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RESEARCH ARTICLE/ ARAŞTIRMA YAZISI

Investigation of the Relationship Between Psychological Flexibility, Emotion Regulation Skills and Depression Symptoms in Adult Individuals

Yetişkin Bireylerde Psikolojik Esneklik, Duygu Düzenleme Becerileri ve Depresyon Belirtileri Arasındaki İlişkinin İncelenmesi

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Abstract:

The main purpose of this study is to examine the relationship between psychological flexibility, emotion regulation skills, and depression symptoms in adult individuals. The relational screening model was preferred in the study. The study population consisted of individuals residing in the Turkish Republic of Northern Cyprus (TRNC). The study sample consisted of 400 participants aged 18 and over, selected using indiscriminate sampling. The Socio-Demographic Information Form, Psychological Flexibility Scale, Difficulties in Emotion Regulation Scale, and Beck Depression Inventory were used as data-collection tools in this study. The research findings revealed a significant negative relationship between psychological flexibility and difficulties in emotion regulation. Negative and significant relationships were found between psychological flexibility and the sub-dimensions of difficulties in emotion regulation, namely openness, impulse, strategies, and non-acceptance. In addition, negative and significant relationships were found between difficulties in emotion regulation and the sub-dimensions of psychological flexibility: values , behavior in line with values, being in the moment, acceptance, contextual self, and separation. These relationships reveal that as psychological flexibility increases, difficulty in emotion regulation decreases. A negative and significant relationship was also found between psychological flexibility and depression. Negative and significant relationships were found between depression and the sub-dimensions of psychological flexibility, which are values and behavior in line with values, being in the moment, acceptance, contextual self, and separation. These results show that as psychological flexibility increases, depression symptoms decrease. Based on the research results, it is recommended that interventions aimed at increasing psychological flexibility be disseminated to reduce individuals' depression symptoms and alleviate emotion regulation difficulties. It is important to actively use such interventions in both individual and group therapies.

Keywords: Depression, Emotion regulation skills, Psychological flexibility.

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Öz:

Bu araştırmanın temel amacı, yetişkin bireylerde psikolojik esneklik, duygu düzenleme becerileri ve depresyon belirtileri arasındaki ilişkinin incelenmesidir. Araştırmada ilişkisel tarama modeli tercih edilmiştir. Araştırmanın evrenini Kuzey Kıbrıs Türk Cumhuriyeti'nde (KKTC) ikamet eden bireyler oluşturmuştur. Araştırmanın örneklemi, gelişigüzel örnekleme yöntemiyle belirlenen 18 yaş ve üzeri 400 katılımcıdan oluşmaktadır. Bu araştırmada veri toplama araçları olarak Sosyo-Demografik Bilgi Formu, Psikolojik Esneklik Ölçeği, Duygu Düzenleme Güçlüğü Ölçeği ve Beck Depresyon Envanteri kullanılmıştır. Araştırma bulgularında, psikolojik esneklik ile duygu düzenleme güçlüğü arasında negatif ve anlamlı bir ilişki bulunmuştur. Psikolojik esneklik ile duygu düzenleme güçlüğünün alt boyutları olan açıklık, dürtü, stratejiler ve kabul etmeme arasında negatif yönlü ve anlamlı ilişkiler tespit edilmiştir. Ayrıca duygu düzenleme güçlüğü ile psikolojik esnekliğin alt boyutları olan değerler ve değerler doğrultusunda davranış, anda olma, kabul, bağlamsal benlik ve ayrışma arasında negatif yönlü ve anlamlı ilişkiler bulunmuştur. Bu ilişkiler, psikolojik esneklik arttıkça, duygu düzenleme güçlüğünün azaldığını ortaya koymaktadır. Psikolojik esneklik ile depresyon arasında negatif ve anlamlı bir ilişki saptanmıştır. Depresyon ile psikolojik esnekliğin alt boyutları olan değerler ve değerler doğrultusunda davranış, anda olma, kabul, bağlamsal benlik ve ayrışma arasında negatif yönlü ve anlamlı ilişkiler bulunmuştur. Bu sonuçlar, psikolojik esneklik arttıkça depresyon belirtilerinin azaldığını göstermektedir. Araştırma sonuçlarına dayanarak, bireylerin depresyon belirtilerini azaltmak ve duygu düzenleme güçlüklerini hafifletmek amacıyla, psikolojik esnekliği artırmaya yönelik müdahalelerin yaygınlaştırılması önerilmektedir. Bu tür müdahalelerin hem bireysel hem de grup terapilerinde aktif olarak kullanılması önem arz etmektedir.

Anahtar Kelimeler: Depresyon, Duygu düzenleme becerileri, Psikolojik esneklik.

