. On the other hand, the study presents some strong points. First, the subject is of considerable importance from clinical, psychosocial, and political perspectives, especially in light of the insufficient number of studies in this field and the empirical evidence that has not yet been consolidated. Moreover, our choice to work on a sample of women using a multi-perspective research methodology allowed us to integrate both the subjective evaluations of female IPV victims and those of clinicians and researchers.

Another strength of the present study is the opportunity space it created to establish contact between clinicians working with female IPV victims and researchers at the university, with the intent of creating dialogue. The work also elaborated more accurate reflections on early relationships with caregivers in order to broaden and refine current understandings of the developmental processes through which violence is internalized and reactivated over time and across generations. Finally, the work investigated variables in relation to female victims of violence, whereas previous research has focused on perpetrators or family systems.

To date, we have insufficient knowledge of women in abusive relationships to make definitive suggestions for clinical interventions (Clauss & Clements, 2018; Condino et al., 2016; Stover et al., 2009). Exposure to trauma in early childhood may significantly interfere with one's ability to form secure attachments. In particular, experiences of early emotional neglect—more than physical or sexual abuse—limit individuals' opportunities to acquire the full spectrum of mentalizing skills, leaving their capacity to mentalize vulnerable to disruption under the influence of stress and preventing them from structuring a feeling of self-cohesion that may help them to avoid repetition of their childhood trauma. However, we do not mean to suggest that deficits in mentalization are a cause of vulnerability to IPV; rather, we only wish to highlight mentalization as a potentially understudied risk factor in violence. This issue has been addressed in the psycho-forensic literature relating to risk factors that may contribute to preventing and intervening in violent behavior during criminal investigations and trials (Gudjonsson et al., 2020). Here, we believe that a more multidimensional reading of victims could be useful in understanding the dynamics of IPV and preventing recidivism.

It should also be noted that IPV is not only a serious social phenomenon with significant consequences for victims' mental and physical health, but also an increasingly frequent predictor of intimate partner femicide (IPF) (Baldry et al., 2011; Gino et al., 2019; Vives-Cases, 2016). We therefore believe that the significant results obtained with regard to attachment, variety of traumatic experiences, and mentalization support the inclusion of these variables in future IPV research. The results also render the study interesting from both clinical and research perspectives.

Several studies on IPV have shown the limitations of current efforts to prevent and treat violence against women, and the need for more in-depth investigation of victims' mental functioning strategies, which may comprise risk factors and/or contribute to the development of significant disorders and distress in different areas of life.

References

Agrawal, H. R., Gunderson, J., Holmes, B. M., & Lyons-Ruth, K. (2004). Attachment studies with borderline patients: A review. *Harvard Review of Psychiatry*, *12*(2), 94–104. doi:10.1080/10673220490447218

Alexander, P. C. (2009). Childhood trauma, attachment, and abuse by multiple partners. *Psychological Trauma: Theory, Research, Practice, and Policy, 1*(1), 78–88.

Allison C. J., Bartholomew K., Mayseless O., & Dutton D. G. (2008). Love as a battlefield: attachment and relationship dynamics in couples identified for male partner violence. *Journal of Family Issues*, *29*, 125–150. 10.1177/0192513X07306980

Asen, E., & Fonagy, P. (2017). Mentalizing family violence part 1: Conceptual framework. *Family Process*, *56*(1), 6–21. doi: 10.1111/famp.12261

Babcock, J. C., Jacobson, N. S., Gottman, J. M., & Yerington, T. P. (2000). Attachment, emotional regulation, and the function of marital violence: differences between secure, preoccupied and dismissing violent and nonviolent husbands. *Journal of Family Violence, 15*, 391–409.

Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (1993). A psychometric study of the Adult Attachment Interview: Reliability and discriminant validity. *Developmental Psychology*, *29*, 870–879.

Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (2009). The first 10,000 Adult Attachment Interviews: Distributions of adult attachment representations in clinical and non-clinical groups. *Attachment Human and Development*, *11*(3), 223–263. doi: 10.1080/14616730902814762

Baldry, A., Porcaro, C., & Ferraro, E. (2011). Donne uccise e donne maltrattate. Stesso passato ma anche stesso destino? *Rassegna Italiana di Criminologia*, 4, 13–12.

