

AN EXAMINATION OF COGNITIVE EMOTION REGULATION STRATEGIES, MINDFULNESS LEVELS AND MEANING IN LIFE AMONG UNIVERSITY STUDENTSⁱ

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Abstract

This study aimed to examine the relationships among cognitive emotion regulation strategies, mindfulness, and meaning in life among university students. Participants were selected through simple random sampling from students enrolled at Sakarya and Düzce Universities during the 2020–2021 academic year. Of the participants, 464 (78.5%) were female and 127 (21.5%) were male, with ages ranging from 18 to 40 years. Data were collected using the Cognitive Emotion Regulation Scale, the Mindfulness Scale, and the Meaning in Life Scale. The data were analyzed using SPSS 20.0. Since the data met the assumption of normality, Pearson correlation analysis was conducted to examine the relationships among the study variables. The findings indicated a significant positive relationship between adaptive cognitive emotion regulation strategies and mindfulness, whereas maladaptive strategies and acceptance were negatively associated with mindfulness. No significant relationship was found between rumination and mindfulness. Adaptive cognitive emotion regulation strategies were positively associated with the presence of meaning, while maladaptive strategies and acceptance were negatively associated with the presence of meaning. No significant relationship was found between blaming others, rumination, and the presence of meaning. In addition, both adaptive and maladaptive cognitive emotion regulation strategies were positively related to the search for meaning in life, whereas no significant relationship was observed between positive refocusing, blaming others, and the search for meaning. Finally, mindfulness was positively associated with the presence of meaning, whereas no significant relationship was found between mindfulness and the search for meaning.

Keywords: Cognitive Emotion Regulation, Mindfulness, Meaning of Life

Üniversite Öğrencilerinde Bilişsel Duygu Düzenleme Stratejileri, Bilinçli Farkındalık Düzeyleri ve Yaşamın Anlamının İncelenmesi

Öz

Bu araştırma üniversite öğrencilerinde bilişsel duygu düzenleme stratejileri, bilinçli farkındalık düzeyleri ve yaşamın anlamı arasındaki ilişkilerin incelenmesini amaçlamaktadır. Araştırmanın çalışma grubunu, 2020–2021 eğitim-öğretim yılında Sakarya ve Düzce Üniversitelerinde öğrenim

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gören ve basit rastgele örnekleme yöntemiyle seçilen 591 üniversite öğrencisi oluşturmaktadır. Çalışma grubundaki öğrencilerin 464'ü (%78,5) kadın, 127'si (%21,5) erkek olup yaşları 18 ile 40 arasında değişmektedir. Araştırmanın verileri bilişsel duygu düzenleme ölçeği, bilinçli farkındalık ölçeği ve yaşamda anlam ölçeği ile toplanmıştır. Toplanan verilerin analizi SPSS 20.0 paket programı ile yapılmıştır. Verilerin normal dağılım göstermesi sonucunda ilişkileri ortaya koymak için pearson korelasyon analizi uygulanmıştır. Veri analizi sonuçlarına göre bilişsel duygu düzenlemenin uyumlu stratejileri ile bilinçli farkındalık puanları arasında pozitif yönde; uyumsuz stratejileri ve kabul etme ile bilinçli farkındalık puanları arasında negatif yönde anlamlı bir ilişki tespit edilmiştir. Düşünceye odaklanma ile bilinçli farkındalık puanları arasında anlamlı bir ilişki bulunmamıştır. Bilişsel duygu düzenlemenin uyumlu stratejileri ile anlamın varlığı arasında pozitif yönde, uyumsuz stratejileri ve kabul etme ile anlamın varlığı arasında negatif yönde anlamlı bir ilişki ortaya konulmuştur. Diğerlerini suçlama ve düşünceye odaklanma ile anlamın varlığı arasında anlamlı bir ilişki tespit edilmemiştir. Bilişsel duygu düzenlemenin uyumlu stratejileri ve uyumsuz stratejileri ile yaşamda anlam arayışı arasında pozitif yönde anlamlı bir ilişki bulunurken pozitif tekrar odaklanma ve diğerlerini suçlama ile anlam arayışı arasında herhangi bir ilişki bulunmamıştır. Bilinçli farkındalık ile anlamın varlığı arasında pozitif yönde anlamlı bir ilişki tespit edilirken anlam arayışı arasında anlamlı bir ilişki ortaya konulmamıştır.

Anahtar Kelimeler: Bilişsel Duygu Düzenleme Stratejileri, Bilinçli Farkındalık, Yaşamın Anlamı

Introduction

Individuals learn to recognize their emotions and distinguish which emotions are constructive or destructive through their social interactions and life experiences. In fact, the ways of regulating emotions have become increasingly important in the literature, based on the view that people are beings who are aware of their emotions, can control their emotions, actively reveal and produce them (Mauss, Bunge & Gross, 2007). Emotion regulation, in general, is controlling the emotions that prevent an individual from achieving goals and adapting to social life, reducing the impact of emotions, and increasing well-being (Koole, Van Dillen & Sheppes, 2010). Garnefski, Kraaij, & Spinhoven (2001) studied the conscious and cognitive dimensions, noting that emotion regulation is handled in different ways. According to Joormann, Yoon, & Siemer (2010), cognitive processes are the primary pathway for regulating emotions, determining whether an emotion will be present and which emotion will be experienced. In this context, cognitive emotion regulation strategies, which will be discussed in the current study, are defined as cognitive processes used to cope with and regulate the emotion that arises as a result of an event (Garnefski & Colleagues, 2001). Cognitive emotion regulation strategies constitute the cognitive dimension of coping (Garnefski & Colleagues, 2001) and are expressed as the thoughts and mental processes used in the emergence and regulation of emotions (Onat & Otrar, 2010). When studies on cognitive emotion regulation (Garnefski & Kraaij, 2006; Garnefski & Kraaij, 2007) are examined, it is seen that there are nine different strategies of cognitive emotion regulation and these strategies are divided into adaptive and maladaptive coping strategies. Adaptive coping strategies include acceptance, refocusing on the plan, positive refocusing, positive reappraisal, and putting things into perspective; maladaptive coping strategies include self-blame, blaming others, catastrophizing, and rumination (Garnefski et al. 2001). Cognitive emotion regulation strategies help individuals reduce the intensity of their emotions, achieve emotional balance, and develop coping skills (Thompson, 1994). Therefore, cognitive emotion regulation and mindfulness are complementary processes in both managing emotions and increasing psychological flexibility (Garland, 2007).