Introduction

Psychological flexibility is defined as an individual's capacity to adapt to the challenges and changes brought by life. This concept encompasses individuals' ability to cope with stressful and challenging situations and reduces their negative effects on emotional well-being (Hayes et al., 2012). There is strong evidence in the literature that psychological flexibility plays an important role in reducing symptoms of depression (Kashdan and Rottenberg, 2010). Similarly, Buğa and colleagues (2018) state that psychological flexibility plays a critical role in both generating solutions and evaluating existing ones.

Emotion regulation skills, on the other hand, involve recognizing, understanding, and managing individuals' emotional responses. Effective emotion regulation protects psychological health by preventing emotional responses from being excessive or insufficient (Gross, 2015). Research shows that poor emotion regulation skills are positively associated with symptoms of depression (Aldao and Nolen-Hoeksema, 2012).

The interaction between psychological flexibility and emotion regulation skills holds significant importance in understanding and treating symptoms of depression. In this context, developing psychological flexibility and emotion regulation skills may contribute to the development of strategies to reduce symptoms of depression (Berking and Wupperman, 2012).

Recent studies have examined the relationship between psychological flexibility and emotion regulation skills with depression and emphasized that these factors are critically important in alleviating depressive symptoms. For example, a study conducted by Li and colleagues (2021) found that individuals with high psychological flexibility had lower symptoms of depression. Similarly, Shahar and colleagues (2010) stated that individuals who use effective emotion regulation strategies have lower levels of depression.

Depression is a mental disorder commonly seen worldwide and can seriously affect individuals' functioning (World Health Organization, 2020). Symptoms of depression typically follow a chronic course that lowers individuals' quality of life and leads to dysfunctions in social, occupational, and emotional domains (American Psychiatric Association, 2013). Research has shown that various factors play a role in the onset and maintenance of depression (Aldao et al., 2010).

Psychological flexibility is defined as an individual's capacity to adapt to stressful and challenging life events, and its protective effect on mental health is widely recognized in the literature (Kashdan and Rottenberg, 2010). Psychological flexibility involves individuals' abilities to manage their emotional and cognitive processes, and it has been shown that symptoms of depression are more prevalent among individuals with lower levels of these characteristics (Gloster et al., 2023).

Emotion regulation skills, on the other hand, encompass the processes of recognizing, understanding, and managing individuals' emotional responses. The use of effective emotion regulation strategies helps individuals maintain emotional balance and reduces the impact of negative emotional experiences (Gross, 2015). Inadequate emotion regulation skills, however, may lead to an increase in depressive symptoms (Joormann and Stanton, 2016).

It has been observed that, particularly among adults, the effects of psychological flexibility and emotion regulation skills on depressive symptoms have become a focal point of interest for researchers in recent years. In this context, various findings have been obtained indicating that the level of flexibility individuals demonstrate when faced with challenging life events and the emotion regulation strategies they employ can play a mitigating or exacerbating role in depressive symptoms (Fletcher and Sarkar, 2013). The literature shows that interventions aimed at improving emotion regulation skills are effective in reducing depressive symptoms (Gross, 2014). Similarly, interventions that enhance psychological flexibility have also been found to strengthen individuals' capacity to cope with depressive symptoms (Kashdan and Rottenberg, 2010). However, studies that examine the effects of these

two variables on depression in more detail are limited, and there is a need for a more comprehensive exploration of their interaction, especially among adults. In line with this, the research problem statement has been determined as follows: "Is there a relationship between psychological flexibility, emotion regulation, and depressive symptoms in adults?"

The limited number of studies conducted suggests that considering psychological flexibility and emotion regulation skills together plays a critical role in the treatment and prevention of depression. In this context, it is thought that a detailed examination of the effects of psychological flexibility and emotion regulation skills on depression may contribute to the development of new strategies both in clinical interventions and in the protection of mental health.

The main aim of this study is to examine the relationship between psychological flexibility, emotion regulation skills, and depressive symptoms among adults.

Method

Research Model

In this study, the relational survey model was used to examine the relationships among psychological flexibility, emotion regulation skills, and depression in adults. The relational survey model aims to determine the nature and degree of change by examining interactions among two or more variables (Karasar, 2012).

