Differences Between Childhood Traumatic Experiences and Coping Styles For Male and Female Patients with Major Depression

Ahmet GÜL[1], Hesna GÜL[2], Nurper ERBERK ÖZEN[3], Salih BATTAL[4]

SUMMARY

Objective: The aim of this study was to evaluate the impact of childhood traumas, determine their effects on coping skills, and assess gender specific differences in patients with major depression.

Method: Fifty female and fifty male patients with unipolar depression were enrolled. All patients were administered sociodemographic data form, the Beck Depression Inventory, and subjected to COPE Scale. Experiences of childhood abuse and neglect were assessed by the Childhood Trauma Questionnaire (CTQ-28).

Results: First, female patients with childhood traumas were found to use Emotion-focused coping styles whereas, male patients used Problem-focused and Less useful coping styles more frequently. Second, there were positive relationships between childhood trauma scores and depression severity, childhood sexual abuse, and emotion-focused coping styles in both male and female groups according to correlation analyses. In addition, childhood traumas led to further modifications on coping styles in the male group. Finally, a multiple linear regression model was used to identify independent predictors of coping styles. For both men and women, it was shown that childhood sexual abuse was significantly and positively related to Emotion-focused coping styles. Depression severity was the other predictor for emotion focused and less useful coping styles in only the male group.

Conclusion: Increased information on childhood trauma history and gender specific coping strategies could help to identify individual's at risk for depression and/or predict response to treatment. Future studies should focus on the prospective investigation of potential predictors and mediators in this area.

Keywords: child abuse, adult survivors, coping skills, depression, gender

INTRODUCTION

Depressive disorder is a common public health problem that significantly disrupts the quality of life, and has high risk of mortality and morbidity (Kessler et al. 2003). Many studies that have researched the causes of depression have determined a correlation between trauma in childhood and clinical depression in adults (Kendler et al. 2006, Kendler et al. 2014). Traumatic experiences in children have been shown to increase the lifelong incidence risk of depressive disorder (Van der Vegt et al. 2009, Arnow et al. 2011). In addition, they negatively affect treatment response and increase the incidence rates of significant comorbid diseases such as personality disorder (Arnow et al. 2011), anxiety, and substance abuse (Van der Vegt et al. 2009, Scott et al. 2010, Scott et al.2011, Keyes, Eaton et al. 2012, Chapman et al. 2004, Hovens et al. 2010) .

Received: 24.03.2016 - **Accepted**: 21.11.2016

[1]MD., Necip Fazıl State Hospital, Department of Psychiatry, Kahramanmaraş, [2]MD., Necip Fazıl State Hospital, Department of Child and Adolescent Psychiatry, Kahramanmaraş, [3, 4]Prof., Ufuk University, Faculty of Medicine, Department of Psychiatry, Ankara, Turkey.

e-mail: *mdahmetgul@gmail.com*

doi: 10.5080/u18193

When investigating the correlation between childhood trauma and depressive disorder, it is necessary to deal with the neurobiological mechanisms and psychosocial effects caused by trauma. Neglect and abusive experiences encountered in the early period activate the hypothalamic-pituitary-adrenal (HPA) axis, which causes negative effects on memory and emotional control mechanisms. This increases the tendency toward depression and resistance to treatment in the developing brain (Heim and Nemeroff 2001, Heim et al.2001, Maercker et al. 2004, Wiersma et al. 2009, Rane et al. 2016). According to the attachment theory, children neglected or abused by caregivers and/or close relatives experience negative thoughts, beliefs, and expectations of themselves and others (Bowlby 1969). This situation causes feelings of learned hopelessness and lack of control. In addition, the attachment theory suggests that the use of inappropriate and less useful coping methods (Hovens et al. 2010, Fossati et al. 2015, Huguelet et al. 2015, Özcan et al. 2016) and results in increased risk of depression, anxiety disorder, chronic fatigue syndrome, eating disorders and personality disorders (Campbell-Sills et al. 2006, Kempke et al. 2015, Martín-Blanco et al. 2015, Monteleone et al. 2015, Ivarsson et al. 2016, Monaco et al. 2016).

In spite of these negative results and psychopathologies, every individual is not affected by trauma in the same way. Multiple studies have proven that more resilient individuals cope better with trauma and have better situations in terms of mental health (Walsh et al. 2010, Schulz et al. 2014). Coping is described as continuously changing cognitive and behavioral effects displayed in response to an internal and/or external problem, which exceeds the strength of the person's ego and support resources (Lazarus 1990). During this effort the individual may use "problem-focused" methods (i.e., actively changing behavior and environmental factors) to cope with the stressor or "emotionally-focused" methods such as changing feelings (Lazarus 1993). Among factors affecting the methods used and coping skills are gender, socioeconomic situation, educational level, living conditions, and frequency and duration of trauma exposure (Carver et al. 1989, Ünal and Özcan 2000, Wingenfeld et al. 2009).