In addition, both mindfulness and cognitive emotion regulation may contribute to the development of meaning in life. Individuals who are aware of their present experiences and able to regulate their emotions effectively may be more capable of interpreting life events constructively, pursuing meaningful goals, and maintaining a sense of purpose. Therefore, mindfulness and cognitive emotion regulation are expected to be associated with both the presence of meaning and the search for meaning in life.

Cognitive emotion regulation occurs in three stages: noticing, accepting, and controlling emotions (Gross & John, 2003). These stages overlap with the concept of mindfulness, which emphasizes accepting emotions experienced in the moment and focusing on the present moment by controlling negative emotions stemming from past experiences. Mindfulness is defined as the nonjudgmental acceptance of one's thoughts and feelings by focusing on the present moment rather than the past or future (Brown & Ryan,

2003). This approach allows individuals to distance themselves from automatic thoughts and behaviors and regulate their emotions more effectively (Deniz, Erus, & Büyükcebeci, 2017). Therefore, cognitive emotion regulation and mindfulness are complementary processes in both managing emotions and increasing psychological flexibility (Garland, 2007).

Individuals with higher levels of mindfulness are more likely to observe their emotions without judgment and respond to emotional experiences consciously rather than automatically (Garland, 2007). Therefore, mindfulness may facilitate the use of adaptive cognitive emotion regulation strategies, such as positive reappraisal and planning, while reducing maladaptive strategies, such as rumination and catastrophizing. In this respect, mindfulness can be considered an important factor supporting effective cognitive emotion regulation.

The university period stands out as a developmental stage in which individuals' search for meaning in their lives intensifies (Erikson, 1968). Meaning in life is defined as individuals integrating their lives with goals and objectives and giving value and direction to their lives (Steger, Oishi, & Kashdan, 2009). The search for meaning is a process that motivates individuals, facilitates their coping with challenges, and enhances their well-being (Bonebright, Clay, & Ankenmann, 2000; Schnell, 2009; Kleftras & Psarra, 2012). Conversely, it has been reported that lack of meaning in life reduces individuals' motivation and negatively affects their psychological adjustment (Şahin et. al., 2009). In addition to cognitive forms of emotion regulation, it can be thought that living with awareness and having a purpose in life will develop individuals and facilitate the adaptation process.

In summary, during university years, it is crucial for students to utilize emotion regulation processes, live mindfully, understand, and have goals to have a say in their own lives and enhance their well-being. In this context, we aimed to investigate the relationship between cognitive emotion regulation strategies, living in the moment and mindfully, and finding meaning in life. Examining cognitive emotion regulation strategies, mindfulness, and the meaning of life together is important in terms of shedding light on programs to be implemented during the university period to adapt to the process, to adapt to the environment, to reduce the damaging effects of emotion by gaining control over thoughts, to gain awareness of the moment, and to have meaning by creating goals in life.

Previous studies have examined the relationships between cognitive emotion regulation and mindfulness, as well as between mindfulness and meaning in life. Similarly, the associations between emotion regulation processes and meaning in life have received increasing attention in the literature. However, studies investigating cognitive emotion regulation strategies, mindfulness, and meaning in life within a single conceptual framework remain limited, particularly among university students. Therefore, examining these variables together may contribute to a better understanding of how emotional and cognitive processes are associated with meaning-making during emerging adulthood and may help fill an important gap in the existing literature.

In this context, the current study aimed to answer the question, "Is there a statistically significant relationship between cognitive emotion regulation strategies, conscious awareness levels and the meaning of life among university students?"

H1. There is a statistically significant relationship between cognitive emotion regulation strategies and mindfulness levels among university students.

H2. There is a statistically significant relationship between cognitive emotion regulation strategies and the meaning of life (the presence of meaning in life and the search for meaning in life) among university students.

H3. There is a statistically significant relationship between mindfulness levels and the meaning of life (the presence of meaning in life and the search for meaning in life) among university students.

Method

Research Design

This study was conducted to examine the relationship between cognitive emotion regulation strategies, mindfulness levels, and meaning in life among university students. The study used a relational screening model, one of the general screening models. A relational screening model is a research design used to determine the relationship between two or more variables and the level of this relationship (Karasar, 2010).

Universe-Sample

Participation in the study was voluntary and consisted of university students studying at Sakarya University and Düzce University during the 2020-2021 academic year. The study sample was selected using a simple random sampling method. Each participant in the target population had an equal chance of being included in the study. Inclusion criteria were: (a) being a registered undergraduate student, (b) being 18 years of age or older, (c) willingness to participate voluntarily, and (d) completing all measurement instruments fully. Of the students in the study group, 464 (78.5%) were female and 127 (21.5%) were male, and their ages ranged from 18 to 40.

Data Collection Tools

The study relied on voluntary student participation, and data were collected using the Cognitive Emotion Regulation Scale, Mindful Awareness Scale, and Meaning in Life Scale. Detailed information about the data collection tools used is provided below.

Cognitive emotion regulation scale.

The Cognitive Emotion Regulation Scale was developed by Garnefski and colleagues (2001) and adapted into Turkish by Onat & Otrar (2010). The scale consists of nine subscales, each with four items, and a total of 36 items. The sub-dimensions were determined as acceptance, refocusing on planning, positive refocusing, positive reexamination, putting into

perspective, self-blame, other-blame, catastrophizing, and thought focus. Higher scores on the five-point Likert-type scale indicate more frequent use of the relevant strategy. In the Turkish adaptation study, the reliability coefficient of the scale (Cronbach's $\alpha = .784$) was found to be acceptable, and item-total correlations ranged from .188 to .468 (Onat & Otrar, 2010). In the present study, the Cronbach's alpha coefficients were calculated as .589 for Acceptance, .755 for Refocusing on Planning, .481 for Positive Refocusing, .731 for Positive Reappraisal, .590 for Putting Things into Perspective, .678 for Self-Blame, .727 for Other-Blame, .746 for Catastrophizing, and .700 for Rumination.

