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The relationship between childhood traumatic experiences and ontological well-being of university students: The mediating role of psychological flexibility

Üniversite öğrencilerinin çocukluk çağı travmatik yaşantıları ile ontolojik iyi-oluşları arasındaki ilişki: Psikolojik esnekliğin aracı rolü

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Abstract: Adverse childhood experiences are a global health problem that can negatively impact individuals in adulthood. While the negative effects of these experiences extending into adulthood are well known, their impact on existential relationships and ways of giving meaning to life is less well-known. In this context, psychological flexibility is considered to play a key mediating role in the relationship between traumatic childhood experiences and ontological well-being. This study aimed to examine the relationship between adverse childhood experiences and ontological well-being in university students and the mediating role of psychological flexibility in this relationship. The study was conducted with a sample of 534 young adult university students (female 47.8%, male 52.2%). Spearman correlation analysis was used to analyze the relationships between variables, and Model 4 bootstrap analysis, generated with 5,000 resamples, was used to analyze the mediating effect. Mediation analyses revealed that psychological flexibility played a full mediating role in the relationship between adverse childhood experiences and ontological well-being. The findings indicated that psychological flexibility may serve as a critical mechanism in reducing the impact of adverse childhood experiences on individuals' existential well-being.

Keywords: *Adverse childhood experiences, ontological well-being, psychological flexibility, university students.*

Özet: Çocukluk çağı olumsuz deneyimleri, yetişkinlikte bireyleri olumsuz etkileyebilen küresel bir sağlık sorunudur. Bu deneyimlerin yetişkinliğe uzanan olumsuz etkileri iyi bilinmekle birlikte, yaşamla varoluşsal ilişki ve yaşama anlam verme biçimleri üzerindeki etkileri tam olarak bilinmemektedir. Bu etkide, psikolojik esnekliğin, çocukluk çağı travmatik deneyimleri ile ontolojik iyi oluş arasındaki ilişkide temel bir aracı değişken rolü oynadığı düşünülmektedir. Bu araştırmada amaçlanan, Üniversite öğrencilerinin olumsuz çocukluk deneyimlerinin ontolojik iyi oluşları ile ilişkisi ve bu ilişkide psikolojik esnekliğin aracı rolünün test edilmesidir. Çalışma, 534 genç yetişkin üniversite öğrencilerinden (%47,8 kadın, %52,2 erkek) oluşan bir örneklemle yürütülmüştür. Değişkenler arasındaki ilişkileri analiz etmek için Spearman korelasyon analizi, aracılık etkisini analiz etmek için ise 5.000 yeniden örneklemeyle oluşturulan Model 4 önyükleme analizi kullanılmıştır. Aracılık analizleri sonucunda, olumsuz çocukluk deneyimleri ile ontolojik iyi-oluş arasındaki ilişkide psikolojik esnekliğin tam aracılık rolü oynadığını doğrulamıştır. Bulgular, psikolojik esnekliğin, olumsuz çocukluk deneyimlerinin bireyin varoluşsal refahı üzerindeki etkisini azaltmada kritik bir mekanizma olabileceğini ortaya koymuştur.

Anahtar Kelimeler: *Çocukluk dönemi olumsuz yaşantıları, ontolojik iyi oluş, psikolojik esneklik, üniversite öğrencileri.*

1. Introduction

Childhood traumatic experiences are major risk factors that can disrupt individuals' physiological, psychological, and social functioning throughout the lifespan. Adverse Childhood Experiences (ACEs) refer to a range of psychosocial risk factors, including emotional, physical, and sexual abuse and neglect experienced within the family before the age of 18, as well as family dysfunctions such as parental substance abuse, criminal behavior, psychiatric disorders, death, divorce, domestic violence, unemployment, and poverty (Brenas et al., 2019; Brown et al., 2009; Felitti et al., 1998; Gündüz et

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al., 2018). Childhood represents a vulnerable developmental stage in which coping mechanisms for stress are still immature. The negative effects of ACEs extend beyond the emotional or behavioral level, influencing the development of cognitive patterns and thereby shaping individuals' lifelong perspectives on themselves, their lives, and the world (Arslan, 2023; Mansueto et al., 2021; Petruccelli et al., 2019).