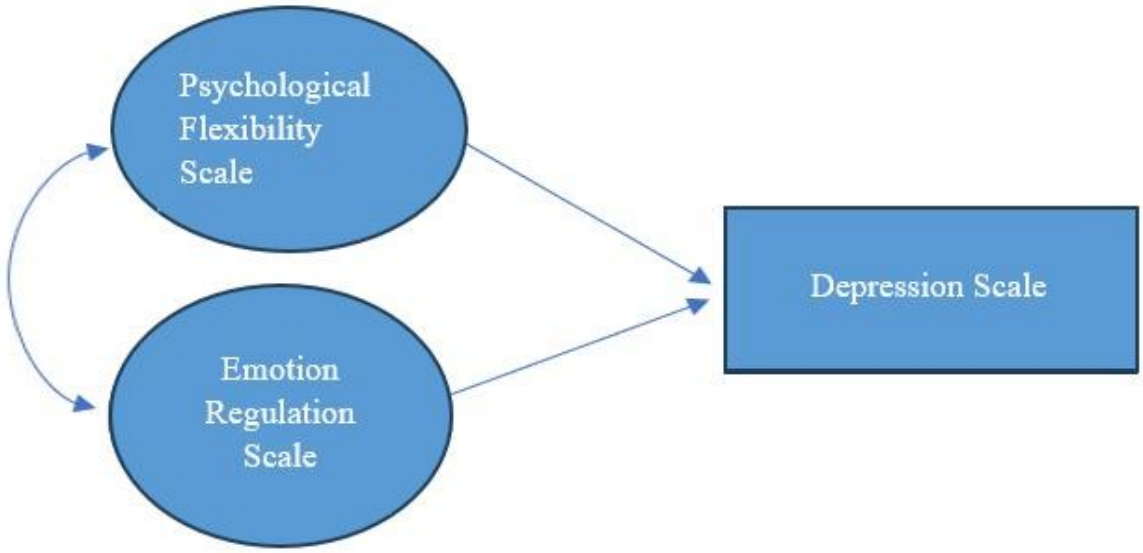

Figure 1. *Independent Variables: Psychological Flexibility Scale, Emotion Regulation Scale; Dependent Variable: Depression Scale*

Population and Sample

The study population consisted of individuals residing in the Turkish Republic of Northern Cyprus (TRNC). The sample consisted of 400 participants aged 18 and older, selected using simple random sampling (source). Simple random sampling is a sampling technique in which each unit in the population has an equal chance of being selected. Detailed information about the participants is presented in Table 1.

Table 1. *Distribution of Participants by Demographic (Personal) Characteristics*

		Number (n)	Percentage (%)
Gender	**Male**	162	40,5
	Female	238	59,5
Age	**18-24**	156	39,0
	25-65	244	61,0
Education Level	**High school or below**	85	21,3
	Bachelor's degree	113	28,2
	Master's degree or above	202	50,5
Marital Status	**Married**	146	36,5
	Single	254	63,5
Income Level	**Low**	118	29,5
	Medium	133	33,3
	High	149	37,3

Table 1 presents the distribution of the 400 participants in the study by demographic characteristics. In terms of gender distribution, 40.5% (n=162) of the participants are male, and 59.5% (n=238) are female. Regarding educational level, 21.3% (n=85) have a high school education or below, 28.2% (n=113) have a bachelor's degree, and 50.5% (n=202) have a master's degree or higher. In terms of marital status, 36.5% (n=146) of the participants are married, while 63.5% (n=254) are single. When income level is examined, 29.5% (n=118) have a low income, 33.3% (n=133) have a medium income, and 37.3% (n=149) have a high income.

Data Collection Tools

In this study, data were collected using the Socio-demographic Information Form, the Psychological Flexibility Scale, the Difficulties in Emotion Regulation Scale, and the Beck Depression Inventory.

Personal Information Form

The information form prepared by the researcher includes 5 questions on participants' gender, age, education level, marital status, and income level.

Psychological Flexibility Scale

The scale developed by Francis et al. (2016) originally comprised 37 items, but the latest version includes 23. This scale is assessed using a 7-point Likert-type scale and, in its original version, comprises three main factors: openness to experience (10 items), behavioral awareness (5 items), and living according to values (8 items). The factor loadings of the items in the original form range from .46 to .77. Individuals who exhibit psychological flexibility score highly on each factor. The overall reliability coefficient of the scale, measured by Cronbach's alpha, was calculated as .91; for the sub-factors, it was .90 for openness to experience, .87 for behavioral awareness, and .90 for living according to values. The Turkish adaptation by Karakuş and Akbay (2020) consists of 5 dimensions and 28 items. This scale is also rated on a 7-point Likert scale (from 1 = strongly disagree to 7 = strongly agree), with total scores ranging from 28 to 196. Twelve items are reverse-scored. The overall Cronbach's alpha reliability coefficient is .79. The Cronbach's alpha coefficients for the subscales are .84 for value and value-oriented behavior, .60 for being present, .72 for acceptance, .73 for contextual self, and .59 for defusion.