The aim of this study was to research the correlation between exposure to childhood trauma and coping attitudes and severity of depression in male and female patients with diagnosis of major depression. We hypothesized that male and females exposed to different types of neglect and abuse will use different coping methods with significant differences between the genders.

MATERIALS and METHODS

Data Collection

The study was completed at Ufuk University Hospital Psychiatry clinic after receiving permission from the ethics committee of Ufuk University. All patients diagnosed with major depression applied to our hospital from January-March in 2014 and were between the ages of 18-50 years. Written consent was obtained from patients that agreed to participate. Inclusion criteria for the study were literacy, psychiatric examination, agreeing to answer the surveys in the study, and volunteer status. Patients with personality disorders, major depression, post traumatic stress disorder, mental retardation, diagnosis of psychotic depression or neurological disease causing organic brain disorder like epilepsy, dementia, and head trauma were not included in the study. After information was collected from 50 female and 50 male patients with similar sociodemographic characteristics, the study was completed.

Patients participating in the study were interviewed face-to-face by a clinician, and the Sociodemographic Data Form and Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) were administered. The patients filled in the Childhood Trauma Questionnaire (CTQ-28), the COPE inventory, and the Beck Depression Scale independently.

MATERIALS

Sociodemographic Data Form

In light of the aims of the study, a structured sociodemographic data form was prepared and used to assess the sociodemographic and clinical characteristics of the patients. This form comprised of questions on sociodemographic characteristics like age, gender, educational level, marital situation, employment situation and cohabitants, and questions on clinical characteristics such as additional medical disease history, family history of psychiatric diseases and treatment history. The form was completed by the clinician following information supplied by the patient.

Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I)

SCID-I was developed by First et al. according to the DSM-IV diagnostic criteria and was adapted into Turkish by Çorapçıoğlu et al. This is a structured clinical interview scale to research first axis disorders (Corapcioglu ve ark. 1999). The validity and reliability studies of the Turkish version were completed by Özkürkçügil et al. (Özkürkçügil et al. 1999, First et al. 2012).

Beck Depression Inventory (BDS)

This scale was developed to measure the risk of depression as well as the level and severity variation of depressive symptoms in adults (Beck et al. 1961). The Turkish validity and reliability studies were completed by Hisli, and the cut-off score for the scale was determined to be 17 (Hisli 1988).

Childhood Trauma Questionnaire (CTQ-28)

Developed by Bernstein in 1994, the scale was adapted into Turkish in 1996 with validity and reliability studies completed by Şar in 2012 (Bernstein et al. 2003, Şar et al. 2012). The scale is helpful to retrospectively and quantitatively assess the neglect and abuse experiences before the age of 20. It is a self-reported and easily-applied scale tool.

Coping Orientation for Problem Experiences Inventory (COPE)

Developed by Carver et al., this is a self-reported scale comprising 60 questions. The Turkish validity and reliability studies were completed by Ağargün et al. (Carver 1997, Agargün et al. 2005). The scale comprises 60 questions and 15 subscales, with each subscale including 4 questions. Each of these subscales are used to question distinct coping attitudes.

Statistical Evaluation

While assessing the data obtained in the study, the *SPSS 18.0 for Windows* program was used for all statistical analyses. For two-way comparisons of parameters with normal distribution, the Student t test was used. Parameters with non-normal distribution were subjected to the Mann Whitney U test. For comparison of qualitative data, the chi-square test was used. In situations where the expected frequencies were not met, the Fisher Exact test was used. Comparisons of groups with non-normal distribution were subjected to the Kruskal Wallis test and the Mann Whitney U test was used to determine the group causing differences. Correlations between scale points were assessed with the Pearson and Spearman correlation analyses. To describe the correlations between factors, a multiple regression analysis was applied. For all analyses, a p-value of less than 0.05 was considered significant.

RESULTS

A total of 100 people participated in the study (50 males and 50 females). The mean age of females was 30.7 years, with mean age of males 30.9 years. There was no statistically significant difference between the two groups in terms of mean age, education in years, and monthly income amount. The females had a higher rate of psychiatric disease history and the prevalence of physical disease was higher in women (Table 1). In terms of exposure to trauma in the childhood period, there was no significant difference between females and males (physical abuse in 56% of females and 60% of males; physical neglect in 78% of females and males; emotional abuse in 72% of females and 76% of males; emotional neglect in 96% of females and 100% of males; and sexual abuse in 36% of females and 44% of males).

There was no difference between the genders in terms of BDS points and COPE results assessing coping attitudes in females and males. In addition, males were found to use "problem-focused" and "less useful" coping methods more often than women. In women the "emotionally-focused" coping method of "humor" subscale points were found to be generally higher than for men (Table 2).

When the scale points of men and women were separately investigated in terms of correlation as neglect and abuse points increased, the BDS points increased in both groups with the correlation moderate-highly significant in the positive direction. The correlation between CTQ points and COPE inventory points determined significant differences between the genders.

