



The relationship between intimate partner violence, childhood traumas, alexithymia and coping styles with stress

Ozlem Ozusta^a, Ali Emre Sevik^{b,*}

^aGaziantep Dr. Ersin Arslan Research and Training Hospital, Department of Psychiatry, Gaziantep, Türkiye

^bÇanakkale Onsekiz Mart University, Faculty of Medicine, Department of Psychiatry, Çanakkale, Türkiye

ARTICLE INFO

Keywords:

Alexithymia
Childhood traumas
Violence

Received: Jan 03, 2024

Accepted: Apr 17, 2024

Available Online: 26.04.2024

DOI:

[10.5455/annalsmedres.2023.12.347](https://doi.org/10.5455/annalsmedres.2023.12.347)

Abstract

Aim: In this study, it was aimed to determine the sociodemographic characteristics, childhood traumas, alexithymia and coping methods with stress in women exposed to intimate partner violence and to examine the relationship between these characteristics and intimate partner violence in comparison with women who were not exposed to violence.

Materials and Methods: The study included 42 women who had been exposed to intimate partner violence in the last year and 42 women as the control group who applied to the Behavioral Sciences Center in our center. Sociodemographic data form, DSM-5 oriented diagnostic interview guide, Toronto Alexithymia Scale (TAS), Childhood Trauma Scale (CTS) and Stress Coping Styles Scale (SCS) were applied to all participants and the data obtained were compared.

Results: The rates of income level, education level of the partner and employment status of the partner were lower in the case group compared to the control group, while the rates of divorce, separation, elopement, forced marriage, witnessing domestic violence in childhood and inflicting violence on their children were higher in the case group. It was found that 97.6% of the women in the case group had experienced recurrent violence and 33.3% had been subjected to violence in their past relationships. Significant differences were found between the groups in the total scores of the TTS, the total scores of the CFTQ, and the scores of the SBTQ. There was a relationship between alexithymic characteristics and preferred stress coping methods. Alexithymia and childhood traumas were found to have a predictive effect on partner violence.

Conclusion: The fact that the level of alexithymia and the use of ineffective methods to cope with stress are higher in women who are victims of violence is important in therapeutic studies to be conducted with these women. Variables affecting intimate partner violence should be evaluated in a larger population with longitudinal follow-up.



Copyright © 2024 The author(s) - Available online at www.annalsmedres.org. This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Introduction

Intimate partner violence is prevalent globally, independent of social, economic, religious, or cultural differences. However, variations in definition and measurement complicate determining prevalence and evaluating associated factors [1, 4]. The prevalence rate is 30%, with 141 studies from 81 countries revealing it [5]. Manifests in forms such as physical (slapping, punching), sexual (coercion, humiliation), emotional (intimidation, control), and economic (financial manipulation), deeply impacting the victim's life and leading to serious societal consequences [6-8]. Intimate partner violence significantly impacts functionality by causing mental issues like depression, anxiety, and sexual dysfunction, with depression and post-traumatic stress

disorder being the most prevalent [9-11]. This type of violence increases the risk of psychiatric disorders and associated violence, with women with severe mental disorders reporting higher violence exposure compared to the control group [9].

Childhood traumas include experiences like sexual, physical, emotional abuse, parental loss, separation, divorce, migration, witnessing violence, accidents, and natural disasters before age 18 [12]. Childhood traumas can lead to mental health issues in adulthood such as depression, anxiety, antisocial personality disorder [13]. Additionally, exposure to domestic violence in childhood has been reported to increase the risk of becoming a victim of intimate partner violence in adulthood [14,15]. A study reveals a 210% rise in the likelihood of intimate partner violence in individuals who experienced childhood abuse [16].

Alexithymia, a condition characterized by emotional ex-

*Corresponding author:

Email address: aliemresevik@gmail.com (Ali Emre Sevik)

pressionlessness, can be linked to psychiatric disorders like depression, anxiety, and trauma, or be a normal trait in healthy individuals [17,18]. Limited literature on the link between intimate partner violence and alexithymia exists, but research indicates individuals with alexithymia struggle with maintaining interpersonal relationships, with violence exposure resulting in higher scores [19,20]. Stress generates negative effects when it is excessively intense or prolonged, surpassing the capacity for adaptation. Coping with stress involves cognitive and behavioral efforts. Successful coping styles reduce stress, while unsuccessful ones may lead to adverse reactions [21,22]. Intimate partner violence constitutes a significant psychological stressor for many women [19,23].

Research showed significant differences in women's coping strategies for violence, with those exposed to abuse often preferring avoidance methods, and those without active coping methods [21-23]. This study examines the relationship between socio-demographic characteristics, childhood traumas, alexithymia, and stress coping methods in women exposed to intimate partner violence, aiming to compare the effects of these characteristics with partner violence among women who have not experienced it.

Materials and Methods

This prospective study involved female participants at Çanakkale Onsekiz Mart University Research Hospital who sought psychiatry services, categorizing them into those who have experienced violence and those who haven't. The study was approved by the Ethics Committee of Clinical Research at University Faculty of Medicine on November 3, 2022, with a decision number 2022/13-15.

Sample selection

For the research, women directed to the Center for Behavioral Sciences (DABIM), established within the Psychiatry Department of Çanakkale Onsekiz Mart University Faculty of Medicine, by the "Violence Prevention and Monitoring Center (ŞÖNİM)" between November 15, 2022, and February 28, 2023, were included in the case group. These women had made an institutional application due to experiencing partner violence in the last year. Women who had a romantic relationship at some point in their lives but had not experienced any type of violence were included as the control group.

Inclusion criteria

The study includes adult women aged 18 and older who have applied to DABIM due to intimate partner violence and have accepted participation.

