Bilişsel Esneklik ile Psikolojik İyi Oluş İlişkisinde Bilişsel Duygu Düzenlemenin Aracı Rolü

Semra KİYE, Muş Alparslan Üniversitesi, ORCID ID: 0000-0003-4414-5765
Ecem ÇİÇEK HABEŞ, Ankara Üniversitesi, ORCID ID: 0000-0002-2242-1397

Öz

Bu araştırma, bilişsel esneklik ile psikolojik iyi oluş arasındaki ilişkide bilişsel duygu düzenlemenin aracılık rolünü incelemektedir. Araştırmaya farklı üniversitelere devam eden 312 öğrenci katılmıştır. Bu öğrencilerin 216'sı kadın, 96'sı erkektir. Katılımcıların yaşları 18-55 arasında değişmektedir. Katılımcıların 53'ü birinci, 34'ü ikinci, 87'si üçüncü ve 138'i dördüncü sınıfa devam etmektedir. Araştırmada Psikolojik İyi Oluş Ölçeği, Bilişsel Esneklik Envanteri, Bilişsel Duygu Düzenleme Ölçeği ile Demografik Bilgi Formu kullanılmıştır. Verilerin analizinde regresyon temelli bootstrapping işlemi yapılmış ve bilişsel esneklik, psikolojik iyi oluş ve bilişsel duygu düzenlemenin uyumlu alt boyutları arasında pozitif yönlü istatistiksel olarak anlamlı ilişkiler bulunmuştur. Ayrıca bilişsel esneklik ile psikolojik iyi oluş arasındaki ilişkide bilişsel duygu düzenlemenin oluşturduğu dolaylı etkinin anlamlı olduğu saptanmıştır. Buna göre bilişsel esneklik ile psikolojik iyi oluş arasında ilişkide plana tekrar odaklanma, pozitif tekrar odaklanma ve pozitif yeniden gözden geçirme alt boyutlarının kısmi aracılık rolü olduğu tespit edilmiştir. Bakış açısına yerleştirmek alt boyutunun ise aracılık rolü bulunmamıştır. Sonuç olarak bilişsel esneklik düzeyleri arttıkça bilişsel duygu düzenleme düzeyleri de artmakta ve bilişsel duygu düzenlemedeki bu artış psikolojik iyi oluşu da artırmaktadır.

Anahtar Kelimeler: Bilişsel esneklik, psikolojik iyi oluş, bilişsel duygu düzenleme

Inonu University
Journal of the Faculty of Education
Vol 25, No 3, 2024
pp. 1292-1310
DOI
10.17679/inuefd.1481952

Article Type
Research Article

Received
10.05.2024

Accepted
28.11.2024

Önerilen Atıf

Kiye, S. ve Çiçek Habeş, E. (2024). Bilişsel esneklik ile psikolojik iyi oluş ilişkisinde bilişsel duygu düzenlemenin araci rolü, *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 25(3), 1292-1310. DOI: 10.17679/inuefd.1481952

Bu makalenin bir kısmı 17-19 Kasım 2024 tarihlerinde Ankara Üniversitesi'nde gerçekleştirilen 24. Uluslararası Psikolojik Danışma ve Rehberlik Kongresi'nde sözlü özet bildiri olarak sunulmuştur.

