ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

The Mediator Role of Identity Salience and Defeat and Entrapment in the Relationship between Centrality of Events and Existential Annihilation Anxiety

Olayların Merkeziliği ile Varoluşsal Yok Olma Kaygısı Arasındaki İlişkide Kimliğin Belirginleşmesi ile Yenilgi ve Tuzağa Düşmenin Aracı Rolü

Neslihan ARICI ÖZCAN*

Reyhan ARSLAN BABAL**

Abstract

This study aims to examine the mediator role of identity salience and defeat and entrapment in the relationship between centrality of events and existential annihilation anxiety. The sample of the study consists of 379 participants between the ages of 18-64 from Turkey. To test the research model, the parallel multiple mediator model analysis was conducted. Correlation analysis indicated that centrality of events had a significant positive relationship with two sub-dimensions of identity salience (commitment and militancy), as well as defeat and entrapment. However, existential annihilation anxiety was significantly correlated with only commitment and defeat and entrapment. Defeat and entrapment and the one sub-dimension of identity salience (commitment) play a mediating role in the relationship between centrality of event and existential annihilation anxiety. These results imply that clinicians and researchers should focus on identity and self-appraisals more when working with trauma.

Keywords: identity salience, defeat and entrapment, centrality of events, existential annihilation anxiety, mediation

Atıf için: Arıcı Özcan, N. ve Arslan Babal, R. (2024). The Mediator Role of Identity Salience and Defeat and Entrapment in the Relationship between Centrality of Events and Existential Annihilation Anxiety. *Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 60(60), 58-71. DOI: 10.15285/maruaebd.1358566

Makale Gönderim Tarihi: 11.09.2023 Yayına Kabul Tarihi: 03.04.2024

^{*} Assoc.prof., İstanbul Medeniyet University, Department of Social Work, E-posta: neslihan@neslihanarici.com, Orcid ID: 0000-0002-6169-1445.

^{**} RA., Istanbul Medipol University, Department of Psychology, E-posta: reyhanarslan@medipol.edu.tr, Orcid ID: 0000-0001-9344-2059.

Öz

Bu çalışma, olayların merkeziliği ile varoluşsal yok olma kaygısı arasındaki ilişkide kimliğin ve yenilgi ve tuzağa düşmenin aracı rolünü incelemeyi amaçlamaktadır. Araştırmanın örneklemini Türkiye'den 18-64 yaş aralığındaki 379 katılımcı oluşturmaktadır. Araştırma modelini test etmek amacıyla paralel çoklu aracılık analizi yapılmıştır. Korelasyon analizine göre, olayların merkeziliği, kimliğin iki alt boyutu ile (bağlılık ve militanlık) ve yenilgi ve tuzağa düşme ile pozitif yönde ilişkilidir. Varoluşsal yok olma kaygısı, yalnızca bağlılık alt boyutu ile ve yenilgi ve tuzağa düşme ile anlamlı düzeyde ilişkili bulunmuştur. Yenilgi ve tuzağa düşme ve kimlik ölçeğinin bağlılık alt boyutu, olayın merkeziliği ile varoluşsal yok olma kaygısı arasındaki ilişkide aracı rol oynamaktadır. Bulgular, araştırmacıların ve klinisyenlerin travma ile çalışırken, kimlik ve öz değerlendirmeye daha fazla odaklanması gerektiğine işaret etmektedir.

Anahtar Kelimeler: kimlik, yenilgi ve tuzağa düşme, olayların merkeziliği, varoluşsal yok olma kaygısı, aracılık

Introduction

Positive memories that support the positive part of the self are important experiences and enable us to make sense in our lives (Bernsten & Rubin, 2006; Ritchie et al., 2014). However, sometimes negative memories have more impacts than positive ones, due to traumatic or stressful events serving as reference points (Bernsten et al., 2003; Bernsten & Rubin, 2006). In the literature, these types of occurrences are taken as the centrality of events. Centrality of events refers to how a traumatic memory serves as a personal reference point. It influences how individuals attribute meaning to other events, marking a significant turning point in their lives and shaping their identity. (Bernsten et al., 2003; Bernsten & Rubin, 2006).

Centrality of events affects peoples' future lives and identity, due to the relationship between the centrality of events and traumatic symptoms (Berntsen et al., 2011; Groleau et al., 2012; Mordeno et al., 2018; Schuettler & Boals, 2011). The centrality of events enhances the vividness of traumatic memories, making them more accessible and intense due to their more sensory basis, giving them more salience for identity – which increases symptoms of trauma (Fitzgerald et al., 2016; McKinnon et al., 2017).

Moreover, the centrality of events that shapes individual beliefs, feelings, thoughts, and behaviors is seen as part of an individual's life story and self-identity (Bernsten & Rubin, 2006; Schlagman et al., 2006). Self-identity, including dynamic and flexible features, develops through the handling of internal, environmental, and social stressors and traumas. These stressors, which challenge or enhance self-identity, may also be related to existential anxiety which occurs due to the threat of the existence of an individual's identity (Shaver & Mikulincer, 2012). However, the existence of an individual's identity is not dependent on the self alone, but rather their relation to larger groups, systems, and generations. Existential annihilation anxiety must be considered in this regard (Kira et al., 2020).