Mindfulness scale .

The Mindfulness Scale was developed by Brown & Ryan (2003) and adapted into Turkish by Özyeşil, Arslan, Kesici, & Deniz (2011). The scale consists of 15 items and has a unidimensional structure. High scores on the six-point Likert-type scale indicate a high level of mindfulness. The internal consistency coefficient of the scale was found to be Cronbach's $\alpha = .80$, and the test-retest correlation was .86. In the present study, the Cronbach's alpha coefficient of the scale was calculated as .84. Total item correlations were above .40, and significant relationships were identified in criterion-related validity analyses (Özyeşil et al., 2011).

Meaning in life scale.

The Meaning in Life Scale was developed by Steger, Frazier, Oishi, & Kaler (2006) and adapted into Turkish by Demirbaş (2010). The scale consists of two subscales, each with five items, and a total of 10 items. The subscales are identified as the presence of meaning in life and the search for meaning; item 9 is reverse scored. Higher scores on the seven-point Likert-type scale indicate higher levels of engagement in the relevant subscale. Internal consistency coefficients for the scale were found to be 0.86 for the total score, 0.87 for the existence of meaning in life subscale, and 0.88 for the search for meaning subscale (Demirbaş, 2010). In the present study, the Cronbach's alpha coefficients were calculated as .484 for the Presence of Meaning subscale and .892 for the Search for Meaning subscale.

Data Collection and Preparation Process for Analysis

Data were collected face-to-face from 591 students studying at Sakarya and Düzce Universities. The research data were analyzed using the SPSS 20.0 package program. Prior to analysis, the dataset was examined for missing and incomplete responses. As a result, 33 cases with incomplete or inconsistent data were excluded from the analysis. Kurtosis and skewness values were used to determine whether the data exhibited a normal distribution. As a result of the normal distribution of the data, Pearson correlation analysis was applied to determine the relationships between cognitive emotion regulation strategies, conscious awareness levels and meaning in life in university students.

Ethical Considerations

Sakarya Üniversitesi Sosyal ve Beşeri Bilimler Etik Kurulu'ndan etik onay alınmıştır
(Karar No: 13, Tarih: 02.09.2020).

Results

The conformity of the data to a normal distribution was assessed by examining the kurtosis and skewness values. The results for these values are presented in Table 1.

Table 1. Kurtosis and skewness results for the sub-dimensions of cognitive emotion regulation, conscious awareness, and meaning in life

Variables	Skewness	Kurtosis
Acceptance	-.260	-.092
Refocusing on the plan	-.308	-.323
Positive refocusing	.008	-.197
Positive reappraisal	-.279	-.483
Putting things into perspective	-.206	-.148
Self-blame	.329	.108
Blaming others	.029	-.198
Catastrophizing	.336	-.439
Rumination	-.179	-.606
Mindfulness	-.368	-.107
The presence of meaning in life	-.423	-.477
The search for meaning in life	-.760	.311

When Table 1 is examined, it is seen that the skewness values of the data vary between -.760 and .336, and the kurtosis values vary between -.606 and .311. Kurtosis and skewness values being within the range of ± 1.5 indicate that there are no excessive deviations from normality (Tabachnick & Fidell, 2015). In this regard, it can be said that the research data exhibited a normal distribution. Pearson correlation analysis was applied to determine the relationships between students' cognitive emotion regulation strategies, mindfulness, and meaning in life scores. Correlation results for cognitive emotion regulation strategies and mindfulness scores are presented in Table 2.

Table 2. Correlation analysis results of the relationship between cognitive emotion regulation strategies and mindfulness scores

Variables	1	2	3	4	5	6	7	8	9	10
Acceptance (1)	1									
Refocusing on the plan (2)	.040	1								
Positive	.031	.362**	1							

refocusing (3)										
Positive reappraisal (4)	.031	.656**	.474**	1						
Putting things into perspective (5)	.134**	.293**	.410**	.463**	1					
Self-blame (6)	.345**	-.128**	-.205**	-.201**	-.017	1				
Blaming others (7)	.128**	-.077	.050	-.116**	.115**	.079	1			
Catastrophizing (8)	.215**	-.311**	-.182**	-.341**	-.071	.356**	.349**	1		
Rumination (9)	.244**	.246**	-.093*	.071	.038	.316**	.109**	.138**	1	
Mindfulness (10)	-.165**	.152**	.123**	.180**	.114**	-.229**	-.111**	-.191**	-.004	1
$\bar{x}$	13.28	15.92	12.54	15.39	13.69	12.34	10.76	9.66	15.86	58.29
SS	2.64	2.52	2.60	2.71	2.62	2.60	2.70	3.16	2.50	12.46

** $p < .01$

When Table 2 is examined, it is seen that there are positive, low-level significant relationships between the students' mindfulness scores and the scores of cognitive emotion regulation strategies such as refocusing on planning ($r = .152$, $p < .01$), positive refocusing ($r = .123$, $p < .01$), positive reappraisal ($r = .180$, $p < .01$), and putting things into perspective ($r = .114$, $p < .01$). However, negative, low-level significant correlations were found between acceptance ($r = -.165$, $p < .01$), self-blame ($r = -.229$, $p < .01$), blaming others ($r = -.111$, $p < .01$), and catastrophizing ($r = -.191$, $p < .01$) scores and mindfulness scores. No significant relationship was found between rumination ($r = -.004$, $p > 0.05$) and mindfulness. Correlation analysis results for cognitive emotion regulation strategies and the sub-dimensions of meaning in life are presented in Table 3.