Exclusion criteria

The research excluded individuals with judgment disorders, medical barriers, active psychiatric disorder symptoms, and those with mild depression according to the Hamilton Depression Rating Scale, as well as those with medical conditions such as dementia, mental retardation, or literacy impairments.

Implementation

The study included 42 women who applied to DABIM within the specified dates and met the inclusion criteria. Twenty-four women were excluded due to non-compliance, two refused to participate, three were exposed to domestic violence, two had active psychiatric disorder symptoms, and four scored above 15 on the Hamilton Depression Rating Scale.

Case group were provided detailed information about the research method. After obtaining their consent through signed informed consent forms, a sociodemographic data form, Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) oriented diagnostic interview guide and Hamilton Depression Rating Scale were administered by the researcher. Following this, participants were given self-report scales, including the Toronto Alexithymia Scale (TAS), Childhood Trauma Questionnaire (CTS), and Coping Styles Scale (CSS), to fill out. Each participant was allocated 40-50 minutes for this process.

Data collection tools

Socio-demographic data form

Researchers have developed a questionnaire to assess sociodemographic characteristics and experiences of violence for individuals and their partners. The questionnaire includes 25 questions categorized based on income level, with physical violence being defined as slapping, throwing objects, beating, choking, burning, and threatening. Sexual violence involves forcing a woman into sexual intercourse against her will, engaging in demeaning behaviors, and coercing childbearing, abortion, or prostitution. Emotional violence restricts a woman's freedom, while economic violence involves hindering her work, forcing her to work, taking away her property, and controlling her expenses.

Women in the control group are instructed to answer questions about relationship and partner characteristics based on their most recent relationship.

DSM-5 Oriented diagnostic interview

The DSM-5 Oriented Diagnostic Interview is designed to guide the diagnostic process according to the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders. In the guide, there are outlines of the structure of the diagnostic interview, how rapport is established during the diagnostic interview, a draft for a 30-minute diagnostic interview, and question examples for each mental disorder defined in DSM-5, in addition to dimensional diagnosis.

Hamilton depression rating scale

The Hamilton Depression Rating Scale (HDRS-17), developed in 1960 to assess the levels of depression, is applied by clinicians and consists of 17 items. The scale evaluates depression symptoms experienced in the past week. The scoring range for items is 0-2 and 0-4, with the highest score being 53. Score ranges indicate the absence of depression, as well as mild, moderate, and severe depression. The validation and reliability study of the Turkish version of the scale was conducted by Akdemir and his team [24].

Toronto alexithymia scale – 20 (TAS)

The self-report scale developed by Taylor and his team in 1985, later abbreviated as TAS-20 and consisting of 20 items, is utilized [25]. It comprises three subdimensions: difficulty recognizing emotions (7 items), difficulty expressing emotions (5 items), and outward falling (8 items). Scores of 61 and above on the scale are considered alexithymic. Values below 51 indicate the absence of alexithymia, while values between 51 and 61 suggest borderline alexithymia. An increase in the obtained score indicates an increase in the individual's alexithymic tendency. The most recent validity and reliability study in Turkey was conducted by Güleç et al. [26].

Childhood trauma scale (CTS)

The 28-item self-report scale developed by Bernstein et al. [27] assesses instances of abuse and neglect during childhood and adolescence. The five-point Likert scale consists of five subdimensions, namely emotional, physical, and sexual abuse, as well as physical and emotional neglect. In this scale, exceeding 5 points is considered a positive report for sexual and physical abuse, while the thresholds for physical neglect and emotional abuse are set at 7 points, and for emotional neglect, it is set at 12 points. The Turkish adaptation of the scale was conducted by Şar et al. [28].

Coping styles assessment scale (CSS)

The Turkish adaptation of the stress coping styles assessment scale developed by Lazarus and Folkman was conducted by Şahin and Durak [29]. The adaptation study encompassed three different groups: university students, employees from public and private banks, and adults residing in Ankara. The abbreviated form of the scale consists of a total of 30 items and was administered in a self-report format using a four-level Likert scale. It includes five subdimensions: "Confident Approach," "Helpless Approach," "Submissive Approach," "Optimistic Approach," and "Social Support Seeking." The scale measures two main coping styles for dealing with stress: "Effective/Active" and "Ineffective/Passive." Additionally, the second computation method of the scale involves independently calculating the subdimension scores.

Statistical analysis

The study data were transferred to the SPSS program (version 25.0) and analyzed. The sociodemographic characteristics of the participants were examined using descriptive statistics such as percentage, mean, and standard deviation. The relationship between women's education, women's employment status, residence location, witnessing violence, partner's education, partner's employment status, and the incidence of violence was examined using the chi-square analysis. Normality analyses, including Kolmogorov-Smirnov and Shapiro-Wilk tests, were conducted to check parametric assumptions. Two Independent Samples T-Test was employed for between-group comparisons meeting parametric assumptions, while the Mann-Whitney U Test was used for analyses not meeting these assumptions. Pearson and Spearman correlation

tests were applied to determine the relationship between TAS and CSS scores. The impact of alexithymia, childhood traumas, and coping styles on the incidence of violence was investigated through binary logistic regression analysis. Due to the limited number of participants in the analysis (n=84), total scores were used for alexithymia, childhood trauma, and coping styles scales.

Results

Forty-two women who have experienced violence and 42 women who have not experienced violence were included in the study. The sociodemographic characteristics of the participants are presented in Table 1.

The study compared the average age of participants in a control group and the case group exposed to partner violence. The control group had a median age of 40.14, while the case group had a median age of 42.30. The control group had a higher percentage of women with middle school or lower education, while the case group had a higher percentage. The control group had a higher percentage of women living in the provincial center.

Married women constituted 66.7% of the control group and 47.6% of the case group. Among those who married with their own consent and the approval of their families, the percentages were 78.1% in the control group and 62.5% in the case group. The average age of starting marriage or a relationship was 23.28 in the control group and 24.57 in the case group. The mean age difference between partners was 2.35 years in the control group and 4.30 years in the case group.

