



Attachment Bonds as Risk Factors of Intimate Partner Violence

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Abstract

Objectives This study investigates whether women’s attachment to mother might influence Intimate Partner Violence (IPV) victimization, both directly and indirectly, through the mediation effect of romantic partner attachment.

Methods Twenty-nine IPV victims, aged 26–54 years ($M = 39.52$, $SD = 8.36$), and 31 women who were not victims of IPV, aged 29–54 years ($M = 39.84$, $SD = 7.62$), were recruited for the present study. Multivariate analyses of variance (MANOVA) were performed to explore differences between the clinical and control groups in attachment bonds, both to mother and romantic partner. Moreover, in order to explore if and which specific attachment bonds might play a role in predicting the onset and maintenance of violence within couple relationships, a mediational analysis was conducted.

Results Female victims of domestic violence present higher levels of insecurity in their attachment bonds to their mothers and their romantic partners than women who are not abused [$F(3, 56) = 36.66$, $p = .000$, $\eta^2 = .66$]. Moreover, an insecure attachment to mother significantly influences the involvement in violent couple relationships in an indirect way, through insecure attachment to the romantic partner (anxiety: $\beta = .14$, $p < .01$; CI 95%: .022; .371; and avoidance: $\beta = .29$, $p < .001$; CI 95%: .132; .494).

Conclusion This study highlighted that an insecure attachment could represent a risk factor for violence within couple relationships. This has strong clinical implications, especially for clinical psychologists and social workers who deal with the IPV phenomenon daily.

Keywords Intimate Partner Violence · Domestic violence · Attachment bonds · Romantic attachment · Maternal attachment

The Centers for Disease Control and Prevention (2015) define Intimate Partner Violence (IPV) as “physical violence, sexual violence, stalking and psychological aggression (including coercive tactics) by a current or former intimate partner (i.e., spouse, boyfriend/girlfriend, dating partner, or ongoing sexual partner)” (p. 11). This phenomenon is not limited to a specific age, gender, socioeconomic or educational level, geographical boundary, religion or society (Garcia-Moreno et al. 2006), although it is undeniable that IPV is frequently related to patriarchal culture values (Kaira and Bhugra 2013), and that 85 percent of victims are women (Rennison 2003).

The consequences of IPV on physical and psychological health are many and manifold. From a physical point of

view, there are: functional disorder (McCauley et al. 1997), injuries (Ellsberg et al. 2000), gynecological disorders, unwanted pregnancies, and sexually transmitted diseases such as HIV and hepatitis (Andersson et al. 2008). Psychologically, female victims of IPV exhibit fragility and loss of self-esteem (Bonechi and Tani 2011). Moreover, they are subject to depression, anxiety and phobia (Ellsberg et al. 1999), post-traumatic stress syndrome, substance dependence (Romito et al. 2005), and suicide attempts or suicide (World Health Organization 2013). IPV is currently one of the most important public health problems in the world (Awang and Hariharan 2011; Hou et al. 2011; World Health Organization 2013).

IPV is strictly linked to the quality of attachment bond. In this regard, according to the attachment theory, the quality of interpersonal relationships, especially those established during childhood with their parents (Bowlby 1969/1982; Hazan and Shaver 1987), structures the behavioral patterns that they will tend to implement during their lives. In other words, the first interactive patterns that characterize the early child-caregiver relationship constitute

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internal relational representations, called internal working models (IWMs), of close attachment relationships. Bowlby proposed that these internal working models reflect the extent to which individuals believe themselves worthy of love and attention from others (the self-model) and the extent to which they believe that others will respond to them in a responsive and supportive way (the other model) (Henderson et al. 2005). Securely attached children, whose caregivers are responsive and represent a secure base for exploration, tend to develop a positive image of self as worthy of love and care, and of others as caring and available. On the contrary, insecurely attached children, whose caregivers tend to be neglecting or rejecting of their emotions and needs, are likely to develop a worse image of self and others, and an attachment bond defined as avoidant and anxious (Ainsworth et al. 1978).