In the female group, the use of religious coping methods increased as physical abuse increased (r=.42, p<0.0). In addition, emotional neglect increased the use of humor, whereas sexual abuse increased the use of emotionally focused coping methods (r=.29, p<0.01 and r=.55, p<0.01, respectively). There was a significant negative correlation between physical abuse and emotional abuse points with the mental disengagement method (r=-.35, p<0.015; r=.29, p<0.05, respectively) (Table 3).

When the male group was investigated, our analysis showed that physical abuse was directly proportional to physical

Table 1. Sociodemographic Characteristics and Childhood Trauma Exposure of Groups

	Men (n=50)	Women (n=50)	Statistics, t	p
Age (Year, Mean ± S.D)	30.94±10.61	30.68±8.87	-0.28	0.777
Education (Year, Mean ± S.D)	12.74±2.64	13.20±2.21	-0.78	0.433
Monthly income (Lira, Mean± S.D)	1199±1248	1426±1271	-1.12	0.259
Psychiatric Treatment History	16 (%32)	34 (%68)	12.96	<0.001
Physical Illness	0 (%0)	5 (%10)	5.26	0.028

Table 2. Distribution of Scale Scores by Groups

SCALES	Women	Men		
	Mean± S.D	Mean± S.D	t	p
BDS	36.35± 14.28	36.72± 12.02	0.553	0.150
COPE				
COPE–Problem Focused	37.16±4.46	54.88±7.23	-6.132	<0.001*
Instrumental Social Support	7.46± 1.19	9.78± 1.32	-9.165	<0.001*
Active Coping	7.58± 1.29	10.46± 1.29	-11.11	<0.001*
Restraint-coping	7.24± 1.34	14.08± 1.93	-2.497	0.014*
Suppression of Competing Activities	7.56± 1.55	10.20±1.35	-9.054	<0.001*
Planning	7.32± 1.44	10.36± 1.28	-11.081	<0.001*
COPE–Emotion Focused	47.82± 6.52	45.34± 7.05	1.825	0.071
Positive Reinterpretation	10,16±1.54	10.02±1.68	0.433	0.666
Turning to religion	10.48± 2.75	10.86± 2.33	-0.743	0.459
Humor	8.42± 1.66	6.46± 1.97	5.368	<0.001*
Emotional Social Support	9.36± 1.60	8.82± 1.59	1.687	0.095
Acceptance	9.40± 1.94	9.18± 1.83	0.581	0.563
COPE–Less Useful	33.38± 4.01	42.10± 4.68	-9.996	<0.001*
Mental Disengagement	7.20± 1.21	9.44± 1.26	-9.043	<0.001*
Focus on and venting emotions	7.20± 1.17	10.22± 1.59	-10.772	<0.001*
Denial	6.72± 1.73	8.20± 1.45	-4.614	<0.001*
Behavioral Disengagement	7.02± 1.25	8.76± 1.30	-6.807	<0.001*
Substance Use	5.24± 1.45	5.48± 1.76	-0.743	0.459

BDS=Beck Depression Scale COPE=Coping Inventory

neglect, emotional abuse, and sexual abuse. In general the use of emotionally-based coping methods increased, with the correlation moderate to high (r=.66, p<0.01; r=.44, p<0.01; r=.53, p<0.01; r=.91, p<0.01, respectively). Conversely, physical abuse, emotional abuse, and sexual abuse was inversely proportional to less useful coping methods in the male group. As exposure to sexual abuse increased in men, active coping, planning, and mental and behavioral disengagement points were determined to significantly decrease, which is opposite to the female group (Table 3).

In terms of male and female development, the correlation of age with the use of coping methods was investigated by correlation analysis. In both groups, there was no significant correlation identified between age and the methods used (Females: use of problem-focused methods r=-.22, p>0.05; use of emotionally-focused methods r=-.19, p>0.05; use of less useful methods r=.06, p>0.05) (Males: use of problem-focused methods r=-.15, p>0.05; use of emotionally-focused methods r=-.27, p>0.05; use of less useful methods r=.06, p>0.05).

To investigate the correlation between coping methods and other components in women, multiple regression analysis was completed. According to the results of these analyses, there was no significant effect of severity of depression and trauma types on problem-focused and less useful coping methods in women. There was a significant linear correlation between exposure to sexual abuse and the use of emotionally-focused methods in women (use of problem-focused methods F=.52, p= .78; use of emotionally-focused methods F=3.98, p=.003; use of less useful methods F=1.31, p=.27) (Table 4).

According to multiple regression analysis for males, there was a positive linear correlation between exposure to sexual abuse and severity of depression with the use of emotionally-focused and less useful methods. There was no correlation identified between the use of problem-focused methods and severity of depression and trauma types (use of problem-focused methods F=1.48, p= .21; use of emotionally-focused methods F=52.5, p<.0001; use of less useful methods F=3.23, p=.01) (Table 5).