Bartholomew, K. (1990). Avoidance of Intimacy: An Attachment Perspective. *Journal of Social and Personal Relationships*, *7*(2), 147-178. doi:10.1177/0265407590072001

Bartholomew, K., & Horowitz, L.M. (1991). Attachment styles among young adults: a test of a four-category model. *Journal of Personality and Social Psychology*, *61*(2), 226-44. doi: 10.1037//0022-3514.61.2.226.

Bartholomew, K., Henderson, A. J. Z., & Dutton, D. G. (2001). Insecure attachment and abusive intimate relationships. In C. Clulow (Ed.), *Adult attachment and couple work: Applying the 'secure base' concept in research and practice* (pp. 43–61). London: Routledge.

Bateman, A. W., & Fonagy, P. (2004). *Psychotherapy for borderline personality disorder*. Oxford: Oxford University Press

Bensley, L., Van Eenwyk, J., & Simmons, K. (2003). Childhood family violence history and women's risk for intimate partner violence and poor health. *American Journal of Preventive Medicine*, *25*(1), 38–44. doi: 10.1016/s0749-3797(03)00094-1

Bifulco, A., Damiani, R., Jacobs, C., Bunn, A., & Spence, R. (2019). Partner violence in women – Associations with childhood maltreatment, attachment style and major depression. *Maltrattamento e Abuso all'Infanzia*, *2*, 13–28. doi: 10.3280/MAL2019-002002

Black, D. S., Sussman, S., & Unger, J. B. (2010). A further look at the intergenerational transmission of violence: Witnessing interparental violence in emerging adulthood. *Journal of Interpersonal Violence*, *25*(6), 1022–1042. https://doi.org/10.1177/0886260509340539

Bonache, H., Gonzalez-Mendez, R., & Krahé, B. (2019). Adult Attachment Styles, Destructive Conflict Resolution, and the Experience of Intimate Partner Violence. *Journal of Interpersonal Violence*, *34*(2), 287-309. doi: 10.1177/0886260516640776.

Bowlby, J. (1973). *Attachment and loss*. Vol. 2: Separation: anxiety and anger. New York, NY: Basic Books.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford.

Briere J, Jordan C. E. (2004). Violence against women outcome complexity and implications for assessment and treatment. *Journal of Interpersonal Violence, 19*, 1252–1312. doi: 10.1177/0886260504269682

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), 231–280. doi: 10.1891/1946-6560.3.2.231

Carlson, K., Onishi, M., & Gjerde, P. (1997). Assessment of romantic attachment: Comparison of self-report and interview methodologies. Paper presented at the annual meeting of the American Psychological Association, Chicago, IL.

Cassibba, R., Sette, G., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. J. (2013). Attachment the Italian Way. *European Psychologist, 18*(1), 47. doi: 10.1027/1016-9040/a000128

Clauss, K., & Clements, C. (2018). Threat Bias and Emotion Recognition in Victims of IPV. Journal of Interpersonal Violence,

Colli, A., & Gagliardini, G. (2015b). *Modes of Mentalization Scale*. Unpublished Manual. University of Urbino "Carlo Bo."

Condino, V., Tanzilli, A., Speranza, A. M., & Lingiardi, V. (2016). Therapeutic interventions in intimate partner violence: An overview. *Research in Psychotherapy: Psychopathology 19*(2), 79-88

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., . . . van der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, *35*(5), 390–398.

Crowell, J. A., & Treboux, D. (1995) A review of adult attachment measures: Implications for theory and research. *Social Development*, *4*(3), 294–327. https://doi.org/10.1111/j.1467-9507.1995.tb00067.x

de Haas, M. A., Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (1994). The Adult Attachment Interview and questionnaires for attachment style, temperament, and memories of parental behavior. *The Journal of Genetic Psychology*, *155*(4), 471-86. doi: 10.1080/00221325.1994.9914795.