These IWMs are incorporated into the developing personality structure, guiding the formation of later social relations outside the family (Bowlby 1973). Therefore, each person will be inclined to repeat, within their couple relationships, the internal working models and psychological dynamics and relationships he/she learned in the past (Doumas et al. 2008; Hazan and Shaver 1987). Congruent with this assumption, the attachment bond established in infancy tends to be stable toward adulthood (Van Ijzendoorn 1995), and an insecure attachment to mother could represent a significant risk factor for the development of insecure attachment to romantic partner (Stith et al. 2000).

Hazan and Shaver (1987) and Bartholomew and Horowitz (1991) proposed two models of attachment in adults, starting from the classification of Ainsworth. However, a review of these models brought other authors to identify two main dimensions of adult romantic attachment (Brennan et al. 1998). The first dimension, anxious attachment, characterizes individuals that have a strong desire for closeness, are dependent on their partners, suffer from a need for security and proximity, and feel fear of abandonment. They are constantly worried about the availability of their partners and, for this reason, they act out hyperactivating strategies, such as frequent requests for care, support, and confirmation from their partner, aimed at maintaining closeness.

The second dimension, avoidant attachment, characterizes individuals that tend to be independent from others, and feel fear of closeness and emotional contact. For this reason, they tend to deactivate the attachment system, in order to maintain their independence and emotional distance from their partners (Hazan and Shaver 1987; Mikulincer 2006).

As various authors have extensively argued, there is also a significant relationship between the attachment bond individuals develop to romantic partners and their involvement in IPV dynamics (Babcock et al. 2000; Feeney

2002; Gormley and Lopez 2010; Macke 2010). To this regard, however, most previous studies looked at the influence of attachment style on violence perpetration behaviors. To this point, an extensive body of literature has confirmed that secure attachment is a significant protection factor for IPV perpetration (Bookwala and Zdaniuk 1998; Dutton et al. 1994; Gormley and Lopez 2010; Mauricio 2002; Orcutt et al. 2005; Roberts and Noller 1998). Several studies have identified a positive significant relationship between insecure attachment bonds and IPV in male batterers, compared to nonviolent males (Allison et al. 2008; Barbaro et al. 2016; Bartholomew and Allison 2006). In particular, research suggests that the characteristics of insecure-anxious individuals, including their deficits in conflict management and resolution, and affecting regulation and cognition, present an increased risk of IPV perpetration (Bookwala and Zdaniuk 1998; Dutton et al. 1994; Orcutt et al. 2005; Roberts and Noller 1998). These individuals tend to feel that their partners are unapproachable and, therefore, they react with rage expression and manipulative behaviors with the purpose of holding onto them (Mauricio et al. 2007; Mayseless 1991). In other words, their intense fear of relationship loss hyper-activates their behavioral-motivation system with excessive proximity-seeking behaviors. In this case, the use of violence is due to the individual's inability to regulate their own emotions (Gormley 2005). On the other hand, insecure-avoidant attached individuals present a predisposition to act out aggressive behaviors or other abusive strategies on purpose, to control, intimidate, and keep their partners distant (Gormley and Lopez 2010; Lafontaine and Lussier 2005; Lawson 2008). Due to their fear of intimacy, they reduce or eliminate their use of proximity-seeking behaviors, while increasing their use of withdrawal and defensive behaviors (Babcock et al. 2000; Gormley 2005; Macke 2010).

Regarding the victimization condition, until now, few studies have analyzed the specific attachment styles of women who have lived repeated traumatic experiences of domestic violence. The present study offers an empirical contribution, increasing knowledge in this field. In particular, the main focus was to explore the differences in attachment styles, both to mother and romantic partner, in women who have, versus those who have not, habitually experienced domestic violence. A second goal of this study was to investigate if, and which, of the specific attachment styles could play a role in predicting the onset and maintenance of violence within couple relationships, examining both direct and indirect associations among the above variables. In accordance with the literature described above, we expected that attachment bonds to mothers and partners of women who have habitually experienced domestic violence, compared to those who have not experienced violence within their couple relationships, would be