GENİŞLETİLMİŞ ÖZET

Giriş

Bilişsel esneklik, değişen çevresel taleplere yanıt olarak farklı bilişsel stratejiler, düşünceler veya görevler arasında uyum sağlama ve geçiş yapma zihinsel becerisini ifade etmektedir (Dennis & Vander Wal, 2010). Okul öncesi yıllarda hızlı bir gelişim göstermekle birlikte ergenlik dönemi boyunca da istikrarlı bir şekilde artmaya devam etmektedir (Buttelmann & Karbach, 2017). Bu esnek beceri; dikkati, bakış açılarını veya problem çözme yaklaşımlarını etkili bir şekilde değiştirme kapasitesini içermektedir. Ayrıca hedef odaklı davranışları, öz denetim ve karar verme ile ilişkili gelişmiş bilişsel süreçlerini kapsayan yürütme işlevinin temel bir unsuru olarak kabul edilmektedir (Dajani & Uddin, 2015). Psikolojik iyi oluş, mutluluk ve yaşam doyumuna kıyasla daha geniş bir yapı olarak ele alınmakta ve açıklanmaktadır (Ryff, 1995). Bireyin, hayatını anlamlı ve amaçlı bulması, kişisel inançları doğrultusunda yaşaması, kişisel güçlerini ve potansiyellerini kullanması, yaşam deneyimlerini yönetebilmesi, önemli kişilerle derin bağlar kurması ve sınırlılıkları da dâhil olmak üzere kendini kabul düzeyi bireyin psikolojik iyi oluşunu ortaya koymaktadır (Ryff, 2013). Anksiyete, depresyon, somatizasyon ve düşmanlık gibi psikolojik semptomların ele alınmasında bilişsel esneklik, psikolojik iyi oluş düzeyinin artırılması için koruyucu bir faktör olarak hizmet etmekte ve bunu öngörmektedir (Inozu et al., 2023; Parvizi & Özabacı, 2022). Benzer şekilde, uyumlu/adaptif duygu düzenleme stratejilerinin tercih edilmesinin psikolojik iyi oluş düzeyini yükselttiği belirtilmekte ayrıca bu stratejilerin psikolojik iyi oluşun yordayıcıları olduğu belirtilmektedir (Uyar, 2019). Duygusal deneyimlerin, ifadelerin, fizyolojinin ve durumların çevresel taleplere yanıt olarak değiştirilmesi olarak tanımlanan duygu düzenleme, bireylerin duyguları algılamasını, yorumlamasını ve düzenlemesini kapsayan bilişsel süreçlerle önemli ölçüde iç içe geçmiştir (Aldao, 2013). Bilişsel duygu düzenleme kavramı, insanların duygusal karşılaşmalarını şekillendirmek için kullandıkları kasıtlı bilişsel yöntemleri ifade etmek için yaygın olarak kabul görmüştür. Bilişsel duygu düzenleme, bireyde herhangi bir davranışsal tepkide bulunmadan önce, bilişsel bir değerlendirme sürecinin gerçekleştiğini öne sürmektedir. Bilişsel duygu düzenleme, stres faktörlerinin şiddetine bağlı olarak uyumlu/adaptive veya uyumsuz/adaptive olmayan çeşitli yaklaşımları da içeren bir dizi stratejiden oluşmaktadır (Garnefski et al., 2001).

Amaç

Yapılan araştırmalar incelendiğinde bilişsel esnekliği yüksek olan bireylerin, uyumlu/adaptive bilişsel duygu düzenleme stratejilerini daha fazla uygulayabildikleri belirtilebilir. Güçlü bilişsel esnekliğe sahip olanlar, belirli bir duruma bakış açılarını değiştirmede veya elverişli alternatif bilişsel stratejilere sorunsuz bir şekilde geçiş yapmada daha işlevsel olabilirler. Bilişsel esnekliği düşük olan bireyler, bilişsel katılıkla ilişkili uyumsuz bilişsel duygu düzenleme stratejilerine başvurabilir ve bu durum onların psikolojik iyi oluş düzeyini olumsuz yönde etkileyebilir. Bu bağlamda, bu çalışma bilişsel esneklik ve psikolojik iyi oluş arasındaki ilişkide uyumlu/adaptive bilişsel duygu düzenleme stratejilerinin aracılık rolünü incelemeyi amaçlamaktadır. Bu çerçevede, bilişsel duygu düznelemenin uyumlu/adaptif 4 alt boyutunun aracılık rolü incelenmiştir.

Yöntem

Bu araştırma, nicel araştırma yaklaşımları arasında yer alan korelasyonel araştırma modeli çerçevesinde tasarlanmıştır (Creswell, 2012). Araştırmaya Türkiye'nin farklı devlet üniversitelerine devam eden 312 öğrenci katılmıştır. Bu öğrencilerin 216'sı kadın ve 96'sı erkektir. Katılımcıların yaşları 18-55 arasında değişmektedir. Katılımcıların 53'ü birinci, 34'ü ikinci, 87'si üçüncü ve 138'i dördüncü sınıfa devam etmektedir. Araştırmada Psikolojik İyi Oluş Ölçeği, Bilişsel Esneklik Envanteri, Bilişsel Duygu Düzenleme Ölçeği ile Demografik Bilgi Formu kullanılmıştır. Analizlerde doğrudan ve dolaylı etkileri göstermek için regresyona dayalı aracılık makrosu kullanılmıştır.