Derogatis, L. R. (1994). *Symptom Checklist-90-R: Administration, Scoring & Procedure Manual for the Revised Version of the SCL-90*. Minneapolis, MN: National Computer Systems.

Dong, M., Anda, R. F., Felitti, V. J., Dube, S. R., Williamson, D. F., Thompson, T. J., Loo, C. M., & Giles, W. H. (2004). The interrelatedness of multiple forms of childhood abuse, neglect, and household dysfunction. *Child Abuse & Neglect*, *28*(7), 771–784. doi: 10.1016/j.chiabu.2004.01.008

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*(5), 616-34. doi: 10.1177/0886260507313526.

Dutton, D. G. (2007). *The abusive personality: Violence and control in intimate relationships* (2nd ed.). The Guilford Press.

Dutton, D. G. (2011). *Rethinking Domestic Violence*. University Of British Columbia Press

Eddy, K. T., Dutra, L., Bradley, R., & Westen, D. (2004). A multidimensional meta-analysis of psychotherapy and pharmacotherapy for obsessive-compulsive disorder. *Clinical Psychology Review, 24*(8), 1011–1030. doi: 10.1016/j.cpr.2004.08.004

Euser, S., Alink, L. R., Tharner, A., van Ijzendoorn, M. H, & Bakermans-Kranenburg, M. J. (2016). The Prevalence of Child Sexual Abuse in Out-of-home Care: Increased Risk for Children with

a Mild Intellectual Disability. *Journal of Applied Research in Intellectual Disabilities*, *29*(1), 83-92. doi: 10.1111/jar.12160.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventive Medicine*, *14*(4), 245–258. http://dx.doi.org/10.1016/S0749-3797(98)00017-8

Finkelhor, D., Ormrod, R., Turner, H., & Holt, M. (2009). Pathways to poly-victimization. *Child Maltreatment, 14*, 316–329. doi: 10.1177/1077559509347012

Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect, 31*(1), 7–26. doi: 10.1016/j.chiabu.2006.06.008

Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). *Reflective Functioning Manual. Version 5 for Application to Adult Attachment Interviews*. London: University College London.

Fonagy, P. (2003). Towards a development understanding of violence. *British Journal of Psychiatry, 183*(3), 190–192. doi: 10.1192/bjp.183.3.190

Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology, 21*(4), 1355–1381. doi: 10.1017/S0954579409990198

Fonagy, P., & Target, M. (1996). Playing with reality: I. Theory of mind and the normal development of psychic reality. *International Journal of Psychoanalysis, 77*(2), 217–233.

Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). *Affect regulation, mentalization, and the development of the self.* Other Press.

Fonagy, P., & Levinson, A. (2004). Offending and attachment: The relationship between interpersonal awareness and offending in a prison population with psychiatric disorder. *Canadian Journal of Psychoanalysis*, *12*(2), 225–251.

Fonagy, P., Bateman, A., & Bateman, A. (2011). The widening scope of mentalizing: A discussion. *Psychology and Psychotherapy: Theory, Research and Practice*, *84*(1), 98–110. doi: 10.1111/j.2044-8341.2010.02005.x

Fonagy, P., Bateman, A., & Luyten, P. (2012). Introduction and overview. In A. Bateman & P. Fonagy (Eds.), *Handbook of mentalizing in mental health practice* (pp. 3–41). Arlington, VA: American Psychiatric Publishing.

Fonagy, P., Luyten, P., Moulton-Perkins, A., Lee, Y-W., Warren, F., Howard, S., et al. (2016). Development and validation of a self-report measure of mentalizing: The Reflective Functioning Questionnaire. *PLoS ONE, 11*(7). e0158678. https://doi.org/10.1371/journal.pone.0158678

Fonagy, P., & Bateman, A. (2008). The development of borderline personality disorder – A mentalizing model. *Journal of Personality Disorders*, *22*(1), 4–21. doi: 10.1521/pedi.2008.22.1.4

Franklin, C. A., & Kercher, G. A. (2012). The intergenerational transmission of intimate partner violence: Differentiating correlates in a random community sample. *Journal of Family Violence, 27*(3), 187–199. doi: 10.1007/s10896-012-9419-3

Gagliardini, G., & Colli, A. (2019). Assessing mentalization: Development and preliminary validation of the Modes of Mentalization Scale. *Psychoanalytic Psychology*, *36*(3), 249–258.