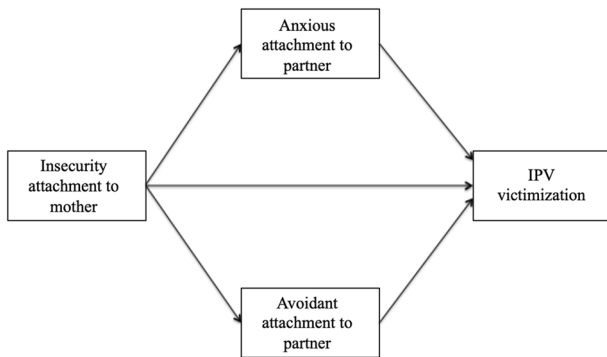


Fig. 1 The hypothesized model

significantly more insecure. With respect to the second aim, we hypothesized that a more insecure attachment, both to mothers and partners, would be a significant predictor of violence within couple relationships. Finally, we expected that an insecure maternal attachment bond could be associated with an insecure (anxious and/or avoidant) attachment to partner, which, in turn, is associated with IPV victimization (see Fig. 1).

Method

Participants

A total of 60 women were recruited for the present study. The sample consists of two groups: (1) a clinical group of 29 female victims of IPV, aged 26–54 years ($M = 39.52$, $SD = 8.36$), recruited from a center in Tuscany, Italy, specializing in the treatment of victims of domestic violence; and (2) a convenience group composed of 31 women, age 29–54 years ($M = 39.84$, $SD = 7.62$), who were not victims of IPV, recruited from a district council office of the City of Florence.

Procedure

For the clinical group, inclusion criteria were: over 18 years of age and victim of habitual and repeated physical aggression from partner during the past 6 months. In order to recruit women of the control group, a trained researcher visited the district council office of the City of Florence. The council carries out a variety of administrative activities and is visited by a large number of people every day. The researcher approached women and invited them to participate in the study. The researchers and participants then went to a private room for a brief confidential interview, before asking the screening question about their experience in IPV. Inclusion criteria were: over 18 years of age, involved in a heterosexual romantic relationship for at least one year, and

absence of IPV experience in the couple relationship. All women who met inclusion criteria accepted participation in the study.

Written formal consent from participants was required in accordance with the ethical treatment of human participants of the Italian Psychological Association. All the women were informed about the purposes of the study, provided their individual consent, and could withdraw from participation at any time. All participants were requested to fill out a card with their socio-registry data (age, nationality, relationship status, educational level, occupational status, children), and information about any experiences of violence within their couple relationships.

They were then asked to anonymously complete a questionnaire designed to assess the quality of attachment bonds both to mother and romantic partner. The data collection from both samples was conducted over a period of 3 months. Participation in the survey was voluntary and no monetary reward was given.

Measures

The participants' attachment bond to mother was assessed using the Italian version of the *Inventory of Parent and Peer Attachment* (IPPA: Armsden and Greenberg 1987; Guarnieri et al. 2010). This scale consists of 24 items, rated on a 5-point Likert scale from 1 (almost never or never) to 5 (almost always or always), which measure the three main dimensions of attachment: Trust, which refers to the trust that mothers understand and respect their own needs and desires (example of item: "My mother respects my feelings"); Communication, which reflects the perceptions of sensibility and participation by mothers on their own emotional states, referring to the quality of involvement and communication with them (example of item: "I like to get my mother's point of view on things I'm concerned about"); and Alienation, which refers to feelings of isolation, anger, and indifference experienced in the relationship with their own mothers (example of item: "Talking about my problems with my mother makes me feel ashamed or foolish"). Furthermore, the scale allows us to calculate, adding up the scores of the three dimensions (after reversed Trust and Communication score), a global score regarding Insecurity of Attachment. The internal consistency values were satisfying, with Cronbach's alpha of .71 for the global score, and .76, .71, and .75 for the Trust, Communication and Alienation dimensions, respectively.

The Italian adapted form of *Experiences in Close Relationships-Revised* (ECR-R: Fraley et al. 2000; Picardi et al. 2002) was used to assess the attachment bond to romantic partner. This questionnaire is composed of 36 items that allow us to assess two dimensions of romantic attachment: Anxiety (example of item: "I worry about being

abandoned”) and Avoidance (example of item: “I prefer not to show a partner how I feel deep down”). Response choices for each item were rated on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Both the subscales exhibited an amply satisfying consistency. In fact, Cronbach’s alpha resulted 0.89, both for Anxiety and Avoidance subscales.