Bulgular

Tüm değişkenlerin çarpıklık ve basıklık değerleri açısından normallik varsayımını karşıladığı bulunmuştur. Değişkenler arasındaki korelasyonlar incelendiğinde, bilişsel esneklik ile psikolojik iyi oluş arasında, bilişsel esneklik ile bilişsel duygu düzenlemenin uyumlu/adaptif alt boyutları olan pozitif yeniden odaklanma, planlamaya yeniden odaklanma, pozitif yeniden değerlendirme ve bakış açısına yerleştirme arasında anlamlı düzeyde pozitif korelasyonlar bulunmuştur. Ek olarak, psikolojik iyi oluş da bilişsel duygu düzenlemenin uyumlu/adaptif alt ölçeklerle anlamlı pozitif ilişkiler göstermiştir. Bu aşamanın ardından yürütülen aracılık testine göre bilişsel esneklik ile psikolojik iyi oluş arasındaki ilişkide bilişsel duygu düzenlemenin oluşturduğu dolaylı etkinin anlamlı olduğu saptanmıştır. Buna göre bilişsel esneklik ile psikolojik iyi oluş arasında ilişkide plana tekrar odaklanma, pozitif tekrar odaklanma ve pozitif yeniden gözden geçirme alt boyutlarının kısmi aracılık rolü olduğu tespit edilmiştir. Bakış açısına yerleştirmek alt boyutunun ise aracılık rolü bulunmamıştır.

Tartışma ve Sonuç

Bu çalışmada, bilişsel esneklik ile psikolojik iyi oluş arasında anlamlı ve pozitif bir ilişki olduğu saptanmıştır. Ayrıca, uyumlu/adaptif bilişsel duygu düzenleme stratejilerinin hem bilişsel esneklik hem de psikolojik iyi oluş ile anlamlı pozitif korelasyon gösterdiği tespit edilmiştir. Bu çalışmanın sonuçları daha önceki araştırma bulgularıyla uyumludur. Bir diğer sonuca göre bilişsel esneklik ve uyumlu/adaptif bilişsel duygu düzenleme stratejileri psikolojik iyi oluşu anlamlı şekilde yordamaktadır. Sonuçlar, bilişsel esneklik ve uyumlu/adaptif stratejilerin üniversite öğrencilerinin iyi oluşu için koruyucu psikolojik değişkenler olduğunu ortaya koymuştur. Buna göre, daha yüksek bir bilişsel esneklik, uyumlu/adaptif duygu düzenleme stratejilerini geliştirmek için kolaylaştırıcı olabilir ve böylece psikolojik iyi oluşu güçlendirebilir. Bilişsel esneklik ve psikolojik iyi oluş arasındaki ilişki üzerinde bilişsel duygu düzenlemenin etkisini araştıran herhangi bir çalışmaya rastlanmamıştır ancak çalışmanın bulguları diğer çalışmalarla tutarlı olduğu saptanmıştır (Malkoç & Mutlu, 2019; Panahi et al., 2016).

The Mediating Role of Cognitive Emotion Regulation in the Relationship between Cognitive Flexibility and Psychological Well-Being

Semra KİYE, Muş Alparslan University, ORCID ID: 0000-0003-4414-5765
Ecem ÇİÇEK HABEŞ, Ankara University, ORCID ID: 0000-0002-2242-1397

Abstract

This study investigates the mediating role of cognitive emotion regulation in the relationship between cognitive flexibility and psychological well-being. The research was conducted using a relational scanning model with 312 students from various universities. 216 of the participants are women and 96 are men, aged between 18 and 55. Among them, 53 were in their first, 34 in their second, 87 in their third, and 138 in their fourth year of study. The research instruments included the Psychological Well-Being Scale, Cognitive Flexibility Inventory, and Cognitive Emotion Regulation Scale. Regression-based bootstrapping was used to analyze the data, and positive, statistically significant relationships were found between cognitive flexibility, psychological well-being, and adaptive sub-dimensions of cognitive emotion regulation. Furthermore, the indirect effect of cognitive emotion regulation on the cognitive flexibility-psychological well-being link was found to be significant. Specifically, refocus on planning, positive refocusing, and positive reappraisal sub-dimensions exhibited a partial mediating role in this relationship, whereas the mediating role of the putting into perspective sub-dimension was not supported. In conclusion, as levels of cognitive flexibility increase, concurrent rises in cognitive emotion regulation are observed, thereby contributing to enhanced psychological well-being.