Existential annihilation anxiety should be taken in the broader perspective of developmental based trauma and collective terror management theory in relation to identity trauma, collective identity trauma, social status traumas and fear of physical death (Kira et al., 2015; Kira et al., 2018; Kira et al.,

2020). In other words, existential annihilation anxiety can develop in line with the individualization process from early adolescence to adulthood. With the onset of the individualization process, adolescents are tasked with constructing their own identity within a hierarchical order in relation to those within which they inhabit (Kira et al., 2018; Kira et al., 2019). Therefore, the individualization process relates to identity development and identity hierarchy. Identity development emerges with self-awareness and basic beliefs about the self, one's environment and meaning. Besides, identity hierarchy relates to one's collective or social role/status and physical identities. In terms of the process of identity development and identity hierarchy, one may encounter four types of existential threat: identity (psychic) traumas, collective identity trauma, social status trauma, and fear of physical death – all of which may evoke existential anxiety (Kira, 2019; Kira et al., 2020).

Although a relationship between existential annihilation anxiety and trauma has been established (Kira et al; 2010; Kira et al., 2018), the relationship of the centrality of an event with existential annihilation anxiety has not been featured yet. However, despite this oversight, the centrality of events has an important effect on an individual's identity, existence, and life story (Kira et al; 2010; Kira et al., 2018). In this study, one of the underlying mechanisms has been considered in terms of identity salience, alongside defeat and entrapment.

The mediator role of identity salience in the relationship between the centrality of event and existential annihilation anxiety

People live in dynamic and fluid systems of familial, social, and ecological systems through social interaction with others and by taking the roles of others (Stryker & Serpe, 1994).

Identities that are pre-cognitive and pre-affective representations have a role in orienting, regulating, and processing sensations, feelings, thoughts, and behaviors (Elmore & Oyserman, 2012; Oyserman et al., 2007). Individuals have multiple identities, which are organized in terms of importance and hierarchy. Within such orders, people use cognitive processes (appraisal/suppression/reappraisal) and socio-emotional commitments in terms of the relevance and importance attached to an event to form identity (Shuwiekh et al., 2017).

Identity salience is defined as the activation of one (or more) identity to form an active lens and agent in response to a contextual cues or event (Stryker, 1968). Identity salience refers to at least two terms. One of these includes identity commitment (commitment or no commitment to an identity), and the other, identity militancy (willing to sacrifice for the salient identity). The more meaningful the commitment identity, the higher the degree of the salience identity (Thoits, 2006). Furthermore, these socio-emotional commitments and cognitive processes have a role in the development of stress (Galliher et al., 2017; Thoits, 2006). Therefore, it can be said that identity salience is greatly affected by traumas and chronic stress (Kira et al., 2018, Martire et al., 2000). Moreover, traumatic experiences have a role in developmental processes associated with dysregulation across areas of development (Ford, 2011; Kiesel, 2013). This dysregulation is seen in all developmental processes – whether physical (hyperarousal), socio-emotional (aggression) or cognitive (repetitive re-experiencing and reappraisals). Such dysregulations may also be seen in the centrality of events that relate to traumas

in terms of their effect on identity salience (Bernsten & Rubin, 2006; Thomsen & Berntsen, 2008). In other words, more salient and central traumatic memories integrate within identity, according to the degree to which they constitute a re-experiencing, connection, hyper-arousal, and further aggression. Thus, it can be said that there can be a relationship between the centrality of event and identity salience.

Individuals with salient identity evaluate traumatic experience in terms of their identity and may experience more stress and anxiety due to re-experiencing, appraisal, and hyper-arousal. These traumatic experiences are also related to collective issues, such as discrimination and oppression, as well as awakening existential fears regarding integrity and authenticity (Kira et al., 2012; Shrira, 2015; Yair, 2014). In this regard, it can be inferred that identity salience may have been a role in increasing existential annihilation anxiety on the level of collective trauma in a group, culture or even civilization.

The mediator role of defeat and entrapment in the relationship between the centrality of event and existential annihilation anxiety

Defeat and entrapment pertain to perceptions of failure, feelings of powerlessness, loss of status and identity, and a perception of failure in struggle (Gilbert, 2001; Taylor et al., 2009). Defeat, especially seen in the loss of social and material resources, taking negative social reactions from others and internal negative reactions toward the self, such as self-criticism, social comparisons, etc. (Taylor et al., 2011). Entrapment is defined as the aspiration to escape from an intolerable situation associated with the perception that all paths to escape are blocked (Gilbert, 2001; Taylor et al., 2009).

Defeat and entrapment play a role in the development of mental problems such as depression and post-traumatic stress (Siddaway et al., 2015). Perceptions of defeat related to trauma cause a perceived loss of psychological autonomy, worthiness and competence, and non-sense of being human (Dunmore et al., 2001). Meanwhile, both defeat and entrapment are explained as a malfunction of the psycho-biological Involuntary Defeat Strategy (IDS) mechanism.

The human IDS is a primitive, evolutionarily adaptive, short-term stress and threat-defense response (like the "fight or flight" response), in the context of social competition or conflict for evolutionarily meaningful resources (Sloman et al., 2003). In other words, individuals elicit the appropriate response (fight and flight) with their evolutionarily meaningful resources in the short-term social threat, so their IDS activation is adaptive. Thus, people enhance their self-confidence and sense of control in their life (Sloman et al., 2003; Taylor et al., 2011).