Table 3. Correlation analysis results of the relationship between cognitive emotion regulation strategies and meaning in life scores

Variable	1	2	3	4	5	6	7	8	9	10	11
1	1										
2	.040	1									
3	.031	.362**	1								
4	.031	.656**	.474**	1							
5	.134**	.293**	.410**	.463**	1						
6	.345**	-.128**	-.205**	-.201**	-.017	1					
7	.128**	-.077	.050	-.116**	.115**	.079	1				

				.116**							
8	.215**	-.311**	-.182**	-	-.071	.356**	.349**	1			
				.341**							
9	.244**	.246**	-.093*	.071	.038	.316**	.109**	.138**	1		
10	-.121**	.389**	.273**	.420**	.175**	-.222**	-.025	-.282**	-.047	1	
11	.166**	.093*	.062	.110**	.144**	.110**	.054	.103*	.256**	-.071	1

Note. 1 = Acceptance; 2 = Refocusing on the Plan; 3 = Positive Refocusing; 4 = Positive Reappraisal; 5 = Putting into Perspective; 6 = Self-Blame; 7 = Blaming Others; 8 = Catastrophizing; 9 = Rumination; 10 = Presence of Meaning in Life; 11 = Search for Meaning in Life. ** $p < .01$, * $p < .05$

Table 4. Descriptive Statistics of Study Variables

Variable	X	SS
Acceptance	13.28	2.64
Refocusing on the plan	15.92	2.52
Positive refocusing	12.54	2.60
Positive reappraisal	15.39	2.71
Putting things into perspective	13.69	2.62
Self-blame	12.34	2.60
Blaming others	10.76	2.70
Catastrophizing	9.66	3.16
Rumination	15.86	2.50
Presence of meaning in life	25.09	6.42
Search for meaning in life	25.06	6.72

An examination of Table 3 reveals that the scores for refocusing on planning ($r = .389$, $p < .01$) and positive reappraisal ($r = .420$, $p < .01$), which are cognitive emotion regulation strategies, exhibit positive, moderately significant relationships with the presence of meaning in life, a sub-dimension of meaning in life. Positive refocusing ($r = .273$, $p < .01$) and putting things into perspective ($r = .175$, $p < .01$) scores were found to have positive, low-level significant relationships with the presence of meaning in life. Negative, low-level significant relationships were found between the strategies of acceptance ($r = -.121$, $p < 0.01$), self-blame ($r = -.222$, $p < 0.01$), and catastrophizing ($r = -.282$, $p < 0.01$) and the presence of meaning in life. No significant relationships were found between the strategies of blaming others ($r = -.025$, $p > 0.05$) and rumination ($r = -.047$, $p > 0.05$) and the presence of meaning in life.

Positive, low-level significant relationships were found between the scores of the cognitive emotion regulation strategies acceptance ($r = .166$, $p < .01$), refocusing on planning ($r = .093$, $p < .05$), positive reappraisal ($r = .110$, $p < .01$), putting things in perspective ($r = .144$, $p < .01$), self-blame ($r = .110$, $p < .01$), catastrophizing ($r = .103$, $p < .05$), and rumination ($r =$

.256, $p < .01$) and the search for meaning, a sub-dimension of meaning in life. However, no significant relationship was found between the strategies of positive refocusing ($r = .062$, $p > .05$) and blaming others ($r = .054$, $p > .05$) and the search for meaning. Descriptive statistics for the study variables are presented in Table 4. The correlation analysis results for the sub-dimensions of mindfulness and meaning in life are presented in Table 5.

Table 5. Correlation analysis results of the relationship between conscious awareness and meaning in life scores

Variables	1	2	3
Mindfulness	1		
The presence of meaning in life	.277**	1	
The search for meaning in life	-.024	-.071	1
$\bar{x}$	58.29	25.09	25.06
SS	12.46	6.42	6.72

** $p < .01$

When Table 5 is examined, a positive, low-level significant relationship was found between mindfulness and the presence of meaning in life ($r = .277$, $p < .01$), a sub-dimension of meaning in life. However, no significant relationship was found between mindfulness and the search for meaning ($r = -.024$, $p > .05$).

Conclusion, Discussion and Suggestions

In the present study, when the relationships between cognitive emotion regulation strategies and mindfulness were examined in university students, weak positive relationships were found between mindfulness and adaptive strategies such as refocusing on the plan, positive refocusing, positive reappraisal, and putting things into perspective. These findings suggest that students develop present-moment awareness by reframing negative experiences (Garnefski et al., 2001; Turan, 2020). The fact that the strategy of refocusing on planning fosters personal development and enhances well-being (Carver, Scheier, & Weintraub, 1989) and that mindfulness focuses attention on the present moment (Bishop et al., 2004) may contribute to this relationship. The present findings are consistent with previous research emphasizing the role of mindfulness in adaptive cognitive reappraisal processes. Garland et al., (2009) suggested that mindfulness facilitates positive reappraisal by enabling individuals to reinterpret stressful experiences from alternative and more adaptive perspectives. Similarly, a meta-analysis conducted by Zhou et al., (2023) revealed a positive association between mindfulness and cognitive reappraisal. These findings support the view that mindfulness is related to adaptive cognitive emotion regulation strategies and may contribute to more constructive responses to stressful life events.

On the other hand, weak negative correlations were found between mindfulness and maladaptive strategies such as acceptance, self-blame, other-blame, and catastrophizing.

These results suggest that higher mindfulness is associated with a reduced tendency to engage in maladaptive cognitive patterns, such as self-criticism and catastrophic thinking (Ülev, 2014; Jimenez, Niles, & Park, 2010; Shapiro, Schwartz, & Bonner, 1998; Gedik, 2018; Garland, 2007). The present findings are consistent with previous studies demonstrating that mindfulness is negatively associated with maladaptive cognitive and emotional processes. For example, Desrosiers et al. (2013) reported that mindfulness was associated with lower levels of maladaptive emotion regulation strategies, including rumination and worry. Similarly, Tomlinson et al. (2018), in a meta-analysis, found that mindfulness was negatively related to repetitive negative thinking processes. These findings support the view that mindfulness may help individuals disengage from self-critical and catastrophic thought patterns and adopt more adaptive ways of responding to stressful experiences.