Keywords: Cognitive Flexibility, Psychological Well-Being, Cognitive Emotion Regulation

İnönü Üniversitesi
Eğitim Fakültesi Dergisi
Cilt 25, Sayı 3, 2024
ss. 1292-1310
DOI
10.17679/inuefd.1481952

Makale Türü
Araştırma Makalesi

Gönderim Tarihi
10.05.2024

Kabul Tarihi
28.11.2024

Suggested Citation

Kiye, S. & Çiçek Habeş, E. (2024). The mediating role of cognitive emotion regulation in the relationship between cognitive flexibility and psychological well-being. *Inonu University Journal of the Faculty of Education*, *25*(3), 1292-1310. DOI: 10.17679/inuefd.1481952

A part of this article was presented as an oral abstract paper at the 24th International Psychological Counseling and Guidance Congress held at Ankara University on November 17-19, 2024.

1. Introduction

Cognitive flexibility refers to the mental ability to adapt and switch between different cognitive strategies, thoughts, or tasks in response to changing environmental demands (Dennis & Vander Wal, 2010). It shows rapid development in the preschool years and continues to increase steadily throughout adolescence (Buttelmann & Karbach, 2017). This adaptability involves the capacity to shift attention, perspectives, or problem-solving approaches effectively. It is regarded as an essential element of executive function, which includes advanced cognitive processes associated with goal-oriented behavior, self-control, and decision-making. Given its significance, cognitive flexibility plays a pivotal role in diverse aspects of human cognition (i.e. learning, problem-solving) and is crucial for adaptive behavior (Dajani & Uddin, 2015). Higher cognitive flexibility is associated with positive outcomes in education (Yeniad et al., 2013) work (Sung et al., 2019) and daily life (Chen et al, 2024). The rapid change in the contemporary era brings forth numerous issues necessitating adaptation in various life domains, such as personal, social, and career-related aspects. From a developmental perspective, it is crucial for young adults, in particular, to cultivate a multitude of skills in order to adapt and succeed in life (Lamb et al., 2017). In this context, cognitive flexibility emerges as a pivotal concept, facilitating individuals in engaging with intricate tasks like multitasking and discovering innovative and adaptable solutions—qualities particularly pertinent for university students. Research on university students shows that cognitive flexibility is linked to outcomes such as life satisfaction (Odacı et al., 2019), level of happiness (Yıldız & Eldeklioglu, 2021), psychopathology (Sternheim et al., 2014) and adjustment to the university (Demirtas, 2020). Studies indicate that cognitive flexibility may contribute to the psychological well-being of university students (Malkoc & Mutlu, 2019) Cognitive flexibility can influence and contribute to psychological well-being in several ways as it enables individuals to embrace challenges and see failures as opportunities for learning and consider alternative solutions and perspectives. Alongside this process, individuals experience a sense of mastery and control over life (Spiro et al., 2013). Having a sense of control over one's behavior, environment, thoughts, and emotions is crucial for psychological adjustment, as it facilitates coping with challenges, managing stress, fostering healthy relationships, and attaining satisfaction (Maddux & Lewis, 1995). It's crucial to emphasize that while there is a positive link between cognitive flexibility and psychological well-being, the relationship is complex and can be influenced by various factors. Recent studies have shed light on the positive association between cognitive flexibility (CF) and psychological well-being in various contexts. Cognitive flexibility has been shown to significantly predict career outcomes and reduce academic stress among university students, even when accounting for external stressors such as the COVID-19 pandemic (Yıldız Akyol & Boyacı, 2020; Alsaif, 2024). It also plays a crucial role in academic success and achievement, particularly among freshman and older students, by mediating the effects of critical thinking disposition (Magalhães et al., 2020; Gökçe & Güner, 2024). In addition, CF was found to partially mediate the relationship between fear of negative evaluation and interaction anxiety (Kırca et al., 2024) and to moderate the impact of social media addiction on phubbing behaviors (Tanhan et al., 2024). The mediating role of CF is further underscored in its ability to influence the sense of belonging among university students through adaptation (Ateş Ös & Bulut Serin, 2024) and to affect mindfulness outcomes when combined with cognitive emotion regulation strategies in patients with type 2 diabetes (Motevalli, Salahshour & Bailey, 2023). Another study has pointed out the potential influence of emotion regulation on the relationship between depressive symptoms and cognitive flexibility (Gabrys et al., 2018). Psychological well-being is regarded as a broader and multidimensional construct (Ryff, 1995; Ryff, 2013) compared to happiness and life satisfaction. This multifaceted framework comprises six components, known as purpose in life, autonomy, environmental mastery, personal growth, self-acceptance and positive relationships (Ryff & Keyes, 1995; Ryff & Singer, 2008). Accordingly, finding one's life meaningful and purposeful, living in accordance with one's personal beliefs, using one's personal strengths and potentials, being able to manage