According to the stress-process model, the accumulation of stress during childhood exerts a cumulative and cascading effect. Such traumatic impacts can alter stress responses across adolescence, adulthood, and old age, leading individuals to develop heightened sensitivity to stressful events throughout life. Consequently, this increases the likelihood of encountering or generating stressful circumstances across the lifespan (Levine et al., 2015; Turner & Butler, 2003; Turner & Schieman, 2008). In summary, adverse experiences in childhood may contribute to the emergence of secondary stress factors, resulting in vicious cycles that hinder victims in various domains of adult life, such as education, social relationships, employment, and intimate partnerships (Evans & Kim, 2010; Ferraro & Shippee, 2009; Nurius et al., 2015; Sansone et al., 2012). This may not only render affected individuals vulnerable in terms of psychological and physical health but also impair their ability to ascribe meaning to life (Arslan et al., 2025a; Nurius et al., 2015; Springer, 2009; Umberson et al., 2008).

Studies examining the long-term effects of childhood traumas on developmental psychopathology through quantitative data began to proliferate in the 1990s (Felitti et al., 1998). Since then, numerous studies have demonstrated the adverse consequences of childhood maltreatment; however, it remains a widespread problem today (American Psychiatric Association [APA], 2022). International research with adult samples indicates that approximately 50–70% report experiencing at least one ACE (Hughes et al., 2017; Merrick et al., 2018; World Health Organization [WHO], 2020). Similarly, studies conducted in Türkiye with adult participants report prevalence rates of one or more ACEs ranging between 50% and 60% (Eruyar et al., 2023). Previous research suggests that even a single ACE can have negative impacts on mental and physical health across the lifespan (e.g., Felitti et al., 1998; Hughes et al., 2017). Based on these findings, it can be suggested that approximately one in two individuals may have been exposed to at least one adverse childhood experience (ACE) during their early years.

In this study, the effects of ACEs on adulthood were examined within the framework of the life course perspective (Elder et al., 2003). The life course perspective posits that the social, emotional, and environmental influences individuals are exposed to during different developmental periods may accumulate over time and create lasting effects on psychological functioning. In this context, ACEs are considered not only in terms of their impact on psychological symptoms but also in relation to how they shape individuals' holistic evaluations of their own lives. Adverse childhood experiences may disrupt the developmental foundations of meaning-making and narrative coherence, which are central to ontological well-being. By impairing one's sense of self-continuity and life purpose, ACEs can undermine individuals' ability to construct a coherent and value-based life narrative, which is a key component of ontological well-being (OWB). The concept of ontological well-being is highly consistent with this perspective, as it is defined as the capacity to structure cognitive and emotional evaluations of one's life across past, present, and future dimensions in a manner that reflects meaning, coherence, and integrity (Şimşek, 2009).

OWB is a multidimensional construct that encompasses the processes of creating a life narrative, maintaining self-continuity, and building a value-oriented life. At the core of OWB lies not merely the experience of positive emotions but also the individual's effort to direct their life and structure it within a meaningful narrative. In this regard, Kaba

(2020) conceptualizes OWB as the capacity to shape one's life around a "life project." According to Kaba, when individuals construct a unique life story, develop goals aligned with their values, and pursue those goals, they are able to experience their lives as a meaningful and coherent whole. Therefore, OWB is considered to provide a strong theoretical framework for understanding how individuals evaluate their lives holistically, even after adverse early-life experiences, and for identifying the variables that play a role in this evaluation. Although there are numerous studies in the literature examining the impact of ACEs on subjective well-being (SWB) (e.g., Browne et al., 2022; Merrick et al., 2018), research addressing their relationship with OWB is scarce. SWB is primarily a hedonic (pleasure-based) construct that focuses on life satisfaction and the frequency of positive and negative affect (Diener, 1984). It is typically measured by evaluating individuals' emotional experiences and life satisfaction within a specific timeframe.

In contrast, OWB presents a more eudaimonic (meaning-based) approach to well-being by emphasizing how individuals make sense of their lives not only in the present moment but across their entire life course (Şimşek, 2009). It involves the capacity to construct a holistic narrative about the self, experiences, and the future, incorporating existential components such as self-continuity, subjective integrity, and meaningfulness of life (Şimşek, 2009). While SWB often reflects short-term emotional states, OWB represents a deeper and more enduring relationship with one's life. This theoretical distinction is critical for understanding individuals' responses to traumatic experiences. In this regard, investigating the effects of ACEs on OWB and the variables that play a role in this relationship is important for filling the conceptual gap in the literature and for developing a more holistic understanding of well-being. Low levels of OWB reflect a depth that cannot be explained merely by "feeling bad" and may indirectly pave the way for psychological problems (Şimşek, 2009). Individuals with weak OWB may struggle to integrate their past experiences into a coherent life narrative, which in turn can reduce their sense of hope, perceived control, and purpose regarding the future. In particular, a weakened sense of self-continuity threatens subjective integrity and may increase vulnerability to various forms of psychopathology. The literature suggests that low OWB may be associated with depression, anxiety, existential emptiness, low life satisfaction, identity confusion, suicide, and substance use (Şimşek & Kocayörük, 2013; Thompson et al., 2019). Therefore, examining the relationship between ACEs and risky behaviors solely at the symptom level may be insufficient; it is also essential to focus on how individuals integrate and make sense of their lives. In this regard, identifying the psychological resources that support the OWB of individuals exposed to ACEs is considered a critical requirement for both preventive and therapeutic interventions.