When the problem of intense, chronic, inflexible, malfunctions of IDS elicit, they prevent individuals from struggling with the stress. Many studies indicate the malfunction of IDS mechanisms bring about more traumatic and stressful situations that can also have an impact on individuals' cognitive, affective, and behavioral systems (McCrory et al., 2010; Sloman et al., 2003; Taylor et al., 2011). Thus, sufferers feel more intense negative emotions, make more negative self-appraisals, more self-criticism and suppress more in their emotion and thoughts (Pinto-Gouveia et al., 2013; Siddaway et al., 2015). These can be seen more in the context of the centrality of traumatic

events (Pinto-Gouveia et al., 2013) as a personal reference point for the attribution of meaning, rooted especially in the childhood period and a central component of a person's identity and self-understanding (Bernsten & Rubin, 2006; Matos et al., 2013).

In other words, individuals with central negative memories, drawing from traumatic experiences rooted in childhood, appraise events more dysfunctional and experience a more malfunction in IDS, which leads them to have powerfully negative emotions towards themselves and activates self-criticism (Matos et al., 2013; Pinto-Gouveia et al., 2013). Thus, it can be said that there is a relationship between centrality of events and defeat and entrapment. Individuals' identity development may also be affected by this mechanism. Furthermore, a malfunction of the IDS mechanism in the perception of defeat and entrapment boosts threat appraisals, leading to anxiety (Butler et al., 2008; Taylor et al., 2011). In this regard, those who suffer from a central traumatic experience suffer more malfunctions of IDS mechanisms and more negative appraisals related to identity, which leads to an increase in existential annihilation anxiety. This is because the centrality of traumatic events influences an individual's life story and identity (Bernsten & Rubin, 2006; Schlagman et al., 2006).

Based on the current literature, all these concepts are crucial in terms of trauma. There have not been any studies that focus on these concepts of the centrality of event (CE), identity salience (IS), defeat and entrapment (DE), and existential annihilation anxiety (EEA), together. As an underlying mechanism of IS and DE that can explain the relationship between CE and EEA based on developmental and physiological IDS mechanisms, researchers ought to consider physiological mechanisms and developmental characteristics in the study of trauma. Thus this study aim is to investigate the mediator role of identity salience and defeat and entrapment in the relationship between centrality of events and existential annihilation anxiety. The proposed model hypothesizes that IS and DE mediate the association of CE with EEA . Last but not least, the research results may guide not only researchers but also clinicians to focus on identity salience and defeat and entrapment when studying trauma and and existential concerns.

Method

Participants

The sample of the study consists of 379 participants between the ages of 18-64. The participants were students at Istanbul Medeniyet University and their relatives. Of the 379 participants, 271 (71.5%) were female and 108 (28.5%) were male. The mean age of the sample was 23.66 (SD = 8.88).

Instruments

Short Defeat and Entrapment Scale (SDES) (Griffiths et al., 2015) is a single factor scale including 8-items that measure defeat and entrapment. One of the sample items in the scale is as follows: "I can see no way out of my current situation". The psychometric properties of the SDES were examined with both psychopathological groups and community settings. The scale had high internal consistency (α = .88 to .94) and high test–retest reliability across 12 months (r_{icc} = .88 to .92).

After covariation of the errors, single-factor structure of the scale was confirmed ($\chi 2(1) = 3.00$, p = .000; CFI = .98; TLI = .96; GFI = .97; RMSEA = .07). These results showed that the goodness of fit indices meet the model fit requirements for single factor structure of the scale (Kline, 2011) in this study. The Cronbach's alpha internal consistency coefficient of SDES was found to be .89 in this study.

Identity Salience Scale (ISS) (Kira et al., 2011) is a 10-item scale that measures identity salience. ISS has two subscales: identity commitment and identity militancy. Higher scores indicate higher collective identity salience; lower scores show more personal identity salience. The subscale of identity commitment includes items like "I think a lot about the destiny of my group to which I belong.". Identity militancy subscale includes such items as "The threat to my group made me stronger and more able to defend my group". The Cronbach's alpha internal consistency reliability was .80 for adolescents, and .81 in an adult sample. The identity commitment subscale had an alpha of .74, and identity militancy subscale had an alpha of .75.

To test the original two-factor structure of the ISS (Kira et al., 2011), confirmatory factor analysis was conducted. After covariation of the errors, two-factor structure of the scale was confirmed ($\chi 2(1)$ = 2.59, p = .000; CFI = .99; TLI = .98; GFI = .97; RMSEA = .06) in the current study. These results showed that the goodness of fit indices meet the model fit requirements for two factor structure of the ISS (Kline, 2011). The Cronbach's alpha internal consistency coefficients of the scale were found to be .88 for the Commitment and .93 for the Militancy, and .93 for the whole scale in this study.

The Centrality of Event Scale (CES) (Berntsen & Rubin, 2006) is a 7-item scale that measures how central an event is to a person's identity and his/her life story. A sample item from the scale states: "This event was a turning point in my life". In the scale, participants are asked the most stressful or traumatic event in their life and are asked to answer the items by thinking about this event. The Cronbach's alpha internal consistency coefficient of the scale was .88.