Table 3. Correlation Between Scale Scores

	Physical Abuse	Physical Neglect	Emotional Abuse	Emotional Neglect	Sexual Abuse
Women					
BDI	0.63**	0.57**	0.40**	0.41**	0 .40**
Problem Focused	-0.12	-0.14	-0.14	0.03	-0.04
ISS	-0.16	-0.20	-0.13	-0.17	-0.11
AC	-0.07	-0.01	-0.18	-0.01	-0.17
RC	-0.07	-0.08	-0.009	-0.14	0.13
SCA	-0.05	-0.23	-0.03	-0.03	-0.07
P	-0.05	-0.01	-0.13	-0.04	0.03
Emotion Focused	0.27	0.11	0.05	0.08	0.55**
PR	0.27	0.21	0.12	0.08	0.33**
TR	0.42**	0.09	0.08	-0.001	0.61**
H	-0.06	0.01	0.03	0.29**	0.36**
ESS	-0.02	-0.03	-0.13	-0.08	-0.09
A	0.18	0.08	0.04	0.04	0.32*
Less Useful	-0.17	-0.13	-0.11	0.09	0.18
MD	-0.35*	-0.11	-0.29*	-0.05	0.01
FO	-0.22	-0.07	-0.18	-0.05	0.05
D	0.11	-0.002	-0.01	0.20	0.24
BD	-0.07	-0.10	0.16	0.16	0.22
SU	-0.21	-0.11	-0.03	-0.03	-0.03
Men					
BDI	0.62**	0.49**	0.34*	-	0.34*
Problem Focused	-0.25	-0.16	-0.08	-	-0.22
ISS	-0.10	-0.08	-0.24	-	-0.25
AC	-0.24	-0.07	-0.26	-	-0.44**
RC	0.06	0.04	-0.12	-	0.22
SCA	-0.15	0.09	0.69	-	0.11
P	-0.21	-0.11	-0.27	-	-0.43**
Emotion Focused	0.66**	0.44**	0.53**		0.91**
PR	0.47**	0.38**	0.43**	-	0.61**
TR	0.55**	0.36**	0.38**	-	0.81**
H	0.46**	0.27	0.37**	-	0.57**
ESS	0.39**	0.21	0.37**	-	0.61**
A	0.55**	0.39**	0.42**	-	0.75**
Less Useful	-0.28*	-0.24	-0.29*		-0.41**
MD	-0.30*	-0.19	-0.24	-	-0.47**
FO	-0.42**	-0.26	-0.42**	-	-0.55**
D	0.14	0.07	0.02	-	0.04
BD	-0.12	-0.06	-0.25	-	-0.36**
SU	-0.17	-0.29*	-0.05	-	-0.03

** Correlations were significant at 0.01 level (2-tailed), Pearson correlation
* Correlations were significant at 0.05 level (2-tailed), Pearson correlation
ISS= Instrumental Social Support, AC=Active Coping, RC= Restraint-coping, SCA= Suppression of Competing Activities, P=Planning, PR=Positive Reinterpretation, TR= Turning to religion, H=Humor, ESS= Emotional Social Support, A = Acceptance Mental Disengagement FO=Focus on and venting emotions, D=Denial, BD= Behavioral Disengagement, SU= Substance Use . No correlation analysis was performed on this area because all participants in the men's group had emotional neglect declarations.

Table 4. Results of Multiple Regression for Women

Use of Problem-Focused Methods[1]	B	SH	β	t	p
Depression	0.06	0.06	0.20	0.94	0.35
Physical Abuse	-1.1	1.7	-0.13	-0.67	0.50
Physical Neglect	-1.8	2.0	-0.17	-0.91	0.36
Emotional Abuse	-1.7	1.7	-0.16	-0.95	0.34
Emotional Neglect	2.5	3.7	0.11	0.67	0.50
Sexual Abuse	-0.10	1.5	-0.01	-0.06	0.94
R^2	0.06				
Use of Emotion Focused Methods[2]					
Depression	-0.05	0.08	-0.12	-0.70	0.48
Physical Abuse	3.1	2.1	0.24	1.4	0.14
Physical Neglect	-1.2	2.4	-0.08	-0.51	0.61
Emotional Abuse	-2.5	2.1	-0.17	-1.1	0.23
Emotional Neglect	2.7	4.5	0.08	0.59	0.55
Sexual Abuse	8.0	1.8	0.59	4.2	<.001**
R^2	0.35**				
Use of Less Useful Methods[3]					
Depression	-0.03	0.05	-0.12	-0.58	0.55
Physical Abuse	-1.2	1.4	-0.15	-0.81	0.42
Physical Neglect	-1.0	1.7	-0.11	-0.63	0.53
Emotional Abuse	-1.4	1.5	-0.15	-0.91	0.36
Emotional Neglect	4.5	3.2	0.22	1.4	0.16
Sexual Abuse	2.7	1.3	0.33	2.0	0.04*
R^2	0.15				

Durbin-Watson analysis for[1]: 1.36, F=.52, p=0.=.78
Durbin-Watson analysis for[2]: 2.13, F=3.98, p=.003**
Durbin-Watson analysis for[3]:1.68, F=1.31, p=0.=.27