Gagliardini, G., Gatti, L., & Colli, A. (2020). Further data on the reliability of the mentalization imbalances scale and of the modes of mentalization scale. *Research in psychotherapy, 23*(1), 450. https://doi.org/10.4081/ripppo.2020.450

Gagliardini, G., Gullo, S., Caverzasi, E., Boldrini, A., Blasi, S., & Colli, A. (2018). Assessing mentalization in psychotherapy: First validation of the Mentalization Imbalances Scale. *Research in Psychotherapy: Psychopathology, Process and Outcome*, *21*(3), 164–177.

George C., West M. (2012). *The Adult Attachment Projective Picture System: Attachment Theory and Assessment in Adults*. New York, NY: Guilford Press

George, C., Kaplan, N., & Main, M. (1985). *The Adult Attachment Interview*. Unpublished manuscript. Berkeley, CA: University of California at Berkeley.

Gino, S., Freilone, F., Biondi, E. Ceccarelli, D., Veggi, S., & Zara, G. (2019). Dall'intimate partner violence al femminicidio: Relazioni che uccidono. *Rassegna Italiana di Criminologia, 2*, 1–29.

Giovanardi, G., Vitelli, R., Fortunato, A., Maggiora Vergano, C., Chianura, L., Lingiardi, V., & Speranza, A. M. (2018). Attachment patterns and complex trauma in a sample of adults diagnosed with gender dysphoria. *Frontiers in Psychology*, *9*, 1–13.

Goldner, V., Penn, P., Sheinberg, & M., Walker, G. (1990). Love and violence: gender paradoxes in volatile attachments. *Family Process, 29*(4):343-64. doi: 10.1111/j.1545-5300.1990.00343.x.

Gudjonsson, G., Vagni, M., Maiorano, T., & Pajardi, D. (2020). The relationship between trauma symptoms and immediate and delayed suggestibility in children who have been sexually abused. *Journal of Investigative Psychology and Offender Profiling,* 1-14. doi:10.1002/jip.1554

Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 59*(2), 270–280. https://doi.org/10.1037/0022-3514.59.2.270

Henderson, A. J. Z., Bartholomew, K., Trinke, S. J., & Kwong, M. J. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence, 20*(4), 219–230. doi: 10.1007/s10896-005-5985-y

Henderson, A. J. Z., Bartholomew, K., & Dutton, D. G. (1997). He loves me; he loves me not: Attachment and separation resolution of abused women. *Journal of Family Violence, 12*(2), 169–191. http://dx.doi.org/10.1023/A:1022836711637

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress, 5,* 377–391. doi: 10.1002/jts.2490050305

Hesse, E. (2008). The Adult Attachment Interview: Protocol, method of analysis, and empirical studies. In J. Cassidy & P. R. Shaver, (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 552–598). New York, NY: Guilford Press.

Hesse, E., & Main, M. (2000). Disorganization in infant and adult attachment: Description, correlates, and implications for developmental psychopathology. *Journal of the American Psychoanalytic Association, 48*, 1097–1127.

Higgins, D. J., & McCabe, M. P. (2001). Multiple forms of child abuse and neglect: Adult retrospective reports. *Aggression & Violent Behavior, 6*(6), 547–578.

Holtzworth-Munroe, A., Bates, L., Smutzler, N., & Sandin, E. (1997). A Brief Review of the Research on Husband Violence: Part 1: Maritally Violent Versus Nonviolent Men. *Aggression and Violent Behavior*, *2*(1), 65–99.