To test the single factor structure of the scale (Berntsen & Rubin, 2006), confirmatory factor analysis was conducted. After covariation of the errors, single factor structure of the scale was confirmed (χ 2(1) = 3.00, p = .001; CFI = .99; TLI = .98; GFI = .98; RMSEA = .07). These results showed that the goodness of fit indices meet the model fit requirements for single factor structure of the CES (Kline, 2011) in this study. The Cronbach's alpha internal consistency coefficient of the scale was .94.

Existential Annihilation Anxiety Scale (EAAS) (Kira et al., 2019) is a 15-item measure that has four subscales: EAA related to personal identity trauma (psychic), EAA related to collective identity trauma (collective), EAA related to social status traumas (status), and EAA related to fear of physical death (physical). EAA and its four subscales were highly correlated with psychopathology, depression, and PTSD, and negatively with "will to exist" and self-esteem in both Western (UK) and non-Western (Egypt) samples. Exploratory and confirmatory factor analysis confirmed the four first order, and one second-order factor structure of the scale in both samples. The Cronbach's alpha internal consistency coefficient for the total scale was .89 in the Egyptian sample and .92 in the UK sample.

To examine the original factor structure of EAAS (Kira et al., 2019), second-order confirmatory factor analysis was conducted. After covariation of the errors, confirmatory factor analysis confirmed

the scale as a unitary second-order factor with four significantly correlated first-order factors ($\chi 2(1)$ = 2.04, p = .000; CFI = .97; TLI = .96; GFI = .95; RMSEA = .05). These results showed that the goodness of fit indices meet the model fit requirements (Kline, 2011) for EAAS in this study. The Cronbach's alpha internal consistency coefficient for the whole scale was .87, providing satisfactory evidence for the reliability of EAAS in the current study.

Procedure

Data was collected from an emergent adulthood and adult sample within the range of 18-64 years. After obtaining the necessary ethical permission from the Ethics Committee of Istanbul Medeniyet University to conduct the study, data was collected in the last months of 2019. The data was obtained from Istanbul Medeniyet University students at the Social Work Department and their relatives. The data were gathered via snowball sampling method. Social Work Department students were asked to deliver the scales to their relatives and friends, and the scales were collected back through these students.

At first, a written consent that included information regarding the subject and objectives of the study, rights of participants, expectations from the participants, and the confidentiality of the answers was obtained from each participant. Then, the participants that voluntarily accepted to participate in the study filled out the scales in paper-pencil format. No identification information was requested from the participants. It took approximately 10 minutes to fill out all the scales.

Data Analysis

Data was reviewed for missing values, outliers, and normality with the SPSS 20 package program. Missing items were assigned by using the series mean method. When determining missing values, participants who left more than 10% of the total number of items blank for each scale were excluded from the analysis. In cases where there were less than 10% missing values for any scale, the average score determined for the relevant items was assigned. Accordingly, the mean value of the participants' responses for each scale item was calculated via SPSS, and this value was assigned to participants with missing data in the relevant item.

To detect univariate outliers, z scores were checked for each continuous variable. The assumptions of normality and linearity for the confirmatory factor analysis were also confirmed in this sample (Tabachnick and Fidell, 2006). Besides, correlation matrix analysis was performed to test the multicollinearity assumption. One of the common ways of identifying multicollinearity is to examine a correlation matrix of all the predictor variables. If the correlation coefficients between the independent variables are above .80 or .90, it may imply multicollinearity (Field, 2009). Accordingly, the correlation coefficients between the independent variables were evaluated in the current study. Since all the correlation coefficients between the independent variable (centrality of event) and the mediator variables (defeat and entrapment, commitment and militancy) were below .80 (see in Table 1), the multicollinearity effect was not considered. Confirmatory factor analyses were performed through AMOS 18 program (Byrne, 2001). The parallel multiple mediator analysis proposed by Hayes (2013) was carried out through the PROCESS extension of the SPSS 20.

Results

Correlation analysis

Relationships between variables in the study were evaluated by calculating the Pearson correlation coefficient. Correlation coefficients between variables were presented in Table 1.

Table 1. The Pearson Correlation Coefficients between Variables

Variable	1	2	3	4	5
1. CES	1				
2. EAAS	.34**	1			
3. SDES	.40**	.43**	1		
4. Militancy	.13**	.05	12*	1	
5. Commitment	.13*	.13**	05	.71**	1

Note 1. *p < .05, **p < .01. Note 2. CES = The Centrality of Event Scale; EAAS = Existential Annihilation Anxiety Scale; SDES = The Short Defeat and Entrapment Scale

The parallel multiple mediator model

The parallel multiple mediator model proposed by Hayes (2013) was conducted to examine the mediating role of defeat and entrapment and identity salience in the relationship between centrality of event and existential annihilation anxiety. In the analysis, 10000 bootstrap sampling was used, and estimates were calculated at 95% confidence interval (Hayes, 2013). The bias error was eliminated, and the corrected results were evaluated. Furthermore, since there was a statistically significant effect of gender on the scores of existential annihilation anxiety ($F_{(1,377)} = 4.10$, p < 05), gender was added to the analysis as a covariate for controlling its effect on the results.