The rate of individuals with children in the control group is 73.8%, and among women with children, 16.1% reported applying physical violence to their child. In the case group, the rate of individuals with children is 81%, and among them, 38.2% stated that they applied violence to their child.

At the time of application, 21.4% of the control group and 50% of the case group were using regular psychiatric medication. During the interview, no significant difference was observed in alexithymia score averages between the group using regular psychiatric medication and the group not using medication ($t=0.642$, $p=0.524$).

In the comparison of some socio-demographic characteristics between the case and control groups, no significant differences were found between the age of marriage/relationship initiation and the age difference between the participant and their partner in the case group and the control group ($p>0.05$). Regarding income, a significant difference was observed between the two groups, with the income of women in the control group being higher than that of women in the case group ($p=0.044$).

The relationships between the educational status, employment status, place of residence, exposure to domestic violence, partner's educational and employment status, the occurrence of violence towards the child, and the experience of violence were examined through chi-square analysis for women participating in the study. No significant association was found between the woman's education, employment status, and place of residence with the experience of violence ($p>0.05$).

Table 1. Sociodemographic characteristics of the participants.

	Control n (%)	Case n (%)
Age (Mean±SD) years	40.14 (±9.51)	42.30 (±9.46)
Educational Status		
Literate	3 (7.1%)	3 (7.1%)
Primary school	10 (23.8%)	12 (28.6%)
Middle school	8 (19.0%)	8 (19.0%)
High school	10 (23.8%)	10 (23.8%)
University	8 (19.0%)	7 (16.7%)
Postgraduate	3 (7.1%)	2 (4.8%)
Working Status		
Working	26 (61.9%)	22 (52.4%)
Not working	16 (38.1%)	20 (47.6%)
Income rate		
No income	10 (23.8%)	18 (42.9%)
Lower than minimum wage	8 (19.0%)	10 (23.8%)
Higher than minimum wage	24 (57.2%)	14 (33.3%)
Where does she lives		
	2 (4.8%)	1 (2.4%)
Bay	7 (16.7%)	11 (26.2%)
	33 (78.5%)	30 (71.4%)
District		
	11 (26.2%)	5 (11.9%)
	0 (0%)	16 (38.1%)
	2 (4.8%)	1 (2.4%)
Province	20 (47.6%)	13 (30.9%)
	2 (4.8%)	1 (2.4%)
	6 (14.2%)	5 (11.9%)
	1 (2.4%)	1 (2.4%)
Who Does He Live With?		
	28 (66.7%)	20 (47.6%)
	10 (23.8%)	2 (4.8%)
Alone	3 (7.1%)	9 (21.4%)
	-	8 (19.1%)
	1 (2.4%)	3 (7.1%)
With kids		
	25 (78.1%)	25 (62.5%)
	1 (3.1%)	9 (22.5%)
With parents	6 (18.8%)	4 (10%)
	-	1 (2.5%)
	-	1 (2.5%)
Nuclear family		
	23.28 (±4.09)	24.57 (±9.10)
Extended family		
	2.35 (±3.21)	4.30 (±5.96)
With spouse/partner		
With friend	31 (73.8%)	34 (81.0%)
	11 (26.2%)	8 (19.0%)
Relationship status		
Married	5 (16.1%)	13 (38.2%)
	26 (83.9%)	21 (61.8%)
Single (never married)		
Divorced	9 (21.4%)	21 (50.0%)
	33 (78.6%)	21 (50.0%)

Mean±SD: Mean±Standard deviation. The group total may not be 100% due to rounding of decimal parts of percentages. *: Percentage value was calculated among participants who were married. **: Asked to people who are married. ***: Percentage calculated from participants with children.

There is a relationship between a woman’s previous exposure to domestic violence and the occurrence of violence (p=0.025). If a woman has witnessed violence before, the likelihood of experiencing violence has also increased.

Table 2. Toronto Alexithymia Scale total and subscale score averages.

Scale	Sub-Dimensions	Control (Mean±Standard Deviation)	Case
TAS	Total Score	42.95 (±9.54)	50.78 (±12.64)
	TAS-A	13.40 (±5.25)	17.19 (±6.21)
	TAS-B	11.28 (±2.83)	13.00 (±4.56)
	TAS-C	18.20 (±4.27)	20.59 (±4.59)

*TAS: Toronto Alexithymia Scale.

Table 3. Childhood Trauma Scale total and subscale score averages.

Scale	Sub-Dimensions	Control (Mean±Standard Deviation)	Case
CTS	Total Score	31.54 (±6.58)	41.61 (±18.82)
	Emotional Abuse	5.90 (±1.57)	8.61 (±4.67)
	Physical Abuse	5.16 (±0.76)	7.50 (±5.46)
	Physical Neglect	6.35 (±2.50)	7.71 (±3.42)
	Emotional Neglect	8.71 (±3.36)	11.42 (±5.73)
	Sexual Abuse	5.40 (±1.12)	6.33 (±3.71)

* CTS: Childhood Trauma Scale.

Table 4. Total and subscale score averages of the Stress Coping Styles Scale.

Scale	Sub-Dimensions	Control (Mean±Standard Deviation)	Case
CSS	Effective Style Total Score	51.09 (±5.5)	47.28 (±7.85)
	Self-Confident Approach	23.26 (±3.21)	21.66 (±4.58)
	Optimistic Approach	15.57 (±2.25)	14.52 (±3.56)
	Seeking Social Support	12.30 (±3.35)	11.09 (±2.3)
	Ineffective Style Total Score	30.30 (±9.76)	34.28 (±6.64)
	Desperate Approach	17.47 (±4.47)	21.28 (±4.54)
	Submissive Approach	11.71 (±3.59)	13.00 (±3.38)

* CSS: Stress Coping Styles Scale.