The study found no significant relationship between rumination and mindfulness. This may be explained by the fact that mindfulness directs attention to present-moment experiences rather than repetitive thought patterns (Kabat-Zinn, 2003). Although previous studies have generally reported negative associations between mindfulness and rumination, the strength of this relationship appears to vary across samples and study contexts. For example, Desrosiers et al. (2013) found that mindfulness was associated with lower levels of maladaptive emotion regulation strategies, including rumination. Similarly, Tomlinson et al. (2018) reported a negative relationship between dispositional mindfulness and repetitive negative thinking. In contrast to these findings, the present study did not reveal a significant association between mindfulness and rumination, suggesting that the relationship may be influenced by individual, developmental, or contextual factors among university students.

Overall, these findings suggest that cognitive emotion regulation strategies and mindfulness are interconnected through processes of cognitive flexibility and present-moment awareness. These results are consistent with previous research (Garland, 2007; Garland et al., 2009; Hayes-Skelton & Graham, 2012; Grecucci et al., 2015; Turan, 2020) and may reflect the role of cognitive reappraisal and attentional control mechanisms in the relationship between these constructs.

When examining the relationships between cognitive emotion regulation strategies and the sub-dimensions of meaning in life, adaptive strategies were positively associated with the presence of meaning, whereas maladaptive strategies were negatively associated with it. These findings are consistent with previous research suggesting that adaptive emotion regulation processes contribute to the development and maintenance of meaning in life. For example, Park and Yoo (2017) reported positive associations between meaning in life and emotion regulation. Similarly, Cox and McAdams (2014) found that meaning-making processes predicted more adaptive emotion regulation over time. A weak negative relationship was found between the acceptance strategy and the presence of meaning, suggesting that acceptance may sometimes be associated with reduced engagement in meaning-making processes. Similarly, self-blame and catastrophizing strategies were negatively related to the presence of meaning (Cho, Lee, Lee, Bae, & Jeong, 2014; Ören Rıza,

2016; Uyar, 2019). Overall, these findings suggest that adaptive cognitive emotion regulation strategies may facilitate the experience of meaning in life, whereas maladaptive strategies may undermine it.

A moderate positive relationship was found between refocusing on the plan and the presence of meaning. This finding is consistent with previous research indicating that developing action plans may facilitate meaning-making processes (Jim, Richardson, Golden-Kreutz, & Andersen, 2006). Positive reappraisal was also positively associated with the presence of meaning, suggesting that cognitive reframing of negative experiences may enhance individuals' sense of purpose (Schroever, Kraaij, & Garnefski, 2008; Haga, Kraft, & Corby, 2009). In addition, putting things into perspective was positively related to the presence of meaning, indicating that alternative evaluations of negative events may support life goals (Ören Rıza, 2016).

No significant relationships were found between blaming others or rumination and the presence of meaning. This finding differs from some previous studies suggesting that maladaptive cognitive processes, particularly rumination, are associated with lower levels of meaning in life. For example, Park and Yoo (2017) reported that meaning in life was negatively associated with maladaptive emotional and cognitive processes, whereas Cox and McAdams (2014) emphasized the importance of constructive meaning-making processes for psychological adjustment. In contrast, the present findings suggest that blaming others and rumination may not be directly related to the presence of meaning among university students. These inconsistencies may be explained by differences in sample characteristics, cultural context, or the multidimensional nature of meaning in life.

Regarding the search for meaning in life, weak positive relationships were found between acceptance and refocusing on the plan. These findings suggest that both self-acceptance and goal-oriented cognitive strategies may contribute to meaning-seeking processes (Cho et al., 2014; Jim et al., 2006; Carver et al., 1989). The present findings are consistent with previous research indicating that adaptive, problem-focused coping strategies are associated with greater meaning-making and goal-directed functioning. For example, Carver, Scheier, and Weintraub (1989) emphasized that planning-oriented coping is linked to more effective goal pursuit and psychological adjustment, which may facilitate meaning-related processes. Similarly, acceptance-based approaches have been shown to support adaptive adjustment and may indirectly contribute to meaning construction by reducing resistance to internal experiences.

Positive reappraisal was weakly and positively associated with the search for meaning, suggesting that cognitive reframing of events may support meaning-making processes (Garland et al., 2015). Similarly, putting things into perspective was positively related to the search for meaning, indicating that alternative evaluations of experiences may facilitate the exploration of new life directions (Doğan, 2006).

A weak positive relationship was also observed between self-blame and the search for meaning, suggesting that self-reflective processes may sometimes contribute to meaning exploration, despite their negative emotional associations (Watson, Clark, & Tellegen, 1988). In contrast, no significant relationships were found between positive refocusing or blaming others and the search for meaning, which may reflect the subjective and individually varying nature of meaning-seeking processes (Steger & Kashdan, 2007; Steger et al., 2008).

Weak positive associations were found between catastrophizing, rumination, and the search for meaning, suggesting that negative cognitive engagement may occasionally contribute to meaning-making through reflection on adverse experiences and post-traumatic growth processes (Schulenberg et al., 2014; Şensoy, 2018).

Regarding mindfulness, a weak positive relationship was found with the presence of meaning in life, whereas no significant relationship was observed with the search for meaning. This finding suggests that mindfulness is more closely related to the experienced sense of meaning rather than the active pursuit of meaning.

From a theoretical perspective, mindfulness involves present-moment, nonjudgmental awareness, which may enhance clarity and integration of life experiences into a coherent sense of meaning. In contrast, the search for meaning is a future-oriented and motivational process, which may explain the lack of a direct association with mindfulness. Overall, these findings suggest that mindfulness is more strongly linked to the presence of meaning than to the search for meaning.