Psychological flexibility, which emerges as one of these protective psychological resources, refers to the individual's capacity to accept internal experiences when faced with difficulties and to take action in line with personal values by establishing a functional relationship with those experiences (Hayes et al., 2012). Rooted in acceptance and commitment therapy (ACT), this construct enables individuals to remain in contact with painful thoughts, emotions, or memories while continuing to live in a value-based manner (Hayes et al., 2012; Ulubay & Güven, 2022). Psychological flexibility can be considered not only a mechanism for coping with stress but also a fundamental component of health, encompassing the capacity to sustain self-integrity, a sense of meaning, and life orientation (Kashdan & Rottenberg, 2010). In this respect, psychological flexibility not only serves as an indicator of positive psychological adjustment but also plays a critical role in maintaining functioning after trauma.

Indeed, studies have demonstrated that psychological flexibility can significantly mitigate the adverse effects of early-life traumas (Arslan et al., 2025b; Gloster et al., 2017). For example, Arslan et al. (2025b) found that psychological flexibility served as a mediating factor in the relationship between adverse childhood experiences and posttraumatic

stress symptoms, thereby reducing the negative psychological impact of early-life trauma. Similarly, Gloster et al. (2017) reported that low psychological flexibility was associated with heightened symptoms of anxiety and depression, whereas higher levels of flexibility substantially alleviated these effects. Exposure to ACEs has been shown to impair psychological flexibility by fostering rigid cognitive patterns, emotional avoidance, and low behavioral adaptability (Browne et al., 2022; Vu et al., 2025). Such disruptions may limit an individual's ability to accept distressing experiences and act in accordance with personal values.

Despite ACEs, psychological flexibility as a fundamental capacity that enables individuals to pursue value-based directions and add meaning to their lives (Hayes et al., 2012; Kashdan & Rottenberg, 2010) may play a supportive role in the core components of OWB. Because ontological well-being requires the ability to integrate past, present, and future experiences into a coherent life story, psychological flexibility can facilitate this integration by allowing individuals to accept difficult memories without avoidance and remain oriented toward personally meaningful goals (Kashdan & Rottenberg, 2010; McCracken, 2024). This integrative capacity may help individuals maintain a stable sense of self, continuity, and existential coherence even in the aftermath of early adverse experiences.

In line with this framework, the present study represents one of the pioneering attempts to examine the mediating role of psychological flexibility in the relationship between university students' ACEs and their OWB. While previous research has extensively focused on the effects of ACEs on mental health outcomes and subjective well-being, studies addressing their impact on ontological well-being—a deeper, meaning-based component of psychological functioning—remain scarce. By integrating ontological well-being into the ACE literature, the current study expands the scope of existing research from short-term affective indicators to a more existential and narrative-based understanding of well-being.

The study aims to test whether psychological flexibility serves as a mediating mechanism in this relationship, providing insights into how early-life adversities may influence university students' capacity to create a coherent and meaningful life narrative. Understanding this mediating pathway may offer a deeper explanation of how internal psychological capacities contribute to the way early adverse experiences are interpreted and integrated into a coherent life narrative. Accordingly, the study is expected to contribute both to the literature on OWB and to the development of trauma-informed psychological intervention strategies, particularly for university student populations.