Table 5. Comparison of scale scores between groups.

	Control	Case	t Score	p
TAS Total Score	42.95 (±9.54)	50.78 (±12.64)	3.205	0.002*
CTS Effective	51.09 (±5.50)	47.28 (±7.85)	-2.574	0.012*
Method Score				
	Control	Case	U Value	P value
CTS Ineffective	29.50 (14-74)	35.00 (17-50)	540	0.002**
Method Score				
CSS Total Score	31.00 (25-55)	36.50 (25-93)	610	0.015**

*: Two Independent Groups T Test. N: Mean ±: Standard Deviation **: Mann Whitney U. N: Median (Minimum-Maximum).

Table 6. Alexithymia and exposure to violence. Relationships between childhood traumas and stress coping styles (Binary logistic regression).

Variable	B	OR (95% CI)	p value
TAS Total	0.052	1.004-1.106	0.035
CTS Total	0.053	1.009-1.103	0.019
CSS is Effective	-0.047	0.881-1.033	0.244
CSS Ineffective	0.028	0.970-1.092	0.348

* CTS: Childhood Trauma Scale; *CSS: Stress Coping Styles Scale; TAS: Toronto Alexithymia Scale.

Table 7. Correlation test results to determine the relationship between alexithymia and stress coping styles.

		N	r	p
Control	TAS Total Score	84	-0.291	0.007*
	CSS Effective Method Score			
Case	TAS Total Score	84	0.333	0.002**
	CSS Effective Method Score			

*Pearson correlation test ** Spearman correlation test *** CSS: Stress Coping Styles Scale **** TAS: Toronto Alexithymia Scale.

There is an association between the partner’s educational status and the occurrence of violence (p=0.009). As the partner’s educational level increases, a clear decrease in the woman’s experience of violence is observed, both in terms of frequency and percentages.

There is a correlation between the partner’s employment status and the incidence of violence (p=0.015). Women whose partners are not employed experience higher levels of violence from their partners.

There is a correlation between the act of applying violence to the child and the occurrence of violence by the partner among participants with children (p=0.047). In women exposed to violence, a higher incidence of applying violence to their child has been observed.

When examining the characteristics of violence experienced by women in the case group, it was found that 97.6% of women reported the recurrence of violent incidents, and 33.3% indicated a history of violence in past relationships. Among women who continue their relationship with the partner they experienced violence from during the application process, the percentage is 33.3%, while those experiencing ongoing violence constitute 16.7%.

The total scores of the scales applied to the participants and the scores of the sub-dimensions are presented in Tables 2, 3, and 4.

According to the total score of the Toronto Alexithymia Scale (TAS), in the control group, alexithymia was identified in 2 participants (4.8%), borderline alexithymia in 6 participants (14.2%), and no alexithymia was observed in 34 participants (81%). In the case group, alexithymia was identified in 6 participants (14.2%), borderline alexithymia in 13 participants (31%), and no alexithymia was observed in 23 participants (54.8%).

The comparison of scale scores between groups is presented

in Table 5. A difference in total scores of all scales was observed between the case group, who experienced violence from their partners, and the control group, who did not experience any type of violence (p<0.05). The total scores of TAS and CTS are higher in the case group. In CSS, effective method scores are higher in the control group, while ineffective method scores are higher in the case group.

Pearson and Spearman correlation tests were conducted to determine the relationship between alexithymia scores and coping styles used to deal with stress. There is a low-level, inverse relationship between the total alexithymia score and effective coping methods used in dealing with stress (r= -0.291, p=0.002). Conversely, there is a moderate-level, positive relationship between alexithymia score and ineffective coping methods used in dealing with stress (r=0.333, p=0.002). A Spearman correlation test was performed to identify the relationship between alexithymia scores of the control and case groups and childhood trauma. In the control group, there is a moderate-level, positive relationship between the total alexithymia score and the total childhood trauma score (r=0.338, p=0.029). However, no relationship was observed between the scales in the case group (Table 6) (Table 7).

Violence, alexithymia, childhood traumas, and coping styles with stress logistic regression results were summarized in Table 7. According to the analysis results, the level of alexithymia is influential on the occurrence of violence (OR: 1.07, p=0.035). The levels of alexithymia in women who have experienced violence (mean=50.79±12.6) are higher than those of women who have not experienced violence (mean=42.9±9.5). The impact of the childhood trauma variable on the occurrence of violence is found to be significant (p=0.019). The effects of effective and ineffective coping style subgroups on the occurrence of violence are not significant (p>0.05).

Discussion

This study aimed to explore the differences in alexithymic characteristics, childhood traumas, and stress coping styles between women who have experienced intimate partner violence and those who haven’t, and the correlations between these variables and violence exposure, involving 42 women aged 22-61 and a mean of 42.30. The average age of the case group exposed to intimate partner violence is consistent with the literature [30,31]. Various studies have reported that a younger age increases the risk of intimate partner violence [4, 32] However, there is no significant difference in age averages between the control group participants, who were included in the study matched with the case group in terms of age.

Studies across Turkey reveal widespread violence against women, with husbands causing significant harm in various cities [33,34,35]. Types of violence, including physical, emotional, sexual, and economic, reflect the harsh realities women face. However, it is emphasized that reporting of violence against women is lower worldwide than the actual occurrence, and prevalence rates vary [6]. In Turkey, 44% experienced emotional, 39% physical, and 15% sexual violence, but 92% did not report it [36]. A 2014 study found

that emotional violence rates remained constant, but physical violence decreased from 39% to 36% and sexual violence from 15% to 12%, resulting in an overall exposure rate of 38% [37].