Hunefeldt, T., Laghi, F., Ortu, F., & Belardinelli, M. O. (2013). The relationship between 'theory of mind' and attachment-related anxiety and avoidance in Italian adolescents. *Adolescence*, *36*(3), 613–621. doi: 10.1016/j.adolescence.2013.03.012

Jacobvitz, D., Curran, M. A., & Moller, N. (2002). Measurement of adult attachment: The place of self-report and interview methodologies. *Attachment and Human Development*, *4*(2), 207–215. https://doi.org/10.1080/14616730210154225

Kalmuss, D. (1984). The intergenerational transmission of marital aggression. *Journal of Marriage and the Family, 46*(1), 11–19. https://doi.org/10.2307/351858

Kim, J., & Cicchetti, D. (2010). Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. *Journal of child psychology and psychiatry, and allied disciplines*, *51*(6), 706–716. https://doi.org/10.1111/j.1469-7610.2009.02202.x

Kong, J., Roh, S, Easton, S.D., Lee, Y.S., & Lawler, M.J. (2018). A History of Childhood Maltreatment and Intimate Partner Violence Victimization Among Native American Adults. *Journal of Interpersonal Violence*, *33*(18), 2826-2848. doi: 10.1177/0886260516632353.

Kuijpers, K. F., van der Knaap, L. M., & Winkel, F. W. (2012). PTSD symptoms as risk factors for intimate partner violence revictimization and the mediating role of victims' violent behavior. *Journal of Traumatic Stress*, *25*(2), 179–186. doi: 10.1002/jts.21676

Kwong, M. J., Bartholomew, K., Henderson, A. J. Z., & Trinke, S. J. (2003). The intergenerational transmission of relationship violence. *Journal of Family Psychology, 17*(3), 288–301. doi: 10.1037/0893-3200.17.3.288

Levendosky, A. A., Bogat, G. A., Huth-Bocks, A. C., Rosenblum, K., & von Eye, A. (2011). The effects of domestic violence on the stability of attachment from infancy to preschool. *Journal of Clinical Child and Adolescent Psychology*, *40*, 398–410.

Levinson, A., & Fonagy, P. (2004). Offending and Attachment: The Relationship between Interpersonal Awareness and Offending in a Prison Population with Psychiatric Disorder. *Canadian Journal of Psychoanalysis / Revue Canadienne de Psychanalyse, 12*(2), 225–251.

Levy, K. N. (2005). The implications of attachment theory and research for understanding borderline personality disorder. *Development and Psychopathology, 17*(4), 959–986. doi:10.1017/S0954579405050455

Levy, K. N., Johnson, B. N., Clouthier, T. L., Scala, J. W., & Temes, C. M. (2015). An attachment theoretical framework for personality disorders. *Canadian Psychology/Psychologie Canadienne, 56*(2), 197–207. doi:10.1037/cap0000025

Lingiardi, V., Giovanardi, G., Fortunato, A., Nassisi, V., & Speranza, A. M. (2017). Personality and attachment in transsexual adults. *Archives of Sexual Behavior*, *46*(5), 1313–1323. doi: 10.1007/s10508-017-0946-0

Luyten, P., Fonagy, P., Lowyck, B., & Vermote, R. (2012). Assessment of mentalizing. In A. Bateman & P. Fonagy (Eds.), *Handbook of mentalizing in mental health practice* (pp. 3–41). Arlington, VA: American Psychiatric Publishing.

Lyons-Ruth, K.., & Jacobvitz, D. (2016). Attachment disorganization from infancy to adulthood. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed., pp. 667–695). New York, NY: Guilford Press.

Machisa, M. T., Christofides, N. J., & Jewkes, R. (2017). Mental ill health in structural pathways to women's experiences of intimate partner violence. *PLoS ONE, 1*(3). doi: 10.1371/journal.pone.0150986

Maggiora Vergano, C., Speranza, A. M., & Lauriola, M. (2015). The Complex Trauma Questionnaire (ComplexTQ): Development and preliminary psychometric properties of an instrument for measuring early relational trauma. *Frontiers Psychology*, *6*, 1323. doi: 10.3389/fpsyg.2015.01323

Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *The John D. and Catherine T. MacArthur Foundation series on mental health and development. Attachment in the preschool years: Theory, research, and intervention* (p. 161–182). University of Chicago Press.