Data Analysis

Descriptive statistics were calculated for all participants. Multivariate analyses of variance (MANOVA) were performed to assess differences between the clinical and control groups in attachment bonds, both to mother and romantic partner. A follow-up univariate ANOVA was carried out when the MANOVA results were significant. For multiple comparisons, Bonferroni corrections were applied. In order to explore if and which specific attachment bonds could play a role in predicting the onset and maintenance of violence within couple relationships, a mediational analysis was conducted. As recommended by Preacher and Hayes (2008), to examine the significance of the mediation effects in analysis, a bias-corrected (BC) bootstrap confidence interval was adopted (using 1000 resamples). This procedure is a nonparametric resampling method that allows us to obtain more powerful confidence interval (CI) limits about indirect effects. An indirect effect is significant if zero is not contained within confidence intervals. The Mplus v.5.21 statistical program (Muthén and Muthén 1998–2012) was used to implement the mediation analysis.

Results

The socio-demographic characteristics of the two groups of women are presented in Table 1. No significant differences emerged between clinical and control groups with respect to mean age ($t(58) = -.156; p = .877$), nationality ($\chi^2(1) = .897, p = .344$), relationship status ($\chi^2(2) = 2.52, p = .283$), educational level ($\chi^2(2) = 1.84, p = .399$), and having children ($\chi^2(1) = .013, p = .908$). Instead, a significant difference was found in occupation status: women who habitually experience domestic violence within their couple relationships are unemployed significantly more often than women who do not experience couple violence ($\chi^2(3) = 13.28, p = .004$).

The MANOVA, performed using the two dimensions of insecure attachment to partner (anxiety and avoidance) as dependent variables, assessed by ECR-R, revealed a significant difference by group [Wilks’ Lambda: $F(2, 57) = 47.63, p = .000, \eta^2 = .63$]. Subsequent univariate analyses

Table 1 Socio-demographic characteristics of the two groups

	Clinical group (<i>n</i> = 29)		Control group (<i>n</i> = 31)	
	<i>N</i>	%	<i>N</i>	%
<i>Nationality</i>				
Italian	25	86.2%	29	93.5%
Foreigner	4	13.8%	2	6.5%
<i>Relationship status</i>				
Married	20	69.0%	22	71.0%
Divorced	4	13.8%	1	3.2%
Cohabitant	5	17.2%	8	25.8%
<i>Educational status</i>				
Middle school	2	6.9%	1	3.2%
High school diploma	21	72.4%	19	61.3%
Bachelor’s degree	6	20.7%	11	35.5%
<i>Socio-economic status</i>				
Housewife	1	3.4%	0	0.8%
Employee	20	69.0%	28	90.3%
Unemployed	8	27.6%	0	0.0%
Student	0	0.0%	3	9.7%
<i>Son</i>				
Yes	24	82.8%	26	83.9%
No	5	17.2%	5	16.1%

of variance (ANOVAs) for each dependent variable revealed that abused women reported higher levels of anxiety and avoidance in their attachment bond to partner than women in the control group. The second MANOVA was performed using the IPPA dimension of insecure attachment to mother and the three dimensions of the IPPA (trust, communication and alienation). The results showed a significant difference by group [Wilks’ Lambda: $F(4, 55) = 6.71, p = .000, \eta^2 = .33$]. Subsequent univariate analyses of variance (ANOVAs) for each dependent variable revealed that the abused women reported higher insecure attachment to mother and, in particular, lower levels of trust and communication and higher levels of alienation than women in the control group. All descriptive statistics and ANOVA results are presented in Table 2.

Finally, results of mediational analysis show that the direct effect of insecure attachment to mother on IPV victimization is not statistically significant. In contrast, the two dimensions of insecure attachment to partner have significant effects on IPV victimization. Specifically, both anxiety and avoidance in attachment to romantic partner were positively linked to IPV victimization. Moreover, insecure attachment to mother is positively linked to both anxiety and avoidance in attachment to romantic partner, and indirectly to IPV victimization through anxiety ($\beta = .14, p < .01; CI 95\%: .022; .371$) and avoidance ($\beta = .29,$

Table 2 Means and standard deviations of the attachment bonds to mother and romantic partner in clinical and control groups and MANOVAs results