The WHO's multinational study, based on interviews with 24,000 women from 10 countries, showed rates of intimate partner violence ranging from 13% to 61%, sexual violence from 6% to 59%, and emotional violence from 20% to 75%. The rate of women exposed to physical or sexual violence ranged from 15% to 71%, with significant variations between countries [38]. According to the WHO's 2002 report, relying on 48 global studies, 10-69% of women worldwide have experienced intimate partner violence at least once. Between 20% and 70% of women have not disclosed their experiences of violence to anyone. Prevalence rates vary significantly between countries, with less than 3% in Australia, Canada, and the United States, 27% in Nicaragua, 38% in the Republic of Korea, and 52% in Palestine. Studies indicate that physical violence often triggers emotional violence, and approximately half of the cases involve sexual violence [39]. In the United States, according to 2015 data, the rate of women reporting violence by intimate partners is 36.4% [40]. A previous cross-sectional study conducted in the Çanakkale region found that 63.2% of women with a higher education level had experienced violence [41]. The lower education level of women in Çanakkale compared to the general population indicates a correlation between low education levels and increased violence exposure.

This study found 35.7% of women in the case group have a primary school education or lower, while the control group showed no significant difference in education levels. The literature indicates a correlation between low levels of education and increased risk of violence [31]. In our study, the percentage of women in the case group with a middle school education or lower is higher (54.7%) than those with a high school education or higher (45.3%). These ratios are similar to a recent study conducted with women who sought the clinic for partner violence [42].

This study found no significant difference in income-generating job employment between the case and control groups, while 67.6% of women in Samsun did not work [43]. In our study, the percentage of working women in the case group is 52.4%. Regional examinations indicate that in the Balıkesir region, which includes Çanakkale, the working rate of women is reported as 32.4% [44]. The predominance of women residing mainly in the provincial center in our study may have led to higher working rates in income-generating jobs compared to the literature.

When examining the income levels of the groups, the percentage of those with a monthly income higher than the minimum wage is 57.2% in the control group, while it is 33.3% in the case group. In a conducted study, it was found that 45% of women seeking help due to exposure to violence did not have their own income [43]. In the literature, having a low income level is reported to increase the risk of exposure to intimate partner violence [45]. This study revealed that the control group had significantly higher income levels than the case group.

This study reveals that women in the control group have a higher proportion of living with a nuclear family, while those in the case group are more likely to live with their

children. This is due to a higher rate of divorce or living separately from the spouse in the case group. The same difference is also observed in married women's rates.

We found that the control group (66.7%) had a higher percentage of married women, while the case group (47.6%) had a higher rate of divorced or separated women. This finding supports previous findings on intimate partner violence among women [18]. The marital status rates of women in the control group are consistent with other studies conducted in Çanakkale [41].

The study reveals that elopement rates are higher among women who have experienced violence, while those marrying by their own will and family consent are higher. The control group's rates are lower, similar to a study in the Çanakkale province [41]. Regional differences contribute to the high rates of marriage through voluntary and family consent.

This study found that violence rates are lower among those who marry by their own will and with family consent, compared to those who marry without family approval, elope, are abducted, or marry through arranged methods. This is consistent with previous studies indicating higher rates of violence among women who marry involuntarily, elope, or through arranged methods [32,46]. The findings may be influenced by sociocultural factors like high education levels, female literacy, and low household size in the Çanakkale province.

Previous research suggested young marriages, particularly before 18, may increase violence exposure [37]. However, there was no significant difference in the average age of starting a relationship between the control and case groups.

A higher age difference between male and female partners has been reported to increase the risk of violence [33]. In our study, there was no significant difference in age difference between the groups. Also, the occurrence of various mental disorders as a result of violence is an expected finding, and the use of psychiatric medication is more frequently observed in women exposed to violence.

The impact of antidepressant use on alexithymic features has been reported [47]. We found no significant difference in alexithymia scale scores between groups using and not using medication, excluding moderate or severe depression due to its prevalence in partner violence cases.

In the study, women exposed to violence were found to have significantly higher education levels than the control group for their partners. Similarly, the majority of working partners were identified in the control group. Consistent with the literature, it is indicated that men's low education or unemployment increases the risk of women experiencing violence [33].

The study found a significant difference in past experiences of witnessing domestic violence between the case group and the control group, indicating a relationship between childhood witnessing and future violence experiences. Studies have shown a relationship between exposure to violence and perpetrating violence against one's own child [33-35]. This study found that the control group had 81% children, while the case group had 38.2%, with

significant differences in the application of physical violence to children.

According to the results of the 2014 Turkey National Survey on Domestic Violence against Women, the overall rates of physical violence, emotional violence, economic violence, and sexual violence against women are 36%, 44%, 30%, and 12%, respectively [37]. A study reveals high rates of intimate partner violence, including physical, verbal, emotional, economic, and sexual violence, with reported rates of 98.4%, 86.8%, 43.7%, 37.3%, and 16.4%, respectively [48]. We found a consistent pattern of violence among participants, with rates of physical, emotional, economic, and sexual violence ranging from 95.2% to 35.7%. Studies examining the relationship between violence and alexithymia can be found in the literature [49,50]. However, research on alexithymic features in women exposed to violence is quite limited. There are sources indicating a relationship between exposure to partner violence and alexithymic features in women. In a study comparing women exposed to partner violence with those without a history of violence using the TAS-20, the group exposed to violence had significantly higher scores, indicating that alexithymia makes these women more vulnerable to the risk of violence [19]. Alexithymic individuals struggle to put themselves in the place of others and understand the emotional states of others due to the inadequacy of their emotional experiences [51]. This condition can be influential in partner choices, and they may have difficulty recognizing some precursors of violence coming from the other party. This study found significant differences in TAS, CTQ, and STQ scores between control and case groups, with the case group having a higher total TAS score of 50.78, below the cutoff point. In contemporary understanding, alexithymia is not perceived as a bipolar trait; rather, it is accepted to demonstrate continuity. An increase in the scores obtained from the scale indicates an increase in alexithymic features in the individual.