2. Methodology

2.1. Participants

This study was conducted with the approval of the Muğla Sıtkı Koçman University Ethics Committee for Social and Human Sciences (Protocol No: 240100, Decision No: 122). The study population consisted of 1,830 students (all programs and grade levels) enrolled Muğla Sıtkı Koçman University, during the 2023–2024 academic year. The minimum required sample size was calculated as n = 466, based on Yamane's finite population correction formula with a 95% confidence level and a 4% margin of error (Yamane, 1973). However, to ensure high representativeness and account for potential data loss, the final sample was determined as 600 students. The sample was selected using the simple random sampling method to ensure strong representativeness of the population. For this purpose, up-to-date enrollment lists obtained from the Student Affairs Unit were used, and random number generation was performed via Microsoft Excel. The link to the scale set was distributed to students through program heads via online communication channels. The first section of the survey form included an informed consent statement outlining the purpose of the study, confidentiality principles, and the voluntary nature of participation. Participants could access the survey questions only

after reading and approving this statement. Of the 600 students initially selected, 66 either did not provide consent or did not complete the survey and were therefore excluded from the sample, while the 534 students who completed the survey constituted the final sample. All analyses were conducted on data from these 534 young adult university students with complete responses.

Of the participants, 47.8% were female (*n* = 255) and 52.2% were male (*n* = 279), providing a balanced representation in terms of gender. Regarding perceived economic status, 74.3% (*n* = 397) identified themselves as middle income, 13.5% (*n* = 72) as low income, and 12.2% (*n* = 65) as high income, indicating a socioeconomically diverse sample. Participants' ages ranged from 18 to 35, with a mean age of 20.3 years (SD = 2.20). The median age of the participants was 20.0 years, reflecting the representation of the young adult group. With respect to ACEs, 40.1% of the participants (*n* = 214) reported two or more ACEs, 21.2% (*n* = 113) reported one ACE, and 38.8% (*n* = 207) reported no ACEs. These findings indicate that 61.3% of the sample reported one or more ACEs (Table 1).

Table 1

Prevalence of Adverse Childhood Experiences (ACEs)

Responses	No		Yes	
ACE Types	*n*	%	*n*	%
Emotional abuse	333	62.40	201	37.60
Physical abuse	418	78.30	116	21.70
Sexual abuse	477	89.30	57	10.70
Emotional neglect	383	71.70	151	28.30
Physical neglect	501	93.80	33	6.20
Parental separation	427	80.00	107	20.00
Witnessing violence	470	88.00	64	12.00
Household alcohol or drug abuse	471	88.20	63	11.80
Household mental illness or disability	460	86.10	74	13.90
Household member involved in crime	481	90.10	53	9.90
ACE Categories	***n***	**%**		
Two or more ACEs	214	40.10		
One ACE	113	21.20		
No ACEs	207	38.80		

2.2. Measures

Adverse Childhood Experiences (ACE) Questionnaire

The Adverse Childhood Experiences (ACE) Questionnaire is a 10-item instrument developed by Felitti et al. (1998) to assess traumatic events and conditions to which individuals were exposed during childhood (ages 0–18). The scale covers a variety of adverse life events, including physical, emotional, and sexual abuse; neglect; domestic violence; parental separation; and the presence of substance abuse, mental illness, or incarceration within the household. Each item has two response options: "yes" (1) or "no" (0) (e.g., "Did a household member go to prison?"). The total score ranges from 0 to 10, with higher scores indicating greater exposure to ACEs. The scale was adapted to Turkish culture by Gündüz et al. (2018), who reported a Cronbach's alpha of .74, indicating adequate internal consistency. In the current study, the internal consistency reliability was similarly calculated as Cronbach's alpha = .74, confirming that the instrument demonstrates reliable measurement properties within the present sample.

Acceptance and Action Questionnaire-II (AAQ-II)

The Acceptance and Action Questionnaire-II (AAQ-II) is a 7-item self-report measure developed by Bond et al. (2011) to assess psychological inflexibility. Each item is rated on a 7-point Likert scale ranging from 1 (never true) to 7 (always

true), with higher scores indicating greater psychological inflexibility (e.g., “Emotions cause problems in my life”). The total score ranges from 7 to 49. Yavuz et al. (2016), in the Turkish adaptation of the scale, reported a Cronbach’s alpha of .84 and demonstrated construct validity through confirmatory factor analysis. In the present study, the Cronbach’s alpha was found to be .88, indicating high reliability.

Although the original scale measures psychological inflexibility, reverse scoring was applied in this study to assess psychological flexibility, which is conceptually the opposite of inflexibility. This reversed approach, as noted by Tyndall et al. (2019), allows researchers to interpret higher scores as greater psychological flexibility—a positive psychological resource linked to mental well-being. In line with this approach, higher total scores represent higher levels of psychological flexibility.