According to the results, centrality of event significantly predicted defeat and entrapment, commitment, and militancy (a path respectively; β = .37, SE = .04, t = 8.57, p < .001, CI [.29, .46]; β = .13, SE = .05, t = 2.59, p < .05, CI [.03, .22]; β = .11, SE = .04, t = 2.65, p < .05, CI [.03, .19]). The direct effects of defeat and entrapment and commitment on existential annihilation anxiety were significant (b path respectively; β = .38, SE = .06, t = 6.86, p < .001, CI [.27, .49]; β = .19, SE = .07, t = 2.85, p < .05, CI [.06, .32]). However, the direct effect of militancy on existential annihilation anxiety was not significant (b path; β = -.07, SE = .08, t = -.87, p = .38, CI [-.23, .09]). The total effect of centrality of event on existential annihilation anxiety was significant (c path; β = .34, SE = .05, t = 7.11, p < .001, CI [.25, .44]). On the other hand, when centrality of event and mediating variables (defeat and entrapment, militancy, and commitment) were taken simultaneously in the equation, the direct relationship between centrality of event and existential annihilation anxiety decreased; but it did not lose its significance level (c' path; β = .19, SE = .05, t = 3.74, p < .001, CI [.09, .29]). These findings revealed that some of the mediating variables added to the equation may have a mediating effect on the relationship between centrality of event and existential annihilation anxiety.

When examining whether the indirect effects are statistically significant or not, the total indirect effect (c-c) of the centrality of event through the mediating variables on existential annihilation anxiety was

found to be significant (point estimate = .16, SE = .03, BCa CI [.11, .21]). When the variables mediating the indirect effect of centrality of event on existential annihilation anxiety were examined, it was observed that the mediation of defeat and entrapment and commitment were statistically significant (respectively; point estimate = .14, SE = .03, BCa CI [.09, .20]; point estimate = .02, SE = .01, BCa CI [.01, .06]). Accordingly, defeat and entrapment and commitment play a mediating role in the relationship between centrality of event and existential annihilation anxiety; however, militancy did not have a mediating role in this relationship. Besides, it was seen that the whole model was significant ($F_{(5,373)}$ = 23.97, P < .001, F = .24) and explained 24% of the total variance. The results were presented in Table 2 and Figure 1.

Table 2. Regression Coefficients, Standard Errors, and Model Summary Information for the Mediation Analysis

Consequent													
	M ₁ (SDES)			M ₂ (Commitment)			M ₃ (Militancy)			Y (EAA	Y (EAAS)		
Antecedent	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p	
X (CES)	.37	.04	.00	.13	.05	.01	.11	.04	.01	.19	.05	.00	
Gender	-2.28	.80	.01	3.23	.91	.00	2.29	.77	.00	-1.53	.86	.08	
$M_{_1}$	-	-	-	-	-	-	-	-	-	.38	.06	.00	
M_2	-	-	-	-	-	-	-	-	-	.19	.07	.01	
M_3	-	-	-	-	-	-	-	-	-	07	.08	.38	
Constant	5.77	1.35	.00	12.19	1.52	.00	14.81	1.30	.00	6.05	1.70	.00	
	$R^2 = .18$		$R^2 = .05$		$R^2 = .04$		$R^2 = .24$	$R^2 = .24$					
	$F_{(2,376)} = 40.79, p < .001$			$F_{(2,376)} = 9.65, p < .001$		$F_{(2,376)} = 7.87, p < .01$		$F_{(5,373)} = 23.97, p < .001$					

CES = The Centrality of Event Scale; EAAS = Existential Annihilation Anxiety Scale; SDES = The Short Defeat and Entrapment Scale

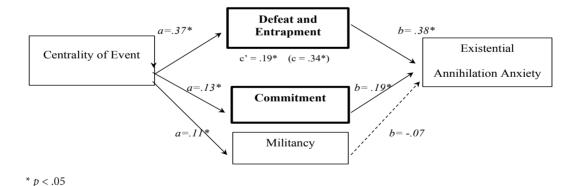


Figure 1. The Parallel Multiple Mediator Model of the Study in the Form of a Statistical Diagram

Discussion and Conclusion

This current study has revealed quite satisfying and significant findings. The results showed that there is a direct significant relationship between centrality of event and existential annihilation

anxiety. Although there has been no studies showing this relationship directly, most of the studies (Kira et al., 2018; Kira, 2019; Kira et al., 2020) that have examined the relationship between trauma and existential annihilation anxiety indirectly support the relationship between centrality of events and existential annihilation anxiety due the fact that traumas generally have more sensory-based features – vivid, accessible and intense – and more salience for identity (Meiser-Stedman & Nixon, 2017; Fitzgerald et al., 2016). Thus, it can be inferred that this is the first known study that directly indicates the relationship between centrality of event and existential annihilation anxiety.