Mannarini et al. reported that higher alexithymia scores in women exposed to violence, but no significant difference. Perpetrators with higher alexithymia struggle to recognize and understand others' emotions. Alexithymia scores predict domestic violence [50]. This research showed a positive correlation between childhood traumas and partner violence, with higher CTQ scores in the case group indicating a higher prevalence of childhood traumas.

Several studies have identified a relationship between domestic violence and childhood traumas [12,52]. Childhood violence is linked to adult marriages containing violence. Childhood abuse, including physical and sexual abuse, increases the risk of intimate partner violence. Past experiences contribute to learned helplessness, and assessing adult violence risk requires questioning childhood abuse [52]. In this study, the effect of childhood trauma variable on the occurrence of violence was found to be significant.

We found significant differences in the frequency of effective and ineffective coping strategies used by the control and case groups. Inadequate coping strategies can increase intimate partner violence victimization. In married couples, not using effective coping methods can lead to domestic violence. Women exposed to violence use less active and problem-focused coping methods and are more

likely to ignore problems. Effective coping strategies include a secure self-approach, optimism, and seeking social support. A helpless and submissive attitude is common among women exposed to violence, leading to feelings of shaken confidence, helplessness, despair, and self-blame [19,21,23].

Violence frequency, severity, and duration influence women's coping strategies, along with social support and financial resources. These coping methods can influence decision-making, such as separating from relationships. Adapting to different situations is crucial, as coping styles can vary depending on the situation [23]. A qualitative study revealed that women residing in shelters use both problem-focused/active and emotion-focused coping methods in a cycle during their process of coping with violence [53]. Coping methods for women experiencing violence are influenced by environmental, personal, and excessive threat constraints. Environmental constraints include lack of social contact, while personal constraints include dependency needs and violence intensity [54]. This study revealed a positive correlation between TAS and CTS in the control group, but no relationship was found in the case group.

Alexithymia is a trait that begins in childhood, influenced by genetic and environmental factors. Particularly, physical and emotional neglect and sexual abuse can lead to emotion regulation problems, affecting emotional expression skills [17-19]. Our study suggests that the observed relationship in the control group may be obscured in the case group for some reason.

In the psychiatric and non-clinical population, alexithymia is associated with immature defense mechanisms and maladaptive coping methods for dealing with stress. Studies have shown that alexithymic individuals tend to use emotion-focused coping methods and score high on avoidance sub-dimensions, while scoring low on problem-focused method scores [55,56]. The correlation test in our study between alexithymia and coping styles demonstrates that a high level of alexithymia negatively affects effective stress coping strategies and simultaneously increases ineffective coping methods. These findings emphasize the potential negative impact of alexithymia on an individual's adaptive coping mechanisms. It is known that alexithymic traits and the presence of childhood trauma pose a risk for experiencing violence in adulthood [32]. Our research examined the relationships between violence, alexithymia, childhood trauma, and coping styles using a logistic regression model. The results indicate that the level of alexithymia and childhood trauma is effective in exposure to violence. However, the impact of coping style subgroups was not found to be significant. These results are consistent with the literature, highlighting the effectiveness of high alexithymia and childhood trauma in exposure to violence.

Limitations

This study is a single-center study and does not reflect the whole society as only the people referred to us constitute the sample.

This study focused on the increase of intimate partner violence in our country and investigated alexithymic charac-

teristics, childhood traumas, and coping strategies among women exposed to violence. However, the study has various limitations. The research is limited to a voluntary sample of women from the Çanakkale province only. The inadequate participation of women exposed to violence in psychiatric interviews limits the detailed examination of relationships between sub-dimensions of the scale. The study only includes women who have filed official complaints, which may exclude silent victims.

Conclusion

Our study is valuable in demonstrating, for the first time, the impact of alexithymic characteristics on exposure to partner violence, childhood traumas, and coping strategies. Our findings indicate that women exposed to violence have a low income level, high divorce rates, and their partners exhibit low educational and employment rates, highlighting socio-economic risk factors. Witnessing violence within the family, perpetrating violence against one's child, and the high prevalence of childhood trauma emphasize the recurrence and intergenerational cycle of violence and are associated with alexithymic characteristics. The research reveals higher levels of alexithymic characteristics and childhood traumas among women exposed to violence and suggests that coping strategies are ineffective. These findings underscore the importance of early intervention and follow-up for women at risk of violence. Assessing alexithymic characteristics may assist in determining the content of therapeutic interventions and providing appropriate support to individuals. Follow-up studies examining the effects of alexithymic characteristics on the development of psychopathology and the benefits of treatment in women exposed to violence would be beneficial. Further longitudinal assessment of effective variables on intimate partner violence in a broader population is necessary.

Ethical approval

The study was approved by the Ethics Committee of Clinical Research at University Faculty of Medicine on November 3, 2022, with a decision number 2022/13-15.