Table 5. Results of Multiple Regression for Men

Use of Problem-Focused Methods[1]	B	SH	β	t	p
Depression	0.22	0.31	0.14	0.71	0.47
Physical Abuse	2.3	15.7	0.05	0.15	0.88
Physical Neglect	-10.2	11.1	-0.21	-0.92	0.36
Emotional Abuse	14.7	12.1	0.33	1.2	0.23
Emotional Neglect	-	-	-	-	-
Sexual Abuse	-16.5	13.1	-0.41	-1.2	0.21
R^2	0.14				
Use of Emotion Focused Methods[2]					
Depression	-0.10	0.04	-0.19	-2.3	0.02**
Physical Abuse	3.4	2.2	0.24	1.5	0.13
Physical Neglect	-0.87	1.6	-0.05	-0.54	0.59
Emotional Abuse	3.0	1.7	0.19	1.7	0.09
Emotional Neglect	-	-	-	-	-
Sexual Abuse	10.4	1.9	0.07	5.4	<.001**
R^2	0.85**				
Use of Less Useful Methods[3]					
Depression	-0.15	0.06	-0.42	-2.2	0.02**
Physical Abuse	5.0	3.4	0.52	1.4	0.15
Physical Neglect	-1.9	2.4	-0.17	-0.80	0.42
Emotional Abuse	2.6	2.6	0.25	1.0	0.32
Emotional Neglect	-	-	-	-	-
Sexual Abuse	-6.2	2.8	-0.67	-2.2	0.03**
R^2	0.26**				

Durbin-Watson analysis for[1]: 2.13, F=1.48, p=0.=.21
Durbin-Watson analysis for[2]: 1.59, F=52.5, p<0 .0001**
Durbin-Watson analysis for[3]:1.68, F=3.23, p=0.=.01**

DISCUSSION

The aim of this study was to separately investigate the correlation between childhood trauma and coping methods used by patients with major depression according to gender and determine the differences. First, the distribution of experiences of neglect and abuse in the childhood period was examined in male and female groups with a similar socioeconomic level and severity of depression. No statistically significant difference was determined between the genders. Second, the correlation between childhood abuse and neglect types and coping methods used by males and females was researched. Males were found to use problem-focused and less useful coping methods while, women were found to use emotionally-focused coping methods. According to neglect and abuse types in the childhood period, there were significant differences determined both within and between the groups. Third, according to the results of the correlation analysis there was a significant moderate and high positive correlation between depression severity and childhood trauma in both genders. In situations with sexual abuse, the use of emotionally-focused methods increased in both groups. In terms of development, the correlation of age with coping methods was investigated with correlation analysis. There was no significant correlation between age and methods used. Finally with advanced regression analyses, it was found that the use of emotionally-focused methods increased in both women and men with exposure to sexual abuse. Additionally, there was a significant effect of severity of depression on the use of emotionally-focused and less useful methods in men.

Recent studies investigating the correlation between number of episodes of major depression, severity of depressive symptoms, childhood trauma and coping methods have proven that increased exposure to trauma in the childhood period increases the use of less useful and emotionally-focused coping methods (Bombay et al. 2014, Morris et al. 2014, Perna et al. 2014, McQuaid et al. 2015). In addition, exposure to emotional neglect and physical and emotional abuse affects chronic depression (Hovens et al. 2012), and these trauma types negatively affect the progress of disease and response to treatment (Perna et al. 2014). In light of this data, the results

of our study showed a highly significant positive correlation between severity of depression and childhood trauma in both genders. The positive correlation between use of emotionally-focused and less useful coping methods and childhood trauma in men were considered and showed good agreement with previous data. In women, there was only a positive correlation between sexual abuse and the use of emotionally-focused coping methods.

Studies have researched the effect of the most common childhood trauma of sexual abuse on coping methods. A study in adults exposed to sexual abuse as children found that severity and incidence of sexual abuse increased the use of inappropriate coping methods such as postponing thoughts, withdrawing from social life, denying experiences, and use of drugs (Ullman et al. 2014). Another study in 2015 found that adolescents and adults exposed to sexual abuse in childhood used avoiding-type coping methods such as trying to forget, acting like nothing happened, and attempting to mentally distance from the event (Harris et al. 2015). When our results are compared with this data, a range of differences were noted. First, men and women exposed to sexual abuse in our study group demonstrated an increase in the use of the coping methods of positive reinterpretation, including emotionally-focused methods, religious coping, joking, and acceptance. Additionally, it was determined that planning (a problem focused method) was used more frequently by men while less useful coping methods were used by women, who were sexually abused in childhood. This situation was interpreted as previous sexual abuse with major depression diagnosis affecting emotionally-focused coping methods in women. However, all types of coping method were affected in men. This important difference between the genders suggests that research on coping methods of different cultures and ethnic constructs with larger sample sizes are necessary.