Secondly, the mediating role of defeat and entrapment in the relationship between the centrality of event and existential annihilation anxiety was examined. Although there is no study that indicate a relationship between centrality of event and defeat and entrapment, most of the studies that emphasized the relationship between trauma and defeat and entrapment (Dunmore et al., 2001; Siddaway et al., 2015) indirectly support the relationship between centrality of event and defeat and entrapment, due to the malfunction of the IDS mechanism. With the onset of a malfunction to the IDS mechanism, individuals use more self-criticism and negative self-appraisals, which can lead individuals to perceive a loss of psychological autonomy and being human (Dunmore et al., 2001; Siddaway et al., 2015). In this regard, their trauma which can be the personal reference point for attribution of meaning to other events can be central for their lives (Bernsten & Rubin, 2006; Matos et al., 2013) and this can lead to their perceptions of defeat and entrapment. Therefore, it can be said that this is the first known study that shows the relationship between centrality of event and defeat and entrapment. Moreover, although the relationship between defeat and entrapment and existential annihilation anxiety has not been alluded to in many studies (Butler et al., 2008; Taylor et al., 2011), the relationship between anxiety and defeat and entrapment considering the IDS mechanism increases threat appraisal mechanism in anxiety. It can further be said that those with central traumatic experiences are prone to a malfunction of the IDS mechanism and use more negative appraisals related to identity, which leads to increased existential annihilation anxiety (Bernsten & Rubin, 2006; Schlagman et al., 2006).

Thirdly, the mediating role of identity salience (commitment and militancy) in the relationship between the centrality of event and existential annihilation anxiety was also examined. As a complex social creature, people form identities and people's identities are crucial to orient and regulate their lives (Elmore & Oyserman, 2012; Oyserman et al., 2007). In this regard, due to traumatic experience, individual identities are affected negatively and develop dysregulated across areas of their development (Ford, 2011; Kiesel, 2013). Furthermore, this dysregulation is seen in all developmental processes – physical (hyperarousal), socio-emotional (aggression) and cognitive (repetitive re-experiencing and reappraisals). These dysregulations may also play a role in identity salience. Thus, most of the studies (Kira et al., 2018; Galliher et al., 2017; Martire et al., 2000; Thoits, 2006) indicate the relationship between trauma and identity salience. The same dysregulation mechanism can be also seen in the relationship between the centrality of event and identity salience which is also supported by some studies (Bernsten & Rubin, 2006; Thomsen & Berntsen, 2008). Thus, it can be said that identity salience (commitment and militancy) can play a role in the relationship between the centrality of event and existential annihilation anxiety.

Re-experiencing and appraisals, especially regarding identity, may increase existential anxiety. Many studies that emphasize the relationship between identity salience and existential anxiety (Kira et al., 2012; Shrira, 2015; Yair, 2014) are parallel with the results of this study. However, in this study, only identity commitment – one of the sub-dimensions of identity salience – showed a significant relationship between existential annihilation anxiety, while the sub-dimension of identity militancy was not held as significant. This may be related to two dimension's features. Identity commitment measures perception and cognitive processes. Identity militancy measures rather behavioral processes and strategy (Kira et al., 2020). In this regard, it can be inferred that taking the centrality of event into question leads individuals to the commitment dimension of identity salience and the further use of the commitment dimension of identity salience, consequently leading them to experience more existential annihilation anxiety. From this result it can be said that when working with trauma, clinicians and researchers should focus on identity and appraisals more.

The limitations of this study must also be underlined. One of the limitations is the use of self-report scales. It may have negatively affected the reliability of the results due to social desirability. The other limitation is that data for dependent and independent variables were gathered from one source. According to Podsakoff et al. (2003) and Antonakis et al. (2010), collecting data from dependent and independent variables from the one source may reveal a variance deviation error. To reduce the negative effects of variance deviation error, the discrimination of all measurements in the study were tested. One more limitation of this study is that it does not establish causality. Instead, the results of the study are based on correlation that aim to understand the nature of the relationship between the centrality of the event and existential annihilation anxiety. Finally, although the findings of this study were collected from a wide age range, the lack of randomization in the inclusion of participants may negatively affect the generalizability of the results. Furthermore, although the size of the sample is sufficient, a more representative sample can be obtained with a larger number of participants and thus the generalizability of the results can be increased.

Despite all the limitations above, the present study makes some contributions to the literature. Firstly, it proved the importance of the relationship between the centrality of events and existential annihilation anxiety in a Turkish sample. In this context, both clinicians and researchers may focus on the central event in trauma and existential annihilation anxiety when they study trauma. Secondly, it demonstrated the importance of identity commitment and defeat and entrapment in the relationship between the central events and existential annihilation anxiety. Thus, it is important for both clinicians and researchers to study identity commitment and defeat and entrapment while studying trauma and existential concerns.

References

Berntsen D., & Rubin D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research and Therapy*, 44, 219–231. https://doi.org/10.1016/j.brat.2005.01.009