Difficulties in Emotion Regulation Scale

Developed by Gratz and Roemer (2004), this scale assesses how individuals manage their emotional responses. The overall internal consistency of the scale is .92. The internal consistency coefficients for the subscales are .78 for clarity, .68 for non-acceptance, .73 for strategies, .87 for impulse, and .69 for goals. In the 16-item short form adapted to Turkish by Yiğit and Guzey-Yiğit (2019), items are rated on a 5-point scale from 1 (almost never) to 5 (almost always). The scale comprises five main dimensions and includes no reverse-scored items. The internal consistency value was calculated as .92, and the test-retest reliability was .85. The internal consistency coefficients for the subscales are .84 for clarity, .78 for non-acceptance, .87 for strategies, .87 for impulse, and .84 for goals.

Beck Depression Inventory

Developed by Beck et al. (1961) for the diagnosis, severity, and monitoring of depression, the Beck Depression Inventory is a 4-point Likert-type scale. The internal consistency coefficient of this scale is .85. Hisli (1989) conducted the Turkish adaptation, validity, and reliability studies. This scale, which measures various symptoms of depression, consists of a total of 21 items and is a self-report tool. Participants rate each item on a scale of 0 to 3, and the total score indicates the level of depression. The internal consistency coefficient of the scale was .84.

Data Collection Process

The research process began with the receipt of ethical approval numbered YDÜ/SB/2024/1778 from the Near East University Ethics Committee on April 1, 2024, following an application to the committee. After obtaining the necessary permissions in accordance with ethical guidelines, the data collection phase commenced. At this stage, the scales to be administered to participants, the personal information form, the participant information form, and the informed consent form were prepared online using Google Forms. Participants in the study were recruited voluntarily, and data were collected digitally via social media platforms such as Facebook, Instagram, and Telegram.

Findings

Table 2. *Pearson Correlation Coefficients for the Relationships Between Scores on the Psychological Flexibility Scale, Emotion Regulation Scale, and Beck Depression Inventory*

Değişkenler		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Değerler ve değerler doğrultusunda	r	1																
	p																	
2. An'da olma	r	,877**	1															
	p	0,000																
3. Kabul	r	,810**	,742**	1														
	p	0,000	0,000															
4. Bağlamsal Benlik	r	,840**	,782**	,827**	1													
	p	0,000	0,000	0,000														
5. Ayrışma	r	,730**	,710**	,597**	,557**	1												
	p	0,000	0,000	0,000	0,000													
6. Psikolojik Esneklik Ölçeği	r	,965**	,927**	,887**	,900**	,772**	1											
	p	0,000	0,000	0,000	0,000	0,000												
7. Acıklık	r	-,359**	-,387**	-,308**	-,288**	-,214**	-,360**	1										
	p	0,000	0,000	0,000	0,000	0,000	0,000											
8. Amaçlar	r	0,040	,105*	-0,053	-0,035	0,035	-,017	,271**	1									
	p	0,425	0,036	0,290	0,482	0,490	0,736	0,000										
9. Dürtü	r	-0,088	-0,021	-,191**	-,270**	-0,004	-,133**	,301**	,479**	1								
	p	0,078	0,669	0,000	0,000	0,931	0,008	0,000	0,000									
10. Stratejiler	r	-,693**	-,673**	-,616**	-,643**	-,552**	-,725**	,347**	,129**	-0,044	1							
	p	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,01	0,379								
11. Kabul etmeme	r	-,469**	-,465**	-,450**	-,396**	-,374**	-,493**	,368**	0,082	0,014	,541**	1						
	p	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,103	0,774	0,000							
12. Duygu Düzenleme Güçlüğü Ölçeği	r	-,574**	-,601**	-,465**	-,444**	-,467**	-,582**	,603**	,523**	,421**	,807**	,680**	1					
	p	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000						
13. Beck Depresyon Ölçeği	r	-,125*	-,219**	-,112*	-,131**	-,147**	-,166**	0,059	0,021	0,06	,208**	0,073	,172**	1				
	p	0,012	0,000	0,025	0,009	0,003	0,001	0,236	0,672	0,231	0,000	0,147	0,001					
14. Depresyon Yok veya Minimal	r	-0,197**	0,239**	0,186**	0,165**	0,173**	0,213**	0,051	0,056	0,103	0,254**	0,065	0,217*	-0,793**	1			
	p	0,000	0,000	0,000	0,001	0,001	0,000	0,308	0,264	0,040**	0,000	0,192	0,000	0,000				
15. Hafif Depresyon	r	-0,107**	0,116**	0,080	0,116	0,131**	0,122**	0,026	0,045	-0,003	0,071	0,067	0,075	-0,335**	-0,186*			
	p	0,033	0,020	0,108	0,021	0,009	0,015	0,611	0,365	0,954	0,158	0,182	0,136	0,000	0,000	1		
16. Orta Depresyon	r	-0,196**	-0,164**	-0,179**	-0,155**	-0,157**	-0,183**	-0,030	-0,126**	-0,079	-0,101**	-0,048	-0,131*	0,038	-0,277*	-0,242*		
	p	0,000	0,001	0,000	0,002	0,002	0,000	0,554	0,011	0,113	0,043	0,337	0,009	0,454	0,000	0,000	1	
17. Şiddetli Depresyon	r	-0,051	-0,119	-0,040	-0,069	-0,085	-0,086	-0,031	0,038	-0,006	-0,155**	-0,054	-0,102*	0,813**	-0,392*	-0,343*	-0,511*	
	p	0,305	0,017	0,429	0,166	0,091	0,087	0,539	0,449	0,904	0,002	0,278	0,041	0,000	0,000	0,000	0,000	1