According to the results of our study, one of the differences between men and women was substance use. Many studies ignoring gender have identified a correlation between cigarette and substance use and childhood trauma (Spratt et al. 2009 , Khoury et al. 2010, Fuller-Thomson et al. 2013). None was observed only in a short-term study of men (Agorastos et al. 2014). Correlation analysis in our study found a negative significant correlation between physical neglect in men only and substance use. This supports the hypothesis that there is no direct correlation with childhood trauma.

Previous studies have shown that the use of religious-based coping methods by trauma victims (Fallot and Heckman 2005, Berkowski and MacDonald 2014, Brewer-Smyth and Koenig 2014, Flannery et al. 2014, McQuaid et al. 2015). It is known that the use of religious coping methods is correlated more with low socioeconomic level and low social support. In this situation, it is thought that religion offers individuals different solutions and explanations in the face of life's difficulties (Faria and Emf 1997). This method has two different forms comprising of positive and negative beliefs. Positive beliefs are when a person's own life is part of a significant whole, which they act together with god, and that god is an endless support and mainstay. Negative beliefs include thoughts that god has abandoned the person, that they are being punished for things they did, that they have been unfair to themselves, and must take care of themselves. A study of women who were trauma victims and had a substance use disorder found that this group used religious coping more than a control group. However, as the severity and duration of trauma increased the method chosen changed from positive beliefs to more negative. When trauma subtypes were investigated (especially in situations with exposure to sexual abuse) the use of negative religious coping methods increased with this increase more defined in situations with sexual abuse during the childhood period (Fallot and Heckman 2005). Studies measuring resilience in adolescent and adult trauma victims stated that positive religious coping methods were correlated with physical and mental well-being of the person (Koenig 2012, Southwick and Charney 2012, Brewer-Smyth and Koenig 2014).

If we consider that the tool used in our study measures positive religious coping methods, it was found that female victims of physical and sexual abuse increased their use of positive religious coping, while in males this increase was valid for all trauma types. However, due to the height of BDS points indicating patients had clinically severe depressive symptoms, we cannot say that this method affected the resilience of both gender groups. To fill this significant gap in the literature, the importance of studies including healthy control groups is clear.

Studies have revealed that in both genders in childhood, adolescence and early adulthood problem-based coping methods are used more frequently. This suggests that emotionally-focused methods are more prominent as age advances (Gutmann 1974, Folkman and Lazarus 1980, Lachapelle and Hadjistavropoulos 2005, Heckhausen et al. 2010). To our knowledge, no investigation has been done to study the effects of increased age and gender on coping methods in parallel. The results of our study revealed that there was no correlation of age with coping methods in middle-aged women and men. However, to understand the effects in the developmental period, we believe it will be appropriate to monitor cases from

the adolescent period instead of performing a cross-sectional study. Significant limitations of the study include the low number of patients included, the use of only self-report scales as data collection tools, the lack of information obtained about significant life events like traffic accidents, earthquakes, and loss of parents or siblings included in the CTQ scale, not knowing the age at which trauma was experienced, lack of determination of the effect of developmental processes due to being a cross-sectional study, not using an objective scale to exclude personality disorder instead of a clinical interview, and the lack of a healthy control group.

This study dealt with depressive symptoms, types of childhood trauma, and the use of coping methods separately according to gender. We hope our results highlight the gender differences and the differences in coping methods caused by sexual abuse. This will be important for treatment planning in patients with major depression.

REFERENCES

Agorastos A, Pittman JO, Angkaw AC et al (2014) The cumulative effect of different childhood trauma types on self-reported symptoms of adult male depression and PTSD, substance abuse and health-related quality of life in a large active-duty military cohort. J Psychiatr Res 58:46-54.

Ağargün MY, Beşiroğlu L, Kıran Ü et al (2005) The psychometric properties of the COPE inventory in Turkish sample: a preliminary research. Anadolu Psikiyatr Derg 6:221-6.

Arnow BA, Blasey CM, Hunkeler ME et al (2011) Does gender moderate the relationship between childhood maltreatment and adult depression? Child Maltreat 16:175-83.

Beck AT , Ward C and Mendelson M (1961) Beck depression inventory (BDI). Arch Gen Psychiatry 4:561-71.

Berkowski M and MacDonald DA (2014) Childhood trauma and the development of paranormal beliefs. J Nerv Ment Dis 202:305-12.

Bernstein DP, Stein JA, Newcomb MD et al (2003) Development and validation of a brief screening version of the Childhood Trauma Questionnaire. Child Abuse Negl 27:169-90.

Bombay A, Matheson K and Anisman H (2014) The intergenerational effects of Indian Residential Schools: Implications for the concept of historical trauma. Transcult Psychiatry 51:320-38.

Bowlby J (1969) Attachment and loss. New York: Basic Books p.79

Brewer-Smyth K and Koenig HG (2014) Could spirituality and religion promote stress resilience in survivors of childhood trauma? Issues Ment Health Nurs 35:251-6.

Campbell-Sills L, Cohan SL and Stein MB (2006) Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. Behav Res Ther 44:585-99.