- Berntsen D., Rubin D. C., & Siegler I. C. (2011). Two versions of life: Emotionally negative and positive life events have different roles in the organization of the life story and identity. *Emotion*, 11, 1190–1201. https://doi.org/10.1037/a0024940
- Berntsen, D., Rubin, D. C., & Siegler, I. C. (2011). Two versions of life: Emotionally negative and positive life events have different roles in the organization of life story and identity. *Emotion*, *11*, 1190-1201. https://doi.org/10.1037/a0024940
- Berntsen, D., Willert, M., & Rubin, D. C. (2003). Splintered memories or vivid landmarks? Qualities and organization of traumatic memories with and without PTSD. Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition, 17(6), 675-693. https://doi.org/10.1002/acp.894
- Berman, S. L., Weems, C. F., & Stickle, T. R. (2006). Existential anxiety in adolescents: Prevalence, structure, association with psychological symptoms and identity development. *Journal of Youth and Adolescence*, 35, 285-292. https://doi.org/10.1007/s10964.006.9032-y
- Brown, A. T. (2006). Confirmatory factor analysis for applied research (1st ed.). Guilford Press.
- Butler, G., Fennell, M., & Hackmann, A. (2008). *Cognitive behavioural therapy for anxiety disorders: Mastering clinical challenges*. The Guilford Press. https://doi.org/10.1017/s135.246.5811000166
- Byrne, B. M. (2001). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Lawrence Erlbaum Associates.
- Carvalho, S., Pinto-Gouveia, J., Pimentel, P., Maia, D., Gilbert, P., & Mota-Pereira, J.
- (2013). Entrapment and defeat perceptions in depressive symptomatology: through an evolutionary approach. *Psychiatry: Interpersonal & Biological Processes*, 76(1), 53-67. https://doi.org/10.1521/psyc.2013.76.1.53
- Dunmore, E., Clark, D. M., & Ehlers, A. (2001). A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy*, 39(9), 1063-84. https://doi.org/10.1016/s0005-7967(00)00088-7
- Elmore, K. C., & Oyserman, D. (2012). If 'we'can succeed, 'Tcan too: Identity-based motivation and gender in the classroom. *Contemporary Educational Psychology*, *37*(3), 176-185. https://doi.org/10.1016/j. cedpsych.2011.05.003
- Field, A. (2009). Discovering statistics using IBM SPSS statistics (3rd ed.). London, UK: Sage.
- Fitzgerald J. M., Berntsen D., & Broadbridge C. L. (2016). The influences of event centrality in memory models of PTSD. *Applied Cognitive Psychology*, 30(1), 10–21. https://doi.org/10.1002/acp.3160
- Ford, A. (2011). State child emotional abuse laws: Their failure to protect children with gender identity disorder. Family Court Review, 49(3), 642-656. https://doi.org/10.1111/j.1744-1617.2011.01399.x
- Galliher, R. V., McLean, K. C., & Syed, M. (2017). An integrated developmental model for studying identity content in context. *Developmental Psychology*, 53(11), 2011. https://doi.org/10.1037/dev0000299
- Gilbert, P. (2001). Depression and stress: A biopsychosocial exploration of evolved functions and mechanisms. Stress: The International Journal of the Biology of Stress, 4, 121–135. https://doi.org/10.3109/102.538.90109115726
- Groleau, J. M., Calhoun, L. G., Cann, A., & Tedeschi, R. D. (2013). The role of centrality of events in posttraumatic distress and posttraumatic growth. *Psychological Trauma-Theory Research Practice and Policy*, 5, 477-483. https://doi.org/10.1037/a0028809
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* The Guildford Press.

- Kira, I., Alawneh, A. N., Aboumediane, S., Mohanesh, J., Ozkan, B., & Alamia, H. (2011). Identity salience and its dynamics in Palestinians adolescents. *Psychology*, 2, 781–791. https://doi.org/10.4236/ psych.2011.28120
- Kira, I. A., Ashby, J. S., Omidy, A. Z., & Lewandowski, L. (2015). Current, continuous, and cumulative traumafocused cognitive behavior therapy: A new model for trauma counseling. *Journal of Mental Health Counseling*, 37(4), 323 – 340. https://doi.org/10.17744/mehc.37.4.04
- Kira, I. A., Özcan, N. A., Shuwiekh, H., Kucharska, J., Amthal, H. A. H., & Kanaan, A. (2020). The cross-national validity and structural invariance of the existential annihilation anxiety scale. *Current Psychology*, 41, 573-584. https://doi.org/10.1007/s12144.019.00591-5
- Kira, I. A., Shuwiekh, H., Rice, K., Al Ibraheem, B., & Aljakoub, J. (2017). A threatened identity: The mental health status of Syrian refugees in Egypt and its etiology. *Identity*, 17(3), 176-190. https://doi.org/10.1 080/15283.488.2017.1340163
- Kira, I. A., Shuwiekh, H., Kucharska, J., Al-Huwailah, A. H., & Moustafa, A. (2020). "Will to Exist, Live and Survive" (WTELS): Measuring its role as master/metamotivator and in resisting oppression and related adversities. *Peace and Conflict: Journal of Peace Psychology*, 26(1), 47–61. https://doi.org/10.1037/pac0000411
- Kira, I. A., Templin, T., Lewandowski, L., Ramaswamy, V., Ozkan, B., Mohanesh, J., & Hussam, A. (2012). Collective and personal annihilation anxiety: Measuring annihilation anxiety AA. *Psychology*, 3(1), 90. https://doi.org/10.4236/psych.2012.31015
- Kline, B. R. (2011). Principles and practice of structural equation modeling (3rd ed.). Guilford Press.Martire, L. M., Stephens, M. A. P., & Townsend, A. L. (2000). Centrality of women's multiple roles: Beneficial and detrimental consequences for psychological well-being. Psychology and Aging, 15(1), 148. https://doi.org/10.1037/0882-7974.15.1.148
- Matos, M., Pinto-Gouveia, J., & Costa, V. (2013). Understanding the importance of attachment in shame traumatic memory relation to depression: The impact of emotion regulation processes. *Clinical Psychology & Psychotherapy*, 20(2), 149-165. https://doi.org/10.1002/cpp.786
- McCrory, E., De Brito, S. A., & Viding, E. (2010). Research review: The neurobiology and genetics of maltreatment and adversity. *Journal of Child Psychology and Psychiatry*, *51*(10), 1079-1095. https://doi.org/10.1111/j.1469-7610.2010.02271.x
- McKinnon, A., Brewer, N., Meiser-Stedman, R., & Nixon, R. D. V. (2017). Trauma memory characteristics and the development of acute stress disorder and post-traumatic stress disorder in youth. *Journal of Behavior Therapy and Experimental Psychiatry*, 54, 112-119. https://doi.org/10.1016/j.jbtep.2016.07.009
- Mordeno, I. G., Galela, D. S., Nalipay, M. J. N., & Cue, M. P. (2018). Centrality of event and mental health outcomes in child and adolescent natural disaster survivors. *The Spanish Journal of Psychology, 21*, E61. https://doi.org/10.1017/sjp.2018.58
- Oyserman, D., Fryberg, S. A., & Yoder, N. (2007). Identity-based motivation and health. *Journal of Personality and Social Psychology*, 93(6), 1011. https://doi.org/10.1037/0022-3514.93.6.1011
- Pinto-Gouveia, J., Castilho, P., Matos, M., & Xavier, A. (2013). Centrality of shame memories and psychopathology: The mediator effect of self-criticism. *Clinical Psychology: Science and Practice*, 20(3), 323-334. https://doi.org/10.1111/cpsp.12044
- Ritchie, T. D., Skowronski, J. J., Cadogan, S., & Sedikides, C. (2014). Affective responses to self-defining autobiographical events. *Self and Identity*, 13, 513-534. https://doi.org/10.1080/15298.868.2013.863222
- Shaver, P. R., & Mikulincer, M. E. (2012). *Meaning, mortality, and choice: The social psychology of existential concerns*. American Psychological Association. https://doi.org/10.1037/13748-000