Ontological Well-Being Scale (OWBS)

The Ontological Well-Being Scale (OWBS) was developed by Şimşek and Kocayörük (2013) to evaluate individuals’ life projects by assessing their perceptions of the past, present, and future. The scale consists of 24 items and includes four subscales*: nothingness, hope, regret, and action*. Each item is rated on a 5-point Likert scale ranging from 1 (I don’t feel this at all) to 5 (I feel this very intensely). Higher scores indicate higher levels of OWB (e.g., “I feel hopeful about my future”). The scale includes several negatively worded items (items 2, 4, 5, 6, 7, 8, 10, 11, 15, 16, 17, and 18), which are reverse scored. Şimşek and Kocayörük (2013), in the original development of the scale, reported a Cronbach’s alpha of .91 and demonstrated construct validity through factor analysis. In the present study, the Cronbach’s alpha was calculated as .92, indicating excellent reliability within the current sample.

2.3. Data Analysis

Initially, a Spearman correlation analysis was conducted to examine the relationships among ACEs, psychological flexibility, and OWB. Comprehensive descriptive analyses, including means, standard deviations, skewness, and kurtosis, were performed using Jamovi 2.6.26. The analysis was further extended to test the mediating role of psychological flexibility in the relationship between ACEs and OWB, for which a bootstrapping method was employed. Following the guidelines of Preacher and Hayes (2008), a Model 4 mediation analysis with 5,000 resamples was conducted to test this mediating role. The significance of the indirect effects was determined by the criterion that the bias-corrected bootstrap confidence interval did not include zero.

3. Results

3.1. Descriptive statistics

Descriptive statistics and interrelations among the studied variables are summarized in Table 2. Descriptive statistics revealed that the mean score for ACEs was 1.72 with a standard deviation (SD) of 2.02, indicating variability in the participants’ early adverse experiences. Psychological flexibility had a mean score of 26.84 (SD = 9.95), and OWB had a mean score of 75.90 (SD = 17.57), reflecting a wide range of experiences and states among the participants. Skewness and kurtosis values for each variable were also reported: ACEs showed a skewness of 1.26 and a kurtosis of 1.22, indicating a positively skewed distribution—meaning that most participants reported low levels of ACEs with a sharper peak and more extreme values; psychological flexibility demonstrated a skewness of .068 and a kurtosis of –.491; and OWB showed a skewness of –.020 and a kurtosis of .348. These statistics suggest non-normality for ACEs and relatively normal distributions for psychological flexibility and OWB. ACEs were inversely correlated with psychological flexibility

(*r* = –.235, *p* < .001). Similarly, there was a negative correlation between ACEs and OWB (*r* = –.203, *p* < .001). Conversely, a significant positive correlation was found between psychological flexibility and OWB (*r* = .539, *p* < .001) (Table 2).Apply the following text formatting: Calibri (Body) typeface at 10-point size with full justification, 1.5 line spacing, paragraph spacing (before and after), and no first-line indentation. Or apply "Main Document" template on styles for this section. Please check the "Author Guidelines" on our journal website for more information.

Table 2

Descriptive Statistics and Correlations Among Study Variables

Variable	Adverse childhood experiences	Psychological flexibility	Ontological wellbeing
Adverse childhood experiences	–		
Psychological flexibility	-.235***	–	
Ontological wellbeing	-.203***	.539***	–
Mean	1.72	26.84	75.90
SD	2.02	9.95	17.57
Skewness	1.26	.068	-.020
Kurtosis	1.22	-.491	.348

*** *p <.001*

3.2. Mediation analysis

Prior to conducting the mediation analysis, assumptions of multivariate regression were tested. Multicollinearity was examined using Variance Inflation Factor (VIF) values, which were found to be below the commonly accepted threshold of 5, indicating no multicollinearity issues. Linearity and homoscedasticity were assessed through visual inspection of residual and scatter plots, which suggested that these assumptions were reasonably met. Although the distribution of ACEs was positively skewed, the use of bootstrapping in the mediation analysis mitigates concerns related to normality violations. No significant outliers were detected. Therefore, the data were considered suitable for mediation analysis.

The mediation analysis utilized a bootstrapping methodology to examine the mediating role of psychological flexibility in the relationship between ACEs and OWB. Table 3 and Figure 1 illustrate the regression results, pathways and the direct impacts evaluated as part of the mediation examination.