Mayseless, O. (1991). Adult attachment patterns and courtship violence. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 40*(1), 21–28. https://doi.org/10.2307/585654

Mahalik, J. R., Aldarondo, E., Gilbert-Gokhale, S., & Shore, E. (2005). The role of insecure attachment and gender role stress in predicting controlling behaviors in men who batter. *Journal of Interpersonal Violence*, *20*(5), 617–631. doi: 10.1177/0886260504269688

Main, M., & Goldwyn, R. (1998). *Adult Attachment Scoring and Classification Systems*. Unpublished manuscript. Berkeley, CA: University of California at Berkeley.

Main, M., Goldwyn, R., & Hesse, E. (2003). *Adult Attachment Scoring and Classification Systems*. Unpublished manuscript. Berkeley, CA: University of California at Berkeley.

Martínez-Torteya, C., Bogat, A., von Eye, A., & Levendosky, A. (2009). Resilience among children exposed to domestic violence: The role of risk and protective factors. *Child Development, 80*(2), 562–77. doi: 10.1111/j.1467-8624.2009.01279.x

McRae, L., Daire, A. P., Abel, E. M., Lambie, G. W. (2017). A social learning perspective on childhood trauma and same-sex intimate partner violence. *Journal of Counseling & Development*, *95*, 332–338.

Max, W., Rice, D. P., Finkelstein, E., Bardwell, R. A., & Leadbetter, S. (2004). The economic toll of intimate partner violence against women in the United States. *Violence and Victims, 19*(3), 259–272. https://doi.org/10.1891/088667004780905660.

Meyer, B., & Pilkonis, P. A. (2005). An Attachment Model of Personality Disorders. In M. F. Lenzenweger & J. F. Clarkin (Eds.), *Major theories of personality disorder* (p. 231–281). Guilford Press.

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change.* The Guilford Press.

Milner, J. S., Thomsen, C. J., Crouch, J. L., Rabenhorst, M. M., Martens, P. M., Dyslin, C. W., Guimond, J. M., Stander, V. A., and Merrill, L. L. (2010). Do trauma symptoms mediate the relationship between childhood physical abuse and adult child abuse risk? *Child Abuse & Neglect*, *3*(5), 332–344. doi: 10.1016/j.chiabu.2009.09.017

Nakash-Eisikovits, O., Dierberger, A. E., & Westen, D. (2002). A multidimensional meta-analysis of pharmacotherapy for bulimia nervosa: Summarizing the range of outcomes in controlled clinical trials. *Harvard Review of Psychiatry*, *10*(4), 193–211.

Nazzaro, M. P., Boldrini, T., Tanzilli, A., Muzi, L., Giovanardi, G., & Lingiardi, V. (2017). Does reflective functioning mediate the relationship between attachment and personality? *Psychiatry Research*, *256*, 169–175.

Ørke E. C., Vatnar S. K. B., & Bjørkly S. (2018). Risk for revictimization of intimate partner violence by multiple partners: a systematic review. *Journal of Family Violence,* 1–15. 10.1177/1524838010378299

Pallini, S., Alfani, A., Marech, L., & Laghi, F. (2017). Unresolved attachment and agency in women victims of intimate partner violence: A case-control study. *Psychology and Psychotherapy: Theory, Research and Practice*, *90*(2), 177-192. doi: 10.1111/papt.12106.

Renner, L. M. and Slack, K. S. (2006). Intimate partner violence and child maltreatment: Understanding intra- and intergenerational connections. *Child Abuse Neglect, 30*(6), 599–617. doi: 10.1016/j.chiabu.2005.12.005

Renner, L. M., & Whitney, S. D. (2012). Risk factors for unidirectional and bidirectional intimate partner violence among young adults. *Child Abuse & Neglect*, *36*(1), 40–52. doi: 10.1016/j.chiabu.2005.12.005

Richards, N. T., Tillyer, M. S., & Wright, E. M. (2017). Intimate partner violence and the overlap of perpetration and victimization: Considering the influence of physical, sexual, and emotional abuse in childhood. *Child Abuse & Neglect*, *67*, 240–248. https://doi.org/10.1016/j.chiabu.2017.02.037

Roberts, A. L., Gilman, S. E., Fitzmaurice, G. M., Decker, M. R., & Koenen, K. C. (2010). Witness of intimate partner violence in childhood and perpetration of intimate partner violence in adulthood. *Epidemiology*, *21*(6), 809–818. doi: 10.1097/EDE.0b013e3181f39f03.