References

- Ellsberg M, Watts C, García-Moreno Henrica C, Jansen AFM, Heise L. WHO multi-country study on women's health and domestic violence against women: initial results on prevalence, health outcomes and women's responses. 2005.
- Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R. The world report on violence and health. World Health Organization, Geneva. 2002.
- Oram S, Khalifeh H, Howard LM. Violence against women and mental health. *Lancet Psychiatry*. 2017;4(2):159–70.
- Çiltaş Ç, Çalık Var E. Kadına yönelik şiddet ve kadın konukevi hizmetine ilişkin bir araştırma: Ankara örneği. *Türkiye Sağlık Bilimleri ve Araştırmaları Dergisi*. 2019;2(1):13–23.
- Devries KM, Mak JYT, García-Moreno C, Petzold M, Child JC, Falder G, et al. Global health. The global prevalence of intimate partner violence against women. *Science*. 2013;340(6140):1527–8.
- Watts C, Zimmerman C. Violence against women: global scope and magnitude. *Lancet*. 2002;359(9313):1232–7.
- Özkan G. Kadına yönelik şiddet-aile içi şiddet ve konuya ilişkin uluslararası metinler üzerine bir inceleme. *Hacettepe Hukuk Fakültesi Dergisi*. 2017;7(1):533–64.
- Karataş S, Şener Ü, Otaran N. Kadın sığınma evleri kılavuzu. T.C. Başbakanlık Kadının Statüsü Genel Müdürlüğü. 2008.
- Oram S, Fisher HL, Minnis H, Seedat S, Walby S, Hegarty K, Rouf K, Angénioux C, Callard F, Chandra PS, Fazel S, Garcia-Moreno C, Henderson M, Howarth E, MacMillan HL, Murray LK, Othman S, Robotham D, Rondon MB, Sweeney A, Taggart D, Howard LM. The Lancet Psychiatry Commission on intimate partner violence and mental health: advancing mental health services, research, and policy. *Lancet Psychiatry*. 2022;9(6):487–524.
- Krahé B, Bieneck S, Möller I. Understanding gender and intimate partner violence from an international perspective. *Sex Roles*. 2005;52(11):807–27.
- Campbell J. Health consequences of intimate partner violence. *The Lancet*. 2002;359:1331–6.
- Helvacı Çelik FG, Hocaoglu Ç. Çocukluk çağı travmaları: bir gözden geçirme. *Sakarya Tıp Dergisi*. 2018;8(4):695–711.
- Fergusson DM, Boden JM, Horwood LJ. Exposure to childhood sexual and physical abuse and adjustment in early adulthood. *Child Abuse Negl*. 2008;32(6):607–19.
- Ehrensaft MK, Cohen P, Brown J, Smailes E, Chen H, Johnson JG. Intergenerational transmission of partner violence: a 20-year prospective study. *J Consult Clin Psychol*. 2003;71(4):741–53.
- Linder JR, Collins WA. Parent and peer predictors of physical aggression and conflict management in romantic relationships in early adulthood. *J Fam Psychol*. 2005;19(2):252–62.
- Gomez AM. Testing the cycle of violence hypothesis: child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. *Youth Soc*. 2010;43(1):171–92.
- Şaşıoğlu M, Gülol Ç, Tosun A. Aleksitimi kavramı. *Psikiyatriye Güncel Yaklaşımlar*. 2013;5(4):507–27.
- Signorelli MS, Fusar-Poli L, Arcidiacono E, Caponnetto P, Aguglia E. Depression, PTSD and alexithymia in victims of intimate partner violence: a case-control study. *Rev Psiquiatr Clín*. 2020;47(2):45–50.
- Craparo G, Gori A, Petrucci I, Cannella V, Simonelli C. Intimate partner violence: relationships between alexithymia, depression, attachment styles, and coping strategies of battered women. *J Sex Med*. 2014;11(6):1484–94.
- Yelsma P. Affective orientations of perpetrators, victims, and functional spouses. *J Interpers Violence*. 1996;11(2):141–61.
- Orzechowska A, Zajackowska M, Talarowska M, Gałeczki P. Depression and ways of coping with stress: a preliminary study. *Med Sci Monit*. 2013;19:1056.
- Kaya D, Koç H. Öğretim elemanlarının stresle başa çıkma davranışlarının bazı değişkenlere göre belirlenmesi. *İşletme Araştırmaları Dergisi*. 2009;1(2):35–50.
- Waldrop AE, Resick PA. Coping among adult female victims of domestic violence. *J Fam Violence*. 2004;19(5):291–302.
- Akdemir A, Dönbak Örsel S, Dağ İ, Türkçapar MH, İşcan N, Özbay H. Hamilton depresyon derecelendirme ölçeği (HDDÖ)'nin geçerliliği-güvenilirliği ve klinikte kullanımı. *Psikiyatri Psikoloji Psikofarmakoloji Dergisi*. 1996;4(4):251–9.
- Bagby RM, Parker JDA, Taylor GJ. The twenty-item Toronto Alexithymia scale—I. Item selection and cross-validation of the factor structure. *J Psychosom Res*. 1994;38(1):23–32.
- Güleç H, Kose S, Güleç MY, Çitak S, Evren C, Borckardt J, Sayar K. Reliability and factorial validity of the Turkish version of the 20-item Toronto alexithymia scale (TAS-20). *Klinik Psikofarmakoloji Bülteni*. 2009;19(3):214–20.
- Bernstein DP, Fink L, Handelsman L, Foote J, Lovejoy M, Wenzel K, Sapareto E, Ruggiero J. Initial reliability and validity of a new retrospective measure of child abuse and neglect. *American Journal of Psychiatry*. 1994;151(8):1132–6.
- Şar V, Öztürk E, İkikardeş E. Çocukluk Çağı Ruhsal Travma Ölçeğinin Türkçe uyarlamasının geçerlilik ve güvenilirliği. *Türkiye Klinikleri Tıp Bilimleri Dergisi*. 2012;32(4):1054–63.
- Şahin NH, Durak A. Stresle başa çıkma tarzları ölçeği: üniversite öğrencileri için uyarlanması. *Türk Psikoloji Dergisi*. 1995;10(34):56–73.
- Cody MW, Jones JM, Woodward MJ, Simmons CA, Gayle Beck J. Correspondence Between Self-Report Measures and Clinician Assessments of Psychopathology in Female Intimate Partner Violence Survivors. *J Interpers Violence*. 2017 May 1;32(10):1501–23.
- Irmak Ç, Altıntaş M. Aile içi şiddet mağduru kadınlarda ruhsal dayanıklılık, bağlanma biçimleri, başa çıkma tutumları ve psikopatoloji. *Anadolu Psikiyatri Derg*. 2017;18(6):561–70.