Table 3

Indirect Effect of Adverse Childhood Experience on Subjective Happiness via Serial Mediation

Path	*B*	*β*	SE	t/z	p	95% CI [LL-UL]
ACE → PF (a path)	-1.05	-.213	.21	-5.04	<.001	[0.64, 1.46]
PF → OWB (b path)	.99	.562	.06	15.52	<.001	[−1.12, −0.87]
ACE → OWB (c' path)	−.56	−.064	.32	−1.77	.076	[−1.18, 0.06]
ACE → OWB (total, c path)	−1.60	−.184	.37	−4.32	<.001	[−2.33, −0.87]
Indirect Effect (a × b)	−1.045	−.120	.23	−4.80	<.001	[−1.52, −0.59]

Note. CI [LL-UL] confidence interval [Lower limit-Upper limit], B = unstandardized coefficient; β = standardized coefficient; SE = standard error, ACE: Adverse childhood experiences OWB: Ontological well-being, PF: Psychological flexibility.

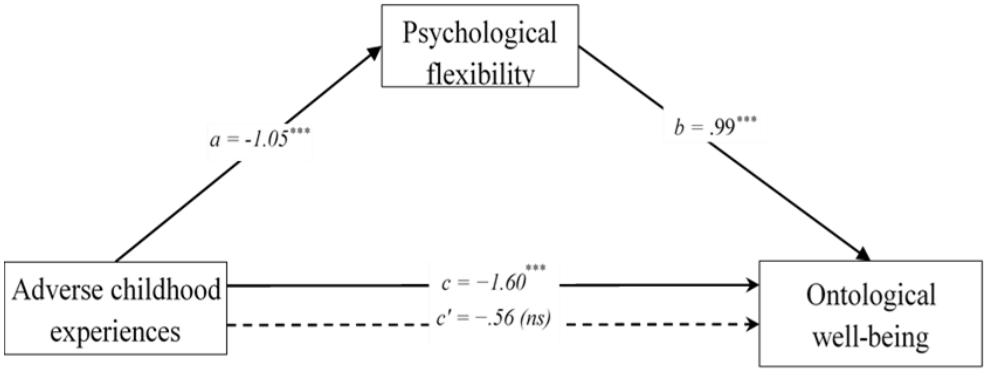
The analysis of direct effects revealed that ACEs significantly predicted psychological flexibility (*B* = –1.05, *β* = –.21, *p* < .001). Furthermore, psychological flexibility emerged as a significant positive predictor of overall wellbeing (*B* = 0.99, *β* = .56, *p* < .001). The total effect of ACEs on overall wellbeing was statistically significant (*B* = –1.60, *β* = –.18, *p* < .001), indicating that individuals who reported higher levels of ACEs tended to report lower overall wellbeing. This effect encompassed both the direct influence and the influence mediated through psychological flexibility. However, the direct

effect of ACEs on overall wellbeing was not statistically significant (B = –0.56, β = –.06, p = .076), suggesting that once psychological flexibility was accounted for, ACEs no longer had a significant direct impact. This finding provides evidence for full mediation.

To ascertain the indirect effect of ACEs on overall wellbeing mediated through psychological flexibility, a bootstrapping approach with 5,000 resamples was employed. The indirect effect was statistically significant (B = –1.05, 95% CI [–1.52, –0.59], β = –.12), confirming that psychological flexibility significantly mediates the relationship between ACEs and overall wellbeing. Using standardized coefficients, approximately 65% of the total effect of ACEs on overall wellbeing was mediated through psychological flexibility, indicating that a substantial portion of the association between ACEs and overall wellbeing operates through this indirect pathway.

Figure 1

Mediation Analysis with Bootstrapped Confidence Interval



Note. Path coefficients are unstandardized *** → p < .001; ns = non-significant

4. Discussion

This study examined the relationship between childhood traumatic experiences and ontological well-being of young adult university students, specifically focusing on the mediating role of psychological flexibility. The findings revealed that the impact of ACEs on OWB is not direct but is largely mediated by psychological flexibility. These results suggest that OWB is shaped not only by past adversities but also, to a greater extent, by individuals' levels of psychological flexibility. The strong mediating role of psychological flexibility in this process provides important insights into how individuals may cope with the long-term effects of early traumatic experiences in adulthood.

The results further demonstrated that while the total effect of ACEs on OWB was statistically significant, only a small portion of this effect could be explained directly. When psychological flexibility was included in the model, the direct effect of ACEs lost its statistical significance. The indirect effect, mediated through psychological flexibility, accounted for approximately 65% of the total effect, indicating that the influence of ACEs on OWB occurs primarily through this pathway. These findings highlight that early adverse life experiences alone are not determinative of OWB and suggest that focusing solely on direct associations may be insufficient when evaluating the long-term negative impacts of childhood trauma on adulthood.