Suggestions

The study group for this study consists of university students. Future studies may extend the current findings by examining the relationships among cognitive emotion regulation, mindfulness, and meaning in life in different age groups and educational levels in order to enhance the generalizability of the results. In addition, longitudinal and experimental research designs are recommended to better understand the causal and developmental relationships between these variables. Furthermore, future research may investigate the potential effects of psychoeducational interventions aimed at improving cognitive emotion regulation and mindfulness skills on individuals' sense of meaning in life. In this context, intervention-based studies may provide valuable evidence regarding the effectiveness of such programs in enhancing psychological well-being.

References

- Allan, B. A., Bott, E. M., & Suh, H. (2005). Connecting mindfulness and meaning in life: Exploring the role of authenticity. *Mindfulness*, 6(5), 996–1003. <https://psycnet.apa.org/doi/10.1007/s12671-014-0341-z>
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science And Practice*, 10, 125-143. <https://psycnet.apa.org/doi/10.1093/clipsy.bpg015>
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Specia, M., Welting, D., & Devins, G. (2004). Mindfulness: a proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230-41. <https://psycnet.apa.org/doi/10.1093/clipsy.bph077>
- Bonebright, C. A., Clay, D. L., & Ankenmann, R. D. (2000). The relationship of workaholism with work–life conflict, life satisfaction, and purpose in life. *Journal of Counseling Psychology*, 47(4), 469–477. <https://psycnet.apa.org/doi/10.1037/0022-0167.47.4.469>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal Of Personality and Social Psychology*, 84(4), 822-848. <https://psycnet.apa.org/doi/10.1037/0022-3514.84.4.822>
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal Of Personality And Social Psychology*, 56(2), 267-283.
- Cho, E. H., Lee, D. G., Lee, J. H., Bae, B. H., & Jeong, S. M. (2014). Meaning in life and school adjustment: Testing the mediating effects of problem-focused coping and self-acceptance. *Procedia-Social and Behavioral Sciences*, 114, 777-781.
- Cox, K. S., & McAdams, D. P. (2014). Meaning making during high and low point life story episodes predicts emotion regulation two years later: How the past informs the future. *Journal of Research in Personality*, 50, 66–70
- Deniz, M. E., Erus, S. M., & Büyükcebeci, A. (2017). The mediating role of emotional intelligence in the relationship between mindfulness and psychological well-being. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 7(47), 17-31. <https://dergipark.org.tr/tr/pub/tpdrd/issue/42743/515880>.
- Demirbaş, N. (2010). *Meaning in life and ego-resilience* (Publication No. 265337) [Master's thesis, Hacettepe University]. Council of Higher Education Thesis Center.
- Desrosiers, A., Vine, V., Klemanski, D. H., & Nolen-Hoeksema, S. (2013). Mindfulness and emotion regulation in depression and anxiety: Common and distinct mechanisms of action. *Depression and Anxiety*, 30(7), 654–661.
- Doğan, T. (2006). Examining the well-being of university students. *Eğitim Fakültesi Dergisi*, 30(30), 120-129. <https://dergipark.org.tr/en/download/article-file/87665>.
- Ekşi, H., Sayın, M., & Liman, M. (2019). Examining the effect of authenticity on the meaning of life: The mediating role of purpose consciousness. *Uluslararası Sosyal Araştırmalar Dergisi*, 12(65), 795-803.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.
- Garland, E. L. (2007). The meaning of mindfulness: a second order cybernetics of stres, metacognition and coping. *Complementary Health Practice Review*, 12(1), 1-16. <https://psycnet.apa.org/doi/10.1177/1533210107301740>

- Garland, E. L., Farb, N. A., Goldin, P., & Fredrickson, B. L. (2015). Mindfulness broadens awareness and builds eudaimonic meaning: A process model of mindful positive emotion regulation. *Psychological Inquiry*, 26(4), 293-314. <https://psycnet.apa.org/doi/10.1080/1047840X.2015.1064294>
- Garland, E. L., Gaylord, S., & Park, J. (2009). The role of mindfulness positive reappraisal. *Explore*, 5(1), 37-44.
- Garnefski, N., & Kraaij, V. (2006). Relationships between cognitive emotion regulation strategies and depressive symptoms: a comparative study of five specific samples. *Personality And Individual Differences*, 40(8), 1659-1669.
- Garnefski, N., & Kraaij, V. (2007). The cognitive emotion regulation questionnaire psychometric features and prospective relationships with depression and anxiety in adults. *European Journal of Psychological Assessment*, 23(3), 141-149. <https://psycnet.apa.org/doi/10.1027/1015-5759.23.3.141>
- Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences*, 30, 1311-1327. [https://psycnet.apa.org/doi/10.1016/S0191-8869\(00\)00113-6](https://psycnet.apa.org/doi/10.1016/S0191-8869(00)00113-6)
- Gedik, G. (2018). Conscious awareness and self-acceptance. *Akademik Sosyal Araştırmalar Dergisi*, 6(71), 615-626.
- Grecucci, A., Pappaianni, E., Siugzdaite, R., Theuninck, A., & Job, R. (2015). Mindful emotion regulation: exploring the neurocognitive mechanisms behind mindfulness. *BioMed Research International*. <https://doi.org/10.1155/2015/670724>
- Gross, J. J. (2008). *Handbook Of Emotion Regulation*. Lewis, M., Haviland-Jones, J. M. ve Barrett, L. F. (Ed), *Emotion Regulation* (s.514-865). Newyork: The Guilford Press.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348-362.doi: <https://psycnet.apa.org/doi/10.1037/0022-3514.85.2.348>
- Haga, S. M., Kraft, P., & Corby, E. K. (2009). Emotion regulation: antecedents and well-being outcomes of cognitive reappraisal and expressive suppression in cross-cultural samples. *Journal of Happiness Studies*, 3, 271-291. <https://psycnet.apa.org/doi/10.1007/s10902-007-9080-3>
- Hayes-Skelton, S., & Graham, J. (2012). Decentering as a common link among mindfulness, cognitive reappraisal, and social anxiety. *Behavioral and Cognitive Psychotherapy*, 41(3), 317-328. <https://doi.org/10.1017/S1352465812000902>
- Jim, H. S., Richardson, S. A., Golden-Kreutz, D. M., & Andersen, B. L. (2006). Strategies used in coping with a cancer diagnosis predict meaning in life for survivors. *Health Psychology*, 25(6), 753-761. <https://psycnet.apa.org/doi/10.1037/0278-6133.25.6.753>
- Jimenez, S. S., Niles, B. R., & Park, C. L. (2010). A mindfulness model of affect regulation and depressive symptoms: Positive emotions mood regulation expectancies and self-acceptance as regulatory mechanism. *Personality and Individual Differences*, 49(6), 645-650. <https://psycnet.apa.org/doi/10.1016/j.paid.2010.05.041>
- Joormann, J., Yoon, K. L., & Siemer, M. (2010). *Cognition and emotion regulation*. A.M. Kring Ve D.M. Sloan (Ed), *Emotion regulation and psychopathology: a transdiagnostic approach to etiology and treatment* (s.174-203). Newyork: The Guilford Press.
- Kabat-Zinn, J. (2003). Mindfulness based interventions in context: Past, present and future. *Clinical Psychology Science Practice*, 10, 144-156. <https://psycnet.apa.org/doi/10.1093/clipsy.bpg016>
- Karasar, N. (2010). *Bilimsel araştırma yöntemi*. İstanbul: Nobel Yayın.