32. Capaldi D, Knoble N, Shortt J, Kim H. A systematic review of risk factors for intimate partner violence. *Partner Abuse*. 2012;3(2):231–80.
33. Page AZ, İnce M. Aile içi şiddet konusunda bir derleme. *Türk Psikoloji Yazıları*. 2008;11(22):81–94.
34. Yanık A, Hanbaba Z, Soygür S, Ayalti B, Doğan M. Kadına yönelik şiddet davranışlarının değerlendirilmesi: Türkiye’den kanıt. *Electronic Journal of Vocational Colleges*. 2014;104–11.
35. Hıdıroğlu S, Topuzoğlu A, Ay P, Karavuş M. Kadın ve çocuklara karşı fiziksel şiddeti etkileyen faktörlerin değerlendirilmesi: İstanbul’da sağlık ocağı tabanlı bir çalışma. *Yeni Symposium*. 2006;44(4):196–202.
36. T.C Başbakanlık Kadının Statüsü Genel Müdürlüğü. Türkiye’de kadına yönelik aile içi şiddet. Ankara; 2009.
37. T.C Başbakanlık Kadının Statüsü Genel Müdürlüğü. Türkiye’de kadına yönelik aile içi şiddet araştırması özet rapor. 2014.
38. Sardinha L, Maheu-Giroux M, Stöckl H, Meyer SR, García-Moreno C. Global, regional, and national prevalence estimates of physical or sexual, or both, intimate partner violence against women in 2018. *The Lancet*. 2022;399(10327):803–13.
39. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R. The world report on violence and health. World Health Organization, Geneva. 2002.
40. Smith SG, Zhang X, Basile KC, Merrick MT, Wang J, Kresnow M, Chen J. National intimate partner and sexual violence survey (NISVS): 2015 data brief - updated release. Atlanta, GA; 2018.
41. Duva Y. Çanakkale il merkezinde kadına yönelik şiddetin yaygınlığının araştırılması, risk faktörleri ile ruhsal dayanıklılık arasındaki ilişkinin incelenmesi [Uzmanlık Tezi]. [Çanakkale]: Çanakkale Onsekiz Mart Üniversitesi; 2019.
42. Fidancı G. 2018-2019 yılları arasında anabilim dalımıza başvuran partner şiddeti mağduru kadınların sosyodemografik ve klinik özellikleri ile adli tıp uygulamaları açısından değerlendirilmesi [Uzmanlık Tezi]. [Isparta]: Süleyman Demirel Üniversitesi Tıp Fakültesi; 2020.
43. Kumcağz H, Aydın Avcı İ, Talay T, Gürkan S, Kinsiz DN. Samsun Şiddet Önleme ve İzleme Merkezi’ne başvuran şiddet mağduru kadınların başvuru durumları ve gereksinimleri. *MANAS Sosyal Araştırmalar Dergisi*. 2018;7(2):401–14.
44. Türkiye İş Kurumu. İlgücü piyasası araştırması Çanakkale ili 2020 yılı sonuç raporu [Internet]. 2020 [cited 2023 Feb 8]. Available from: <https://media.iskur.gov.tr/45153/canakkale.pdf>.
45. Thompson RS, Bonomi AE, Anderson M, Reid RJ, Dimer JA, Carrell D, Rivara FP. Intimate partner violence: prevalence, types, and chronicity in adult women. *Am J Prev Med*. 2006;30(6):447–57.
46. Güleç Öyekçin D, Yetim D, Melih Şahin E. Kadına yönelik farklı eş şiddeti tiplerini etkileyen psikososyal faktörler. *Türk Psikiyatri Dergisi*. 2012;23(2):75–81.
47. Kajanoja J, Scheinin NM, Karukivi M, Karlsson L, Karlsson H. Is antidepressant use associated with difficulty identifying feelings? A brief report. *Exp Clin Psychopharmacol*. 2018;26(1):2–5.
48. Tokgözlü Ö. Yakın partner şiddeti olgularının değerlendirilmesi [Tıpta Uzmanlık Bitirme Tezi]. [Elazığ]: Fırat Üniversitesi Tıp Fakültesi; 2021.
49. Vignola-Lévesque C, Léveillé S. Intimate partner violence and intimate partner homicide: Development of a typology based on psychosocial characteristics. *J Interpers Violence*. 2022;37(17–18):NP15874–98.
50. Mannarini S, Taccini F, Rossi AA. Women and violence: Alexithymia, relational competence and styles, and satisfaction with life: A comparative profile analysis. *Behavioral sciences (Basel, Switzerland)*. 2021;11(11): 147.
51. Tepeli Temiz Z. Bir sınıflandırma çalışması: Aleksitimik belirtiler ve bağlanma örüntüleri. *Medeniyet Araştırmaları Dergisi*. 2018;3(5):21–42.
52. Whitfield CL, Anda RF, Dube SR, Felitti VJ. Violent childhood experiences and the risk of intimate partner violence in adults: assessment in a large health maintenance organization. *J Interpers Violence*. 2003;18(2):166–85.
53. Erdoğan S, Aktaş A, Onat Bayram G. Sığınma evinde yaşayan bir grup kadının şiddet deneyimleri ve baş etme yaklaşımları: Niteliksel bir çalışma. *Uluslararası İnsan Bilimleri Dergisi*. 2009;6(1):807–24.
54. Bulut M, Aslan R, Arslantaş H. Kabul edilmemesi gereken toplumsal bir gerçek: Yakın partner şiddeti. *Sakarya Tıp Dergisi*. 2020;10(2):334–47.
55. Parker JDA, Taylor GJ, Bagby RM. Alexithymia: relationship with ego defense and coping styles. *Compr Psychiatry*. 1998;39(2):91–8.
56. Wise TN, Mann LS, Epstein S. Ego defensive styles and alexithymia: a discriminant validation study. *Psychother Psychosom*. 1991;56(3):141–5.