	Clinical group (n = 29)		Control group (n = 31)		DF	F	p	η^2
	M	SD	M	SD				
Anxiety with partner (ECR-R)	74.10	17.43	52.03	20.31	1,58	20.27	.000	.26
Avoidance with partner (ECR-R)	84.83	21.33	38.39	18.99	1,58	79.55	.000	.58
Insecurity with mother (IPPA)	73.86	15.47	53.10	11.12	1,58	23.46	.000	.29
Trust (IPPA)	30.52	10.02	41.94	6.70	1,58	27.23	.000	.32
Communication (IPPA)	24.83	8.66	32.39	7.32	1,58	13.40	.001	.19
Alienation (IPPA)	13.83	4.30	10.52	3.67	1,58	10.34	.002	.15

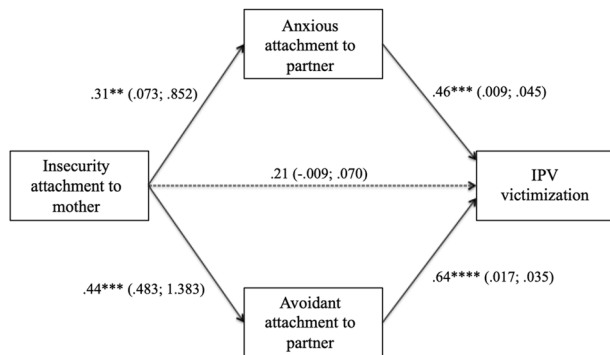


Fig. 2 The standardized solution of the hypothesized model. Note. In parentheses are shown the 95% confidence intervals

$p < .001$; CI 95%: .132; .494) of romance attachment. In Fig. 2, statistical coefficients of direct effect are reported.

In order to investigate which specific dimension of the IPPA was most connected to IPV, another mediational analysis was performed to test the same model using the three dimensions of IPPA, instead of the global score. Results showed that two dimensions of the IPPA, communication and alienation, are not significant predictors of the two dimensions of insecure attachment to partner. On the contrary, the dimension of trust shows a significant and negative direct effect both on anxiety ($\beta = -.57, p < .001$; CI 95%: $-2.55; -.22$) and avoidance ($\beta = -.29, p < .01$; CI 95%: $-2.44; -.18$). Moreover, the two dimensions of insecure attachment to partner have a significant and positive effect on IPV victimization, as in the previous model (anxiety: $\beta = .57, p < .001$; CI 95%: $-.05; -.02$; avoidance: $\beta = .79, p < .001$; CI 95%: $-.04; -.02$). Finally, the trust dimension is negatively linked to both anxiety and avoidance in attachment to partner, and indirectly to IPV victimization through anxiety ($\beta = .32, p < .001$; CI 95%: .01; .08) and avoidance ($\beta = .24, p < .05$; CI 95%: .04; .09).

Discussion

The main purpose of the current study was to investigate differences in attachment styles in women who are, versus

who are not, habitually victims of physical domestic violence. A vast majority of literature has verified a significant relationship between the attachment bond individuals develop to romantic partners and their involvement in IPV dynamics. However, no studies have investigated the role of attachment to mother in IPV. Our study is intended to expand knowledge in this field. Moreover, within the theoretical framework of attachment theory, we aimed to verify if attachment to mother could influence IPV victimization both directly and indirectly, through the mediation effect of romantic partner attachment. Finally, because most previous studies examined (Allison et al. 2008; Barbaro et al. 2016; Bartholomew and Allison 2006; Gormley and Lopez 2010; Mauricio 2002; Orcutt et al. 2005) the influence of attachment style on violent perpetration behaviors, we directed our attention to victims of violence.

We expected that more insecure romantic attachments would be significantly and positively linked to violence in couple relationships. In other words, we expected that women who habitually experience domestic violence would have a more insecure attachment bond to their romantic partners, compared to those who do not experience violence within their couple relationships. Moreover, we hypothesized that an insecure attachment to mother could also be linked to a woman’s IPV victimization, both directly and indirectly, through romantic attachment with partner.