Carver CS (1997) You want to measure coping but your protocol'too long: Consider the brief cope. Int J Behav Med 4:92-100.

Carver CS, Scheier MF and Weintraub JK (1989) Assessing coping strategies: a theoretically based approach. J Pers Soc Psychol 56:267.

Chapman DP, Whitfield CP, Felitti VJ et al (2004) Adverse childhood experiences and the risk of depressive disorders in adulthood. J Affect Disord 82:217-25.

Corapcioglu A, Aydemir O, Yildiz M, Esen A et al (1999). Structured clinical interview for DSM IV (SCID), Turkish version.; Ankara: Hekimler Yayin Birligi.

Fallot RD and Heckman JP (2005) Religious/spiritual coping among women trauma survivors with mental health and substance use disorders. J Behav Health Serv Res 32:215-26.

Faria J and Emf S (1997) The Psychology of Religion and Coping: Theory, Research,Practice. New York, USA: The Guilford.s:102

First MB, Spitzer RL, Gibbon M et al (2012) Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), Clinician Version, Administration Booklet, American Psychiatric Pub s:106

Flannery AJ, Becker SP and Luebbe AM (2014) Does Emotion Dysregulation Mediate the Association Between Sluggish Cognitive Tempo and College Students' Social Impairment?. J Atten Disord doi:10.1177/1087054714527794.

Folkman S and Lazarus RS (1980) An analysis of coping in a middle-aged community sample. J Health Soc Behav 21:219-39.

Fossati AKL, Gratz A, Somma C et al (2015) The Mediating Role of Emotion Dysregulation in the Relations Between Childhood Trauma History and Adult Attachment and Borderline Personality Disorder Features: A Study of Italian Nonclinical Participants. J Pers Disord 30:1-24

Fuller-Thomson E, Filippelli J and Lue-Crisostomo C (2013) Gender-specific association between childhood adversities and smoking in adulthood: findings from a population-based study. Public Health 127: 449-60.

Gutmann DL (1974) The country of old men: Cross-cultural studies in the psychology of later life. Culture and personality: Contemporary readings, Aldine Chicago s:95-121.

Harris SL, Block SD, Ogle CM et al (2015) Coping style and memory specificity in adolescents and adults with histories of child sexual abuse. J Memory 24:1078-90.

Heckhausen J, Wrosch C and Schulz R (2010) A motivational theory of life-span development. Psychol Rev 117: 32.

Heim C and Nemeroff CB (2001) The role of childhood trauma in the neurobiology of mood and anxiety disorders: preclinical and clinical studies. Biol psychiatry 49:1023-39.

Heim C, Newport DJ, Bonsall R et al (2001) Altered pituitary-adrenal axis responses to provocative challenge tests in adult survivors of childhood abuse. Am J Psychiatry 158:575-81.

Hisli N (1988) Beck Depresyon Envanteri'nin geçerliği üzerine bir çalışma. Psikoloji Derg 6:118-22.

Hovens J, Wiersma J, Giltay E et al (2010) Childhood life events and childhood trauma in adult patients with depressive, anxiety and comorbid disorders vs. controls. Acta Psychiatr Scand 122:66-74.

Hovens JG, Giltay EJ , Wiersma JE et al (2012) Impact of childhood life events and trauma on the course of depressive and anxiety disorders. Acta Psychiatr Scand 126:198-207.

Huguelet P, Mohr S, Rieben I et al (2015) Attachment and coping in psychosis in relation to spiritual figures. BMC Psychiatry 15:1.

Ivarsson T, Saavedra F, Granqvist P et al (2016) Traumatic and adverse attachment childhood experiences are not characteristic of OCD but of depression in adolescents. Child Psychiatry Hum Dev 47:270-80.

Kempke S, Luyten P, De Coninck S et al (2015) Effects of early childhood trauma on hypothalamic–pituitary–adrenal (HPA) axis function in patients with Chronic Fatigue Syndrome. Psychoneuroendocrinology 52:14-21

Kendler K, Gardner CO and Prescott CA (2006) Toward a comprehensive developmental model for major depression in men. Am J Psychiatry 159:1133-45.

Kessle RC, Berglund P, Demler O et al (2003) The epidemiology of major depressive disorder: results from the National Comorbidity Survey Replication (NCS-R)." JAMA Psychiatry 289:3095-105.

Keyes KM , Eaton NR, Krueger RF et al (2012) Childhood maltreatment and the structure of common psychiatric disorders. Br J Psychiatry 200:107-15.

Khoury L, Tang YL, Bradley B et al (2010) Substance use, childhood traumatic experience, and posttraumatic stress disorder in an urban civilian population. Depress Anxiety 27:1077-86.

Koenig HG (2012) Religion, spirituality, and health: The research and clinical implications. Int Sch Res Notices 2012:1-34.

Lachapelle DL and Hadjistavropoulos T (2005) Age-Related Differences Among Adults Coping With Pain: Evaluation of a Developmental Life-Context Model. Can J Behav Sci 37:123.