In line with these findings, it can be argued that the negative impact of traumatic experiences on individuals does not follow a direct or fixed pathway but rather operates through multilayered processes shaped by cognitive and emotional

processing styles. In this context, Harris et al. (2024), in their systematic review on post-traumatic stress disorder, emphasized that identifying mediating variables is critical not only for understanding the outcomes of trauma but also for uncovering the psychological processes that contribute to these outcomes. Similarly, Arslan and Genç (2022), in a study conducted with a comparable sample group, examined the mediating role of positive perception and hope in the relationship between childhood psychological abuse and the mental well-being of university students. Their findings revealed that individuals exposed to psychological abuse in childhood tend to report lower levels of mental well-being; however, components of positive perception—such as optimism, hope, and a positive worldview—significantly mitigated these negative effects. These results indicate that the way individuals interpret childhood trauma and utilize their internal resources plays a critical role in determining its impact.

Psychological flexibility is defined as the capacity to notice adverse internal experiences, accept them without suppression, and act in accordance with one's values in the face of such experiences (Hayes et al., 2006). Within this theoretical framework, individuals with higher levels of psychological flexibility are able to sustain their psychological functioning following traumatic experiences by accepting stressful thoughts and emotions rather than responding with avoidance or dysfunctional reactions. Thus, psychological flexibility may serve as a regulatory mechanism that supports mental well-being in individuals with traumatic histories (Kashdan & Rottenberg, 2010). In this regard, the findings of the present study suggest that psychological flexibility is not merely an individual trait but also a fundamental process that regulates the complex relationship between traumatic experiences and well-being.

The findings of this study indicate a significant negative relationship between ACEs and psychological flexibility. This suggests that ACEs may weaken individuals' levels of cognitive-emotional flexibility in adulthood and negatively influence the development of psychological flexibility throughout the life course. Williams and Ciarrochi (2020), in their longitudinal study with a sample of 468 young people in Australia, investigated the relationship between life satisfaction and subjective well-being and individuals' ability to sustain value-based actions over time. Their findings indicated that sustaining value-based actions was closely related to life satisfaction and subjective well-being, whereas deviation from values or acting under pressure had negative effects on well-being. This highlights that experiences of abuse, neglect, and emotional deprivation during childhood—when emotional regulation skills and self-concept are being shaped—may reduce psychological flexibility later in life (Berking & Whitley, 2014). Moreover, the literature frequently emphasizes that childhood traumas can lead individuals to perceive internal experiences as threatening, thereby increasing experiential avoidance and weakening psychological flexibility (Bond et al., 2011). In this regard, the negative correlation obtained in the present study is consistent with previous theoretical and empirical findings.

The final finding of this study is that the effect of ACEs on OWB is largely mediated by psychological flexibility, which serves as a full mediator in this relationship. To date, no empirical study in the literature has examined ACEs, psychological flexibility, and OWB together within the same model. However, similar findings have been reported. For instance, Browne et al. (2022), in their longitudinal study conducted in Ireland during the COVID-19 pandemic, investigated the effect of ACEs on psychological well-being and tested the mediating role of psychological flexibility. In their study with 231 adult participants, individuals were categorized into three groups based on ACE levels (No ACE, Low ACE, High ACE), and changes in psychological distress were tracked throughout the pandemic. The findings showed that individuals with high ACE levels experienced significant increases in depression, anxiety, and stress over time, while psychological flexibility partially mediated these effects. Consistent with the present study, these results support the view that psychological flexibility may mediate the impact of ACEs on psychological outcomes. Similarly, in a longitudinal

study conducted in Türkiye with a sample of 270 young adults, Kütük et al. (2024) examined the mediating role of cognitive flexibility in the relationship between childhood psychological abuse and subjective vitality. Their findings revealed that psychological abuse during childhood reduced cognitive flexibility, which in turn negatively affected individuals' levels of subjective vitality.

The findings that demonstrate the full mediating role of psychological flexibility significantly contribute to the field by showing that this construct influences not only psychological but also existential aspects of well-being. Furthermore, the sample consisting of young adults is noteworthy, as it provides data on individuals in a developmentally vulnerable and intervention-sensitive period, thereby offering valuable insights into their well-being. In these respects, the study may serve as a foundation both for theoretical knowledge production and for the design of preventive and intervention programs in practice.