Roisman, G.I., Holland, A., Fortuna, K., Fraley, R. C., Clausell, E., & Clarke, A. (2007). The Adult Attachment Interview and self-reports of attachment style: An empirical rapprochement. *Journal of Personality and Social Psychology*, *92*(4), 678–697. https://doi.org/10.1037/0022-3514.92.4.678

Sagi, A., van IJzendoorn, M. H., Aviezer, O., Donnell, F., & Mayseless, O. (1994). Sleeping out of home in a kibbutz communal arrangement: It makes a difference for infant-mother attachment. *Child Development, 65*(4), 992–1004. https://doi.org/10.2307/1131299

Sanz-Barbero, B., López Pereira, P., Barrio, G., & Vives-Cases, C. (2018). Intimate partner violence against young women: prevalence and associated factors in Europe. *Journal Epidemiol Community Health*, *72*(7), 611-616. doi: 10.1136/jech-2017-209701.

Sen L., Fengqing Z., & Guoliang Y. (2019). Childhood maltreatment and intimate partner violence victimization: A meta-analysis. *Child Abuse & Neglect*, *88*, 212–224.

Shipman, K. L., & Zeman, J. (1999). Emotional understanding: A comparison of physically maltreating and nonmaltreating mother–child dyads. *Journal of Clinical Child Psychology, 28*(3), 407–417. https://doi.org/10.1207/S15374424jccp280313

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*(4), 460–469. http://dx.doi.org/10.1037/vio0000142

Speranza, A. M., & Maggiora Vergano, C. (2015). Le rappresentazioni mentali e il trauma pregresso nei genitori di bambini maltrattati. *Infanzia e Adolescenza*, *14*(1), 22–44. doi: 10.1710/1862.20338

Stein, H. (2006). Does mentalizing promote resilience? In J. G. Allen & P. Fonagy (Eds.), *Handbook of Mentalization-Based Treatment* (pp. 307–326).

Stover, C. S., Meadows, A., & Kaufman, J. (2009). Interventions for Intimate Partner Violence: Review and Implications for Evidence-Based Practice. *Professional Psychology Research and Practice, 40*(3), 223-233

Straus, M. (1980). Victims and Aggressors in Marital Violence. *American Behavioral Scientist, 23*(5), 681-704

Taubner, S., White, L.O., Zimmermann, J. *et al.* Attachment-Related Mentalization Moderates the Relationship Between Psychopathic Traits and Proactive Aggression in Adolescence. *Journal of Abnormal Child Psychology, 41,* 929–938 (2013). https://doi.org/10.1007/s10802-013-9736-x

Vagni, M., Maiorano, T., & Pajardi, D. (2017). Memoria e suggestionabilità interrogativa nei minori testimoni in casi di presunto abuso sessuale. *Maltrattamento Abuso all'Infanzia* (2017), *2*(19), 141-161. doi:10.3280/MAL2017-002008.

Vagni, M., Maiorano, T., Pajardi, D., & Berlingeri, M. (2018). Suggestionabilità interrogativa: il ruolo del contesto forense e dello stress post traumatico in bambini e adolescenti testimoni di presunta violenza sessuale. *Psicologia Sociale, 2*, 107-128. doi: 10.1482/90778

Van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, *18*(5), 389–399. doi: 10.1002/jts.20047

van Ijzendoom, M. H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin*, *117*, 387–403.

van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2008). The distribution of adult attachment representations in clinical groups: A meta-analytic search for patterns of attachment in 105 AAI studies. In H. Steele & M. Steele (Eds.), *Clinical applications of the Adult Attachment Interview* (p. 69–96). The Guilford Press.