*p<0,05; **p<0,01

Table 2 presents Pearson correlation coefficients to examine relationships among scores on the Psychological Flexibility Scale, the Difficulties in Emotion Regulation Scale, and the Beck Depression Inventory.

A significant and negative relationship was found between psychological flexibility and difficulties in emotion regulation ($r = -0.582$; $p < 0.01$). Similarly, significant and negative correlations were observed between the Psychological Flexibility Scale and the subscales of the Difficulties in Emotion Regulation Scale: clarity ($r = -0.360$; $p < 0.01$), impulse ($r = -0.133$; $p < 0.01$), strategies ($r = -0.725$; $p < 0.01$), and non-acceptance ($r = -0.493$; $p < 0.01$). Notably, as moderate depression scores increase, psychological flexibility scores tend to decrease ($r = -0.183$; $p < 0.01$). Significant negative relationships were also found between the Difficulties in Emotion Regulation Scale and the subscales of the Psychological Flexibility Scale: values and value-oriented behavior ($r = -0.574$; $p < 0.01$), being present ($r = -0.601$; $p < 0.01$), acceptance ($r = -0.465$; $p < 0.01$), contextual self ($r = -0.444$; $p < 0.01$), and defusion ($r = -0.467$; $p < 0.01$). These results indicate that as psychological flexibility increases, difficulties in emotion regulation decrease. A significant and negative correlation was found between psychological flexibility and the Beck Depression Inventory ($r = -0.166$; $p < 0.01$). In addition, negative and significant correlations were found between the Beck Depression Inventory and the subscales of the Psychological Flexibility Scale: values and value-oriented behavior ($r = -0.125$; $p < 0.05$), being present ($r = -0.219$; $p < 0.01$), acceptance ($r = -0.112$; $p < 0.05$), contextual self ($r = -0.131$; $p < 0.01$), and defusion ($r = -0.166$; $p < 0.01$). These findings suggest that as psychological flexibility increases, depressive symptoms decrease.

No significant correlations were found between the Beck Depression Inventory and the clarity ($r = 0.059$; $p > 0.05$), goals ($r = 0.021$; $p > 0.05$), impulse ($r = 0.06$; $p > 0.05$), and non-acceptance ($r = 0.073$; $p > 0.05$) subscales of the Difficulties in Emotion Regulation Scale. However, there was a significant and positive correlation with the strategies subscale ($r = 0.208$; $p < 0.01$). A positive and significant correlation was also found between the total scores of the Beck Depression Inventory and the Difficulties in Emotion Regulation Scale ($r = 0.172$; $p < 0.01$). This indicates that as depression levels increase, individuals' difficulties in emotion regulation also tend to increase. It is understood that these increases are particularly more pronounced in moderate and severe depression ($p < 0.05$).

Table 3. *The Predictive Power of Psychological Flexibility Scale and Emotion Regulation Scale Scores on Beck Depression*

Variable	***B***	***SE***	***β***	***t***	***p***
(Constant)	*42,581*	*4,714*		*9,033*	*0,000*
Psychological Flexibility Scale	*-0,074*	*0,045*	*-0,099*	*-1,639*	*0,102*
Difficulties in Emotion Regulation Scale	*-0,28*	*0,148*	*-0,114*	*-1,889*	*0,060*
R=0,190	*R2=0,36*		*F(2;399)=7,452*		*P<0,01*

Inventory Scores

Dependent Variable: Beck Depression Inventory

Table 3 presents the results of the regression analysis examining the predictive effects of the Psychological Flexibility and Difficulties in Emotion Regulation scales on Beck Depression Inventory scores.

According to the analysis, neither the Psychological Flexibility Scale ($\beta = -0.099$; $p > 0.05$) nor the Difficulties in Emotion Regulation Scale ($\beta = -0.114$; $p > 0.05$) shows a significant predictive effect on Beck Depression Inventory scores.

Discussion

In this section, the data obtained regarding the effects of psychological flexibility and emotion regulation skills on depressive symptoms in adults are evaluated and discussed in relation to the existing literature.