Despite its important findings, this study has several limitations. First, a cross-sectional design was employed, which limits the ability to draw causal inferences. Future research may benefit from using longitudinal designs to explore changes in psychological flexibility and well-being over time, and experimental designs to examine potential causal mechanisms more directly. Second, the exclusive use of retrospective self-report measures may pose limitations such as recall bias—particularly when reporting emotionally charged or traumatic experiences—and common method bias, as all variables were assessed through the same method. These biases may influence the strength or direction of observed associations. Future studies would benefit from incorporating multi-method approaches (e.g., parent reports, clinician ratings, behavioral tasks) to increase measurement validity.

Although the study sample included participants aged 18 to 35, the majority were younger university students (M = 20.3, SD = 2.20), which may limit the generalizability of the findings to broader age groups. Moreover, the fact that participants were all university students attending a vocational school in Turkey may affect the generalizability of the findings to individuals from other educational levels and socioeconomic backgrounds. Comparative studies across different age groups may allow researchers to examine developmental differences in greater depth.

Another limitation is that no specific cut-off point was applied to categorize ACE scores in this study. Instead, all participants—including those reporting no ACEs—were included in the analyses to maintain the descriptive integrity of the sample. While this inclusive approach allowed for a broader understanding of ACE distribution, it limited the ability to compare psychological outcomes across distinct risk groups. Future studies may consider grouping participants based on ACE exposure levels (e.g., 0, 1–3, ≥ 4) to facilitate more detailed comparisons between low, moderate, and high-risk individuals. Finally, the study was conducted with a Turkish sample, which may limit the generalizability of the findings to other cultural contexts due to cultural differences. Conducting similar studies in diverse cultural settings would enable cross-cultural comparisons and contribute to a broader understanding of these relationships.

The findings of this study suggest that psychological flexibility may play a critical role in the relationship between ACEs and OWB. Given the mediating role identified in the current study, and considering the potential benefits of interventions aimed at enhancing psychological flexibility, the development of preventive and strengthening programs across educational levels can be recommended. Higher education institutions represent a critical stage in the transition of young adults into professional life and broader social responsibilities. During this period, students face a range of developmental challenges, including identity formation, increased autonomy, and future-oriented decision making, which require the internalization of adaptive psychological skills (Arnett, 2000). As the findings revealed that

psychological flexibility mediates the relationship between ACEs and ontological well-being, developing structured training modules and psychoeducational workshops focusing on psychological flexibility may serve as practical applications of the current findings within educational institutions.

In Türkiye, there is no standardized or continuous training program specifically designed to enhance psychological flexibility. Most universities have psychological counseling centers that offer mental health support to students. Given the findings of the present study, university counseling centers could incorporate psychological flexibility-focused interventions, such as ACT-based group programs, into their existing services to better support students with a history of ACEs. Integrating such programs into student support services may be particularly beneficial for university students with a history of ACEs.

Furthermore, since the data showed that individuals with higher ACE scores tended to report lower levels of ontological well-being, the results of this study highlight the importance of early preventive interventions in educational settings. From an educational sciences perspective, these findings underscore the need to design and implement school-based preventive and developmental programs to support students with ACEs. In Türkiye, school counselors (psychological counselors) working in primary and secondary education are ideally positioned to deliver group- or class-based interventions. Structured psychoeducational programs focusing on emotional awareness, coping strategies, and value-oriented goal setting can be integrated into school guidance activities. Such early interventions may contribute to the development of psychological flexibility and OWB in the long term. Programs such as Acceptance and Commitment Therapy (ACT) (Hayes et al., 2006) and ACT-based psychoeducation (e.g., Affect Regulation Training [ART]; Berking & Whitley, 2014) may be particularly effective in helping individuals increase their acceptance of internal experiences and live a value-oriented life.

Declaration of Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Declaration of Generative AI Use

No generative artificial intelligence tools (e.g., ChatGPT, Gemini, Claude, etc.) were used in the preparation of this study. All text, analysis, and content were produced solely by the author through human effort.

Ethical Statement

This study involved the collection of data from human participants through an online questionnaire. The research was approved by the Ethics Committee for Social and Human Sciences at Muğla Sıtkı Koçman University (Protocol No: 240100, Decision No: 122, Date: 01.10.2024). Informed consent was obtained from all participants electronically. The study was conducted in accordance with the principles of the Declaration of Helsinki (1964).

Author Contributions

The author (Ayça Büyükcebeci) conducted the conceptualization, methodology, data analysis, discussion, original draft writing, and manuscript review and editing.

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