Velotti, P., Beomonte Zobel, S., Rogier, G., Tambelli, R. (2018). Exploring relationships: A systematic review on intimate partner violence and attachment. *Frontiers in Psychology*, *5*(9), 1166. doi: 10.3389/fpsyg.2018.01166

Vergano, C. M., Lauriola, M., & Speranza, A. M. (2015). The Complex Trauma Questionnaire (ComplexTQ): Development and preliminary psychometric properties of an instrument for measuring early relational trauma. *Frontiers in Psychology, 6.* https://doi.org/10.3389/fpsyg.2015.01323

Vives-Cases, C., Goicolea, I., Hernández, A., Sanz-Barbero, B., Gill, A.K., Baldry, A.C, Schröttle, M., & Stoeckl, M. (2016). Expert opinions on improving femicide data collection across Europe: A concept mapping study. *PLoS ONE, 11*(2): e0148364. https://doi.org/10.1371/journal.pone.0148364

Widom, C. S., Czaja, S., & Dutton, M. A. (2014). Child abuse and neglect and intimate partner violence victimization and perpetration: A prospective investigation. *Child Abuse Neglect, 38*(4), 650–663. doi: 10.1016/j.chiabu.2013.11.004

Widom, C. S., Czaja, S. J., Dutton, M. A. (2008). Childhood victimization and lifetime revictimization. *Child Abuse Neglect, 32*(8), 785–796. doi: 10.1016/j.chiabu.2007.12.006

Wilson, J. B., Gardner, B. C., Brosi, M. W., Topham, G. L., Busby, D. M. (2013). Dyadic Adult attachment style and aggression within romantic relationships. *Journal of Couple & Relationship Therapy, 12*(2), 186-205.

World Health Organization (2013). *Responding to Intimate Partner Violence and Sexual Violence Against Women: WHO Clinical and Policy Guidelines*. Geneva, World Health Organization.

World Health Organization (2016). *Global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against children*. Geneva, World Health Organization.

Yodanis, L., Godenzi, A., & Stanko, E. A. (2000). The Benefits of Studying Costs: A Review and Agenda for Studies on the Economic Costs of Violence Against Women. *Policy Studies*, *21*(3), 263-276.

Zeanah, C. H., & Zeanah, P. D. (1989). Intergenerational transmission of maltreatment: Insights from attachment theory and research. *Psychiatry*, *52*(2), 177–196.

Table 1. Comparison with data in literature concerning the AAI classification (Bakermans-Kranenburg & van Ijzendoorn, 2009*; Cassibba et al., 2013**)

	Sample IPV (n=31)	International normative sample* (n=693)	International clinical sample* (n=1854)	Italian normative sample** (n=842)	Italian clinical sample ** (n=260)
F	7 (23%)	392 (56%)	426 (21%)	508 (60%)	43 (17%)
Ds	4 (13%)	112 (16%)	389 (23%)	172 (21%)	79 (30%)
E	6 (19%)	63 (9%)	241 (13%)	92 (11%)	44 (17%)
CC/U	14 (45%)	126 (18%)	797 (43%)	70 (8%)	94 (36%)
Organized	17 (55%)	567 (82%)	1056 (57%)	772 (92%)	166 (64%)
Disorganized	14 (45%)	126 (18%)	797 (43%)	70 (8%)	94 (36%)

Note. F, Free/autonomous; Ds, dismissing; E, preoccupied; U, unresolved/disorganized; CC, Cannot Classify

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Table 2. Descriptives of prementalizing modalities

	Clinical sample	IPV					
	Average	**Average**	**SD**	**Min**	**Max**	**Sig. (2code)**	**pFDR**
Excessive certainty	1,84	1,89	,77	,83	3,50	,661	0,94
Concrete thinking	1,81	1,88	,77	,50	3,67	,659	0,94
Good mentalization	3,03	3,05	,74	1,40	4,40	,913	0,95
Teleological thought	2,50	2,51	,99	1,33	4,33	,948	0,95
Intrusive pseudomentalization	1,38	1,35	1,04	0,00	4,00	,869	0,95

Figure 1. Reflective functioning in AAI classifications