The study reveals a relationship between psychological flexibility and emotion regulation, indicating that as psychological flexibility increases, individuals' difficulties in emotion regulation decrease. Specifically, as psychological flexibility rises, difficulties in emotion regulation—such as clarity, non-acceptance, strategies, and impulse—also decrease. These findings demonstrate that individuals with higher levels of psychological flexibility are better able to regulate their emotional responses and cope more effectively with those responses. This result is consistent with the literature that supports a strong relationship between psychological flexibility and emotion regulation (Gloster et al., 2011; Kashdan & Rottenberg, 2010; Aldao et al., 2010). It has been reported that psychological flexibility is directly related to individuals' ability to cope with stressful and challenging situations, maintain emotional flexibility, and sustain psychological well-being (Kashdan et al., 2010). Other studies have also shown that psychological flexibility enables individuals to respond more adaptively to negative emotional experiences, thereby reducing difficulties in emotion regulation (Tugade & Fredrickson, 2004).

The study further found that as psychological flexibility increases, symptoms of depression decrease, with this relationship being more pronounced in moderate and severe depression. Skills such as acting in accordance with one's values, being present, acceptance, contextual self-awareness, and defusion—key aspects of psychological flexibility—appear to be effective in reducing depressive symptoms. These findings suggest that psychological flexibility increases individuals' capacity to cope with depressive symptoms and improves their overall psychological health. Previous studies have shown a relationship between psychological flexibility and depression, indicating that as psychological flexibility

decreases, depression levels increase (Hofmann et al., 2012; Bohlmeijer, 2011; Ruiz, 2010). Acting in accordance with one's values helps individuals find meaning and purpose in life, which can reduce depressive symptoms (Hayes et al., 2006). The ability to stay in the present moment and to be accepting can help individuals accept their emotional experiences without judgment, thereby alleviating depression symptoms (Kashdan & Rottenberg, 2010). Self-awareness enables individuals to distance themselves from their emotional experiences, which can help regulate depressive moods (Kashdan et al., 2006).

The research also demonstrates that individuals who experience greater difficulties in emotion regulation tend to have higher levels of depression. Additionally, while difficulties in emotion regulation increase in cases of minimal depression, the same relationship may not be observed in severe depression. Therefore, this study suggests that different levels of depression may be associated with varying degrees of emotion regulation difficulties. A relationship was also found between depression and emotion regulation strategies. This finding indicates that depression is more prominent in individuals who have difficulty developing effective emotion regulation strategies. Research has shown that the effective use of emotion regulation strategies reduces the symptoms of depression, anxiety, and other psychological disorders (Gross, 2015). Depression is a condition associated with emotional and psychological disturbances and may lead to difficulties in regulating emotional experiences (Aldao et al., 2010). The literature frequently emphasizes that depression makes it harder for individuals to control their emotional responses and leads them to use less healthy ways of coping with emotional experiences (Gross & Munoz, 1995).

It was found that psychological flexibility and emotion regulation do not have a significant predictive effect on depression levels. This result suggests that although psychological flexibility and emotion regulation are related to depression, these variables alone are not sufficient predictors of depression. Considering that depression has many dimensions and develops through the interaction of individual, social, and environmental factors, this finding is understandable. The literature describes depression as a complex psychopathological condition in which biological, psychological, and environmental factors all play a role; therefore, it is not expected that a single factor would predict depression on its own (Kessler et al., 2003). Although psychological flexibility and emotion regulation are associated with depression, it can be stated that these factors alone may be insufficient to explain the emergence of depression. Psychological flexibility refers to individuals' capacity to cope with life's challenges, and this capacity can mitigate the effects of depression (Wiglesworth et al., 2022). However, multiple factors such as genetic predisposition, environmental stressors, individual traumas, and social support play a role in the onset of depression (Monroe & Harkness, 2005). Additionally, the differences observed in this study may be related to the characteristics of the research group. In different populations, psychological flexibility and difficulties in emotion regulation may have an impact on depression.

Conclusion and Recommendations

The study found that as psychological flexibility increases, difficulties in emotion regulation decrease. Additionally, it was observed that higher psychological flexibility is associated with lower levels of depressive symptoms, while greater difficulties in emotion regulation are linked to higher levels of depression.

Psychological flexibility was found to significantly predict emotion regulation, and this relationship persisted even after including depression levels in the model. However, psychological flexibility and emotion regulation levels did not significantly predict depression levels.

This research demonstrates that there is a relationship between psychological flexibility, emotion regulation, and depression. Researchers can gain more detailed insights into the dynamics of this relationship by conducting longitudinal studies and comparative research in different cultural contexts. Furthermore, exploring how this finding can be utilized in psychological interventions will provide an important contribution to the fields of therapy and counseling.