- Schlagman, S., Schulz, J., & Kvavilashvili, L. (2006). A content analysis of involuntary autobiographical memories: Examining the positivity effect in old age. *Memory*, 14(2), 161-175. https://doi.org/10.1080/096.582.10544000024
- Schuettler, D., & Boals, A. (2011). The path to posttraumatic growth versus posttraumatic stress disorder: Contributions of event centrality and coping. *Journal of Loss and Trauma*, 16, 180-194. https://doi.org/10.1080/15325.024.2010.519273
- Shrira, A. (2015). Transmitting the sum of all fears: Iranian nuclear threat salience among offspring of holocaust survivors. *Psychological Trauma: Theory, Research, Practice, and Policy, 7*, 364-371. https://doi.org/10.1037/tra0000029
- Siddaway, A. P., Taylor, P. J., Wood, A. M., & Schulz, J. (2015). A meta-analysis of perceptions of defeat and entrapment in depression, anxiety problems, posttraumatic stress disorder, and suicidality. *Journal of Affective Disorders*, 184, 149-159. https://doi.org/10.1016/j.jad.2015.05.046
- Sloman, L., Gilbert, P., & Hasey, G. (2003). Evolved mechanisms in depression: the role and interaction of attachment and social rank in depression. *Journal of Affective Disorders*, 74(2), 107-121. https://doi.org/10.1016/s0165-0327(02)00116-7
- Stryker, S. (1968). Identity salience and role performance: The relevance of symbolic interaction theory for family research. *Journal of Marriage and the Family*, 30(4), 558-564. https://doi.org/10.2307/349494
- Stryker, S., & Serpe, R. T. (1994). Identity salience and psychological centrality: Equivalent, overlapping, or complementary concepts?. *Social Psychology Quarterly*, *57*(1), 16-35. https://doi.org/10.2307/2786972
- Taylor, P. J., Gooding, P. A., Wood, A. M., Johnson, J., & Tarrier, N. (2011). Prospective predictors of suicidality: Defeat and entrapment lead to changes in suicidal ideation over time. *Suicide and Life-Threatening Behavior*, 41(3), 297-306. https://doi.org/10.1111/j.1943-278x.2011.00029.x
- Taylor, P. J., Wood, A. M., Gooding, P., Johnson, J., & Tarrier, N. (2009). Are defeat and entrapment best defined as a single construct? *Personality and Individual Differences*, 47(7), 795-797. https://doi.org/10.1016/j.paid.2009.06.011
- Thoits, P. (2006). Personal agency in the stress process. *Journal of Health and Social Behavior*, 47(4), 309–323. https://doi.org/10.1177/002.214.650604700401
- Thoits, P. A. (2013). Self, identity, stress, and mental health. In *Handbook of the sociology of mental health* (pp. 357–377). Springer. https://doi.org/10.1007/978-94-007-4276-5_18
- Thomsen, D. K., & Berntsen, D. (2008). The long-term impact of emotionally stressful events on memory characteristics and life story. *Applied Cognitive Psychology*, 23, 579–598. https://doi.org/10.1002/acp.1495
- Yair, G. (2014). Israeli existential anxiety: Cultural trauma and the constitution of national character. *Social Identities*, 20(4-5), 346-362. https://doi.org/10.1080/13504.630.2014.1002390