Lazarus RS (1990) Stress, coping, and illness. Personality and Disease. Oxford, England, John Wiley & Sons Press s:97-120.

Lazarus RS (1993) Coping theory and research: past, present, and future. J Psychosom Medic 55:234-47.

Maercker A, Michael T, Fehm L et al (2004) Age of traumatisation as a predictor of post-traumatic stress disorder or major depression in young women. Br J Psychiatry 184:482-7.

Martín-Blanco A, Ferrer M, Soler J et al (2015) The role of hypothalamus–pituitary–adrenal genes and childhood trauma in borderline personality disorder. Eur Arch Psychiatry Clin Neurosci doi: 10.1007/s00406-015-0612-2.

McQuai RJ, Bombay A, McInnis OA et al (2015) Childhood adversity, perceived discrimination, and coping strategies in relation to depressive symptoms among First Nations adults in Canada: The moderating role of unsupportive social interactions from ingroup and outgroup members. Cultur Divers Ethnic Minor Psychol 21:326-36.

Monaco F, Monteleone A, Pellegrino F et al (2016) Childhood trauma and cortisol awakening response in eating disorders: A dose-dependent trauma effect. Eur Psychiatry 33:165.

Monteleone AM, Monteleone P, Serino I et al (2015) Childhood trauma and cortisol awakening response in symptomatic patients with anorexia nervosa and bulimia nervosa. Int J Eat Disord 48:615-21.

Morris MC, Kouros CD, Fox KR et al (2014) Interactive models of depression vulnerability: The role of childhood trauma, less useful attitudes, and coping. Br J Clin Psychol 53:245-63.

Özcan NK, Boyacioğlu NE, Enginkaya S et al (2016) The relationship between attachment styles and childhood trauma: a transgenerational perspective–a controlled study of patients with psychiatric disorders. J Clin Nurs doi: 10.1111/jocn.13274.

Özkürkçügil A, Aydemir Ö, Yıldız M et al (1999) DSM-IV eksen I bozuklukları için yapılandırılmış klinik görüşmenin Türkçeye uyarlanması ve güvenilirlik çalışması. İlaç Tedavi Derg 12:233-6.

Perna G, Vanni G, Di Chiaro NV et al (2014) Childhood trauma, temperament, and character in subjects with major depressive disorder and bipolar disorder. J Nerv Ment Dis 202:695-8.

Rane L, Cleare A, Fekadu A et al (2016) Childhood trauma, HPA-axis dysregulation and long term outcome in treatment resistant depression. Bipolar Disord 18:107

Schulz A, Becker M, Van der Auwera S et al (2014) The impact of childhood trauma on depression: does resilience matter? Population-based results from the Study of Health in Pomerania. J Psychosom Res 77:97-103.

Scott KM, Smith DR and Ellis PM (2010) Prospectively ascertained child maltreatment and its association with DSM-IV mental disorders in young adults. Arch Gen Psychiatry 67:712-9.

Scott KM, Von Korff M, Angermeyer MC et al (2011) Association of childhood adversities and early-onset mental disorders with adult-onset chronic physical conditions. Arch Gen Psychiatry 68:838-44.

Southwick SM and Charney DS (2012, Ekim 16) The Science of Resilience: Implications for the Prevention and Treatment of Depression. Science-338:79. At 16 October 2012 it was downloaded by http://sciencemag.org .

Spratt EG, Back SE, Yeatts SD et al (2009) Relationship between child abuse and adult smoking. Int J Psychiatry Med 39:417-26.

Ullman SE, Peter-Hagene LC and Relyea M (2014) Coping, emotion regulation, and self-blame as mediators of sexual abuse and psychological symptoms in adult sexual assault. J Child Sex Abus 23:74-93.

Ünal S and Özcan E (2000) Depresyonda hazırlayıcı, ortaya çıkarıcı ve koruyucu etkenler. Anadolu Psikiyatri Derg 1:41-8.

Van der Vegt EJ, Tieman W, Van der Ende J et al (2009) Impact of early childhood adversities on adult psychiatric disorders. Soc Psychiatry Psychiatr Epidemiol 44:724-31.

Şar V, Öztürk PE and İkikardeş P (2012) Çocukluk Çağı Ruhsal Travma Ölçeğinin Türkçe Uyarlamasının Geçerlilik ve Güvenilirliği. Turk J Med Sci 32:1054-63.

Walsh WA, Dawson J and Mattingly MJ (2010) How are we measuring resilience following childhood maltreatment? Is the research adequate and consistent? What is the impact on research, practice, and policy? Trauma Violence Abuse 11:27-41.

Wiersma JE, Hovens J, Van Oppen P et al (2009) The importance of childhood trauma and childhood life events for chronicity of depression in adults. J Clin Psychiatry 70:983-9.

Wingenfeld K, Mensebach C, Rullkoetter N et al (2009) Relationship between coping with negative life-events and psychopathology: Major depression and borderline personality disorder. Psychol Psychother. 82:421-5.