The relationship identified between psychological flexibility and emotion regulation in this study can inform clinical interventions, particularly therapeutic strategies aimed at enhancing individuals' psychological flexibility (e.g., acceptance and commitment therapy). As psychological flexibility increases, individuals' difficulties in emotion regulation decrease. Therefore, in therapies aimed at improving emotion regulation skills, it is recommended to focus specifically on developing emotional awareness, acting in accordance with values, and mindfulness skills through interventions that enhance psychological flexibility.

Recommendations

For future studies, it is recommended that multidimensional, strategic research be conducted to better understand the lifelong clinical course and psychosocial effects of Tourette syndrome (TS). Primarily, since most TS research is limited to childhood and adolescence, there is a need to increase longitudinal studies on clinical features, tic severity, and comorbid psychiatric conditions in adulthood. Such studies are critically important for revealing the lifelong dynamics of TS and for developing clinical prediction models.

Additionally, it is important to conduct research examining the effects of TS on individuals' social functioning, academic achievement, and daily activities in a multidimensional manner. These studies will form the basis not only for symptom management but also for developing interventions to improve quality of life and social adaptation. In particular, the design and evaluation of support programs involving families, educators, and employers will strengthen individuals' interactions with their social environment and ensure the sustainability of their functioning.

Studies conducted in diverse cultural and socioeconomic contexts are expected to reveal the diversity of TS expressions and contribute to the development of culturally sensitive assessment and intervention approaches. Increasing community-based awareness programs is critical to reducing stigma and supporting early diagnosis. In the field of intervention and treatment, it is recommended to monitor the long-term effects of non-pharmacological therapeutic approaches (behavioral therapies, social skills training, psychoeducation) and to integrate them into clinical protocols. Additionally, designing sustainable rehabilitation models for adults will enable the development of a holistic approach centered on lifelong psychosocial functioning.

Declarations

Ethics Approval and Consent to Participate
This study was approved by the Scientific Research Ethics Committee of Near East University on August 14, 2025 (Approval No: YDÜ/SB/2024/1778). All participants provided informed consent prior to their participation.

Publication Permission
Not applicable.

Availability of Data and Materials
Not applicable.

Conflict of Interest
The authors declare that there is no conflict of interest.

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Author Contributions
M.N.D. and M.K. contributed to the study design, data collection, analysis, and writing of the manuscript. M.Ç, M.K and A.T. contributed to the supervision of the study, interpretation of the findings, and critical revision of the manuscript.

References

Aldao, A., & Nolen-Hoeksema, S. (2012). The influence of context on the implementation of adaptive emotion regulation strategies. *Behaviour Research and Therapy*, *50*(7-8), 493–501. https://doi.org/10.1016/j.brat.2012.04.004

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review, 30*(2), 217-237. https://doi.org/10.1016/j.cpr.2009.11.004

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association. (2013). https://psycnet.apa.org/doi/10.1176/appi.books.9780890425596

Beck, A. T., Ward, C., & Mendelson, M. (1961). Beck depression inventory (BDI). *Archives of General Psychiatry, 4*(6), 561-571. https://doi.org/10.1001/archpsyc.1961.01710120031004

Berking, M., & Wupperman, P. (2012). Emotion regulation and mental health: recent findings, current challenges, and future directions. *Current Opinion in Psychiatry*, *25*(2), 128–134. https://doi.org/10.1097/yco.0b013e3283503669

Buğa, A., Özkamalı, E., Altunkol, F., & Çekiç, A. (2018). Üniversite öğrencilerinin bilişsel esneklik düzeylerine göre sosyal problem çözme tarzlarının incelenmesi. *Gaziantep Üniversitesi Eğitim Bilimleri Dergisi, 2*(1), 48-58. https://izlik.org/JA55WB96HE

Bohlmeijer, E. T., Fledderus, M., Rokx, T. A., & Pieterse, M. E. (2011). Efficacy of an early intervention based on acceptance and commitment therapy for adults with depressive symptomatology: Evaluation in a randomized controlled trial. *Behaviour Research and Therapy*, *49*(1), 62–67. https://doi.org/10.1016/j.brat.2010.10.003

Fletcher, D., & Sarkar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist, 18*(1), 12–23. https://doi.org/10.1027/1016-9040/a000124

Francis, A. W., Dawson, D. L., & Golijani-Moghaddam, N. (2016). The development and validation of the comprehensive assessment of Acceptance and Commitment Therapy processes (CompACT). *Journal of Contextual Behavioral Science, 5*(3), 134–145. https://doi.org/10.1016/j.jcbs.2016.05.003