Overall, our findings confirmed these hypotheses. Female victims of violence within couple relationships present higher levels of insecurity in their attachment bonds to their romantic partners (both anxious and avoidant) than women who are not involved in violent couple relationships. These results are in line with previous literature, and confirm that the insecure attachment bonds represent a significant risk factor for involvement in romantic violent dynamics, and constitute an obstacle to leaving a violent couple relationship (Bond and Bond 2004; Dumas et al. 2008; Henderson et al. 1997; Pearson 2006). This is especially true for anxious attached women, who are totally dependent on their partners (Mikulincer and Shaver 2007) and tend to maintain their romantic relationships at any cost (Davila and Bradbury 2001).

Previous research has found that, especially in the anxious attachment style (which is characterized by fear of abandonment and rejection), there are significant risk factors for becoming a victim of violence. Our results highlighted that abused women present more avoidant attachment bonds to their partners compared to not-abused women. This could be understandable, as studies examining the adult attachment style of the victim in relation to the attachment style of the perpetrator have found that perpetration of violence occurs when anxious attachment of perpetrator is in association with the avoidant attachment of the victims (Pietromonaco et al. 2004; Roberts and Noller 1998). In these cases, the two romantic partners present significant differences in need for closeness and perception of their reciprocal emotional distance. This discrepancy could result in hostile communication, denial, or inability to provide for the partner's needs and, finally, in angry and violent behavior.

Moreover, our results have shown that the attachment bond to mother is also significantly linked to a woman's propensity to enter and maintain a violent romantic relationship. Regarding this point, however, our hypothesis was only partially confirmed. In fact, our results suggest that only adult insecure attachment to partner is a direct significant predictor of being a victim of violence, while an insecure attachment to mother does not directly affect this experience. Despite that, attachment to mother significantly influences involvement in violent couple relationships in an indirect way. Therefore, an insecure attachment to mother could be considered a significant vulnerability factor, causing women to develop insecure attachments to partners (Stith et al. 2000). This constitutes a significant mediator in the relationship between insecure attachment to mother and the victimization experience. More in particular, our results highlighted the role played by the trust dimension. In other words, women that feel their own mother understands and respects their needs and desires tend to have less insecure attachment bonds to their partners and, indirectly, less probability to enter a violent romantic relationship.

Limitation and Future Research Directions

Despite the undoubted empirical and theoretical interest of these results, there are a number of limitations to this study. First, the sample size is relatively limited. However, ethical and security issues make it difficult to recruit large samples of abused women. Second, we only used self-report measures to assess attachment bonds. Although self-report instruments represent an important source of information about an individual's perception of the quality of their close relationships, the use of other methods, such as structured oral interviews, would allow a better understanding of the nature of attachment bonds, especially in women with a

history of IPV. To add strength to our findings, it would be useful to verify them through the use of multi-method assessment measures. Moreover, we analyzed only the attachment bond to mother. It would be interesting to extend the survey to the bond to father as well, in order to improve our knowledge of all primary relationships on the IPV phenomenon. In addition, it would be interesting to analyze the role of other variables, such as social support. It is possible, in fact, that the level of social support perceived by women could be a significant protection factor in IPV.

Despite these limitations, the results of this study provide relevant food for thought. Our results, in fact, expand our knowledge about the roles that adult attachment bonds play on the onset and maintenance of victimization conditions within romantic relationships. The role played directly by the quality of romantic relationships on the tendency to establish couple relationships and, indirectly, by the primary relationship with mother, seems extremely relevant and suggests the need to continue studying these aspects.

Moreover, understanding these influences could also be useful for clinical psychologists and social workers who deal with IPV daily. The ability to identify specific attachment styles that characterize abused women can help professionals listen to women in a more informed way and detect risk factors earlier, which could significantly contribute to help abused women within domestic violent dynamics. In any case, given the limited amount of research in this area, this study provides a useful platform for further investigation. However, future developments of this study need to consider attachment bonds with partner, mother, and father, taking into consideration not only data based on self-report instruments, but also from semi-structured interviews, which are especially appropriate for the assessment of the representational model of attachment.

Author Contributions L.P. collaborated with the design and data collection, analyzed the data, and wrote the paper. F.T. collaborated with the design and in data collection, assisted with the data analyses, collaborated in the writing, and editing of the final manuscript.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in this study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The University of Florence provided IRB approval for the study.

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

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