- Kleffaras, G., & Psarra, E. (2012). Meaning in life, psychological well-being and depressive symptomatology: a comparative study. *Psychology*, 3(4), 337-345. <https://psycnet.apa.org/doi/10.4236/psych.2012.34048>
- Koole, S. L. (2009). The psychology of emotion regulation: an integrative review. *Cognition ve Emotion*, 23(1), 4-41. <https://psycnet.apa.org/doi/10.1080/02699930802619031>
- Mauss, I. B., Bunge, S. A., & Gross, J. J. (2007). Automatic emotion regulation. *Social and Personality Psychology Compass*, 1(1), 146-167. <https://psycnet.apa.org/doi/10.1111/j.1751-9004.2007.00005.x>
- Manav, A. İ., Atik, D., Coşkun, E., & Bozkurt, A. (2020). Conscious awareness, coping attitudes and personal well-being in the elderly during the covid-19 pandemic. *Özgün Araştırma*, 15(1), 85-93. <https://doi.org/10.21763/tjfmpe.808383>
- Mcgregor, I., & Little, B. R. (1998). Personal projects, happiness and meaning: on doing well and being yourself. *Journal of Personality and Social Psychology*, 74 (2), 494-512. <https://psycnet.apa.org/doi/10.1037/0022-3514.74.2.494>
- Müzehher Şensoy, E. (2018). *Correlation among the meaning of life, rumination and anxiety level of the university student* (Publication No. 542046) [Master's thesis, Gazi University]. Council of Higher Education Thesis Center.
- Ncee. (1983). *A nation at risk: The imperative for educational reform*. Washington DC: Government Printing Office.
- Onat, O., & Otrar, M. (2010). Adaptation of the cognitive emotion regulation scale to Turkish: validity and reliability studies. *Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 31, 123-143. <https://dergipark.org.tr/tr/download/article-file/1656>
- Ören Rıza, S. (2016). *The relationship between cognitive emotion regulation strategies, psychological well being and marital satisfaction on married individual* (Publication No. 430579) [Master's thesis, Işık University]. Council of Higher Education Thesis Center.
- Özyeşil, Z., Arslan, C., Kesici, Ş., & Deniz, M. E. (2011). A study on adapting the Conscious Awareness Scale to Turkish. *Eğitim ve Bilim*, 36(160), 224-235. <http://eb.ted.org.tr/index.php/EB/article/view/697/271>.
- Park, C. J., & Yoo, S. K. (2017). Meaning in life and its relationships with intrinsic religiosity, deliberate rumination, and emotional regulation. *Journal of Psychology and Theology*, 45(2), 86-99.
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in science and practice of Eudaimonia. *Psychother Psychosom*, 83(1), 10-28. <https://doi.org/10.1159/000353263>
- Schnell, T. (2009). The sources of meaning and meaning in life questionnaire (some): relations to demographics and well-being. *The Journal of Positive Psychology*, 4(6), 483-499. <https://psycnet.apa.org/doi/10.1080/17439760903271074>
- Schroever, M., Kraaij, V., & Garnefski, N. (2008). How do cancer patients manage unattainable personal goals and regulate their emotions? *British Journal of Health Psychology*, 13(3), 551-562. <https://doi.org/10.1348/135910707X241497>
- Schulenberg, S. E., Drescher, C. F., & Baczwaski, B. J. (2014). *Perceived meaning and disaster mental health: Perceived meaning and disaster mental health: A role for logotherapy in clinical-disaster psychology. Meaning in Positive and Existential Psychology*, 251-267. https://psycnet.apa.org/doi/10.1007/978-1-4939-0308-5_15
- Shapiro, S. L., Schwartz, G. E., & Bonner, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of Behavioral Medicine*, 21(6), 581-599.

- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53(1), 80-93. <https://psycnet.apa.org/doi/10.1037/0022-0167.53.1.80>
- Steger, M., & Kashdan, T. B. (2007). Stability and specificity of meaning in life and life satisfaction over one year. *Journal of Happiness Studies*, 8, 161-179. <https://psycnet.apa.org/doi/10.1007/s10902-006-9011-8>
- Steger, M. F., Kashdan, T. B., Sullivan, B. A., & Lorentz, D. (2008). Understanding the search for meaning in life: personality, cognitive style and the dynamic between seeking and experiencing meaning. *Journal of Personality*, 76(2), 199-228. <https://psycnet.apa.org/doi/10.1111/j.1467-6494.2007.00484.x>
- Steger, M. F., Oishi, S., & Kashdan, T. B. (2009). Meaning in life across the life span: Levels and correlates of meaning in life from emerging adulthood to older adulthood. *The Journal of Positive Psychology*, 4(1), 43-52. <https://psycnet.apa.org/doi/10.1080/17439760802303127>
- Şahin, A. (2019). Relationships between mindfulness and life satisfaction and well-being among university students. *Üsküdar Üniversitesi Sosyal Bilimler Dergisi*, 8, 151-176.
- Şahin, İ., Şahin Fırat, N., Zoraloğlu, Y. R., & Açıkgöz, K. (2009). Problems of university students. *e-Journal of New World Sciences Academy Education Sciences*, 4(4), 1435-1449. <https://dergipark.org.tr/en/download/article-file/185896>.
- Tabachnick, B. G., & Fidell, L. S. (2015). *The use of multivariate statistics* (Translator: M. Baloglu). Ankara: Nobel Publications.
- Thompson, R. (1994). Emotion regulation: a theme in search of definition. *Monographs Of The Society For Research In Child Development*, 59(2-3), 25-52, 250-283. <https://psycnet.apa.org/doi/10.2307/1166137>
- Tomlinson, E. R., Yousaf, O., Vittersø, A. D., & Jones, L. (2018). Dispositional mindfulness and psychological health: A systematic review and meta-analysis. *Mindfulness*, 9(1), 23-43
- Turan, O. (2020). *The development and assessment of the program on cognitive emotion regulation strategies an awareness for children* (Publication No: 628169) [Master's thesis, Kocaeli University]. Council of Higher Education Thesis Center.
- Uyar, M. (2019). *The predictive role of attachment styles and cognitive emotion regulation on psychological well-being in emerging adulthood* (Publication No. 533876) [Master's thesis, Maltepe University]. Council of Higher Education Thesis Center.
- Ülev, E. (2014). *The relationship of mindfulness level and coping styles with depression, anxiety, and stress symptoms among university students* (Publication No. 365039) [Master's thesis, Hacettepe University]. Council of Higher Education Thesis Center.
- Zhou, S., Wu, Y., & Xu, X. (2023). Linking cognitive reappraisal and expressive suppression to mindfulness: A three-level meta-analysis. *International Journal of Environmental Research and Public Health*, 20(2), 1241. <https://doi.org/10.3390/ijerph20021241>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070. <https://psycnet.apa.org/doi/10.1037/0022-3514.54.6.1063>

Kaynakça

- Alves, H. ve Raposo, M. (2010). The influence of university image on student behaviour. *International Journal of Educational Management*, 24(1), 73-85.
- Ankan, N., Ayvaci E. ve Selçuk, M. (2017). *Kurumsal iletişim stratejisi*. Ankara: Anı Yayıncılık.
- Aydoğan, İ. (2016). Bir eğitim aracı olarak modernizm ve Müslümanların açmazı. *Kırıkkale Üniversitesi Sosyal Bilimler Dergisi*, 6(2), 1-9.
- Balay, R. (2004). Küreselleşme, bilgi toplumu ve eğitim. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 37(2), 61-82.
- Brown, R. M. ve Mazzarol, T. W. (2016). *Sınav yoluyla öğrenme yöntemi ve örnek uygulamaları* (Çev: M. Akay ve İ. Şan). Ankara: Nobel Yayıncılık.
- Cerit, Y. (2006). Eğitim fakültesi öğrencilerinin üniversitenin örgütsel imaj düzeyine ilişkin algıları. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 12(3), 343-365.
- Comte, A. (2001). *Pozitif felsefe kursları* (Çev: E. Ataçay). İstanbul: Sosyal Yayınlar.
- Creswell, J. W. ve Poth, C. N. (2017). *Qualitative inquiry and research design*. New York: Sage Publications.
- Can, N. (Edt.) (2013). *Kuram ve uygulamada eğitim yönetimi*. Ankara: Pegem Akademi Yayıncılık.
- Erdem, M. ve Kılıç, G. (2012). Üniversite öğrencilerinin algılarına göre Yüzüncü Yıl Üniversitesinin örgütsel imajı. 7. Ulusal Eğitim Yönetimi Kongresinde sunulan bildiri. İnönü Üniversitesi, Malatya, Türkiye, 24-26 Mayıs.
- Memduhoğlu, H. B. ve Karataş, E. (2017). Öğretmenlere göre çalıştıkları okullar ne kadar etkili? *Eğitim Bilimleri Araştırmaları Dergisi*, 7(1), 65-85.
- Muijs, D. (2006). New directions for school effectiveness research: Towards school effectiveness without schools. *Journal of Educational Change*, 7(3), 141-160. doi: <http://dx.doi.org/10.1007/s10833-006-0002-7>
- Özden, Y. (2008). *Eğitimde yeni değerler* (6. baskı). Ankara: Pegem Akademi Yayıncılık.
- Paden, N. ve Stell, R. (2006). *School-family relations in context: parent and teacher perceptions of parent involvement* (Unpublished Doctoral Dissertation). Western Michigan University, Kalamazoo, Michigan.
- Pelit, A. (2013). *Okul yöneticilerinin yetiştirilmesine ve atanmasına ilişkin benimsenen modellerin karşılaştırılması* (Yayınlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Şişman, M. (2007). *Örgütler ve kültürler*. Ankara: Pegem Akademi Yayıncılık.
- Taş, A., Karataş, E. ve Küçükçene, M. (2017). Üniversite öğrencilerinin örgütsel imaj algıları. *Kırşehir Eğitim Fakültesi Dergisi*, 18(2), 79-99.
- Türk Dil Kurumu (2016). *Türkçe sözlük*. Ankara: Türk Dil Kurumu Yayını.
- Yıldırım, A. ve Şimşek, H. (2016). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.
- Yılmaz, K. (2016). Türkiye'de eğitim yönetimi alanındaki batı etkisi üzerine bir değerlendirme. İçinde K. Yılmaz (Edt.), *Eleştirel eğitim yönetimi yazıları* (65-114). Ankara: Pegem Akademi Yayıncılık.
- Yükseköğretim Kurumu (2017). Yükseköğretim bilgi yönetim sistemi. <https://istatistik.yok.gov.tr/> Erişim Tarihi: 24.03.2017