Gloster, A. T., Haller, E., Villanueva, J., Block, V., Benoy, C., Meyer, A. H., Brogli, S., Kuhweide, V., Karekla, M., Bader, K., Walter, M., & Lang, U. (2023). Psychotherapy for chronic in- and outpatients with common mental disorders: The "Choose Change" effectiveness trial. *Psychotherapy and Psychosomatics*, *92*(2), 124–132. https://doi.org/10.1159/000529411

Gloster, A. T., Klotsche, J., Chaker, S., Hummel, K. V., & Hoyer, J. (2011). Assessing psychological flexibility: What does it add above and beyond existing constructs? *Psychological Assessment, 23*(4), 970–982. https://doi.org/10.1037/a0024135

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment, 26*(1), 41–54. https://doi.org/10.1023/B:JOBA.0000007455.08539.94

Gross, J. J. (2014). Emotion regulation: Conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (2nd ed., pp. 3-20). Guilford Press.

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry, 26*(1), 1–26. https://doi.org/10.1080/1047840X.2014.940781

Gross, J. J., & Muñoz, R. F. (1995). Emotion regulation and mental health. *Clinical Psychology: Science and Practice, 2*(2), 151–164. https://doi.org/10.1111/j.1468-2850.1995.tb00036.x

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: model, processes and outcomes. *Behaviour Research and Therapy*, *44*(1), 1–25. https://doi.org/10.1016/j.brat.2005.06.006

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2006). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. The Guilford Press.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). *Acceptance and Commitment Therapy: The Process and Practice of Mindful Change* (2nd ed.). New York: Guilford Press.

Hisli, N. (1989). Beck Depresyon Envanterinin üniversite öğrencileri için geçerliği, güvenirliği. *Psikoloji Dergisi*, *7*(23), 3-13.

Hofmann, S. G., Sawyer, A. T., Fang, A., & Asnaani, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive Therapy and Research, 36*(5), 427–440. https://doi.org/10.1007/s10608-012-9476-1

Joormann, J., & Stanton, C. H. (2016). Examining emotion regulation in depression: A review and future directions. *Behaviour Research and Therapy*, *86*, 35–49. https://doi.org/10.1016/j.brat.2016.07.007

Karakuş, M., & Akbay, S. (2020). Ayrışma temelli terapiler: Temel yaklaşımlar ve uygulama. *Journal of Cognitive Behavioral Psychotherapy and Research*, *9*(1), 27-38.

Karasar, N. (2011). *Bilimsel Araştırma Yöntemleri*. Nobel Yayınları.

Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, *30*(7), 865-878. https://doi.org/10.1016/j.cpr.2010.03.001

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R., ... & Wang, P. S. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *JAMA, 289*(23), 3095-3105. https://doi.org/10.1001/jama.289.23.3095

Li, A., Wang, S., Cai, M., Sun, R., & Liu, X. (2021). Self-compassion and life-satisfaction among Chinese self-quarantined residents during the COVID-19 pandemic: A moderated mediation model of positive coping and gender. *Personality and Individual Differences*, *170*, 110457. https://psycnet.apa.org/doi/10.1016/j.paid.2020.110457

Monroe, S. M., & Harkness, K. L. (2005). Life stress, the "kindling" hypothesis, and the recurrence of depression: Considerations from a life stress perspective. *Psychological Review*, 112(2), 417–445. https://doi.org/10.1037/0033-295x.112.2.417

Ruiz, F. J. (2010). A review of Acceptance and Commitment Therapy (ACT) empirical evidence. *International Journal of Psychology and Psychological Therapy, 10*(1), 125–162.

Shahar, B., Britton, W. B., Sbarra, D. A., Figueredo, A. J., & Bootzin, R. R. (2010). Mechanisms of change in mindfulness-based cognitive therapy for depression: Preliminary evidence from a randomized controlled trial. *International Journal of Cognitive Therapy, 3*(4), 402–418. https://doi.org/10.1521/ijct.2010.3.4.402

Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86*, 320-333. https://doi.org/10.1037/0022-3514.86.2.320

Wiglesworth, A., Butts, J., Carosella, K. A., Mirza, S., Papke, V., Bendezú, J. J., Klimes-Dougan, B., & Cullen, K. R. (2022). Stress system concordance as a predictor of longitudinal patterns of resilience in adolescence. *Development and Psychopathology, 35*(5), 2384–2401. https://doi.org/10.1017/s0954579423000731

World Health Organization. (2020). Depression. https://www.who.int/news-room/fact-sheets/detail/depression

Yiğit, İ., & Yiğit, M. G. (2019). Psychometric properties of the Turkish version of the difficulties in emotion regulation scale-brief form (DERS-16). *Current Psychology, 38*(6), 1503-1511. https://doi.org/10.1007/s12144-017-9712-7