life experiences, establishing deep bonds with important people, and the level of self-acceptance, including one's limitations, reveal the individual's psychological well-being (Ryff, 2013). Cognitive flexibility in addressing psychological symptoms such as anxiety, depression, somatization, and hostility serves as a protective factor for enhancing the level of psychological well-being (Inozu et al., 2023) and predicts it (Parvizi & Özabacı, 2022). Likewise, employing adaptive emotion regulation strategies elevates the level of psychological well-being (Mendes et al., 2023). There is a positive correlation between adaptive cognitive emotion regulation strategies and psychological well-being (Özen, 2016), and these strategies also serve as predictors of it (Uyar, 2019). Emotion regulation, defined as the modification of emotional experiences, expressions, physiology, and situations in response to environmental demands (Aldao, 2013), is significantly intertwined with cognitive processes encompassing the perception, interpretation, and regulation of emotions by individuals. The term "cognitive emotion regulation" has become widely accepted to denote the deliberate cognitive methods people use to shape their emotional encounters. The concept of cognitive emotion regulation emerges from the recognition that it is inappropriate to consider cognitive and behavioral coping strategies within a singular dimension. It posits that prior to engaging in any behavioral response, a cognitive evaluation process takes place. Moreover, it contends that instructing individuals to undertake specific actions without concurrently addressing the associated cognitive processes lacks effectiveness (Garnefski et al., 2001). Cognitive emotion regulation (CER) comprises a range of strategies, incorporating various approaches that can manifest as adaptive or maladaptive, contingent upon contextual nuances with their effectiveness varying depending on the severity of stressors (Troy et al., 2013). *Self-blame* involves individuals holding accusatory thoughts toward themselves while *blaming others* entails redirecting the attribution of blame toward other individuals. *Acceptance* refers to acknowledging the lived experience and *refocusing on planning* entails engaging in contemplation about steps to manage the negative experience. *Positive refocusing* entails directing thoughts towards pleasant issues rather than dwelling on the actual event while *rumination* involves dwelling on the emotions and thoughts linked to the adverse experience. *Positive reappraisal* entails assigning a positive meaning to the event in relation to personal development while *putting it into perspective* involves assessing the event's importance in comparison to other events. *Catastrophizing*, on the other hand, involves exaggerating the severity of an experience (Garnefski et al., 2001). Extensive research findings have conclusively shown the critical importance of emotion regulation in our capacity to adapt to challenging life circumstances (Eisenberg, Fabes, Guthrie, & Reiser, 2000) with a significant impact on overall well-being (Cicchetti et al., 1995). Studies indicate that cognitive strategies employed for emotion regulation play a substantial role in influencing both subjective well-being (Xu, 2014) and psychological well-being (Balzarotti et al., 2016). The utilization of such strategies, has been shown to function in the reduction or enhancement of depression and anxiety symptoms (d'Arbeloff et al., 2018; Aldoa & Nolen-Hoeksema, 2010) and related to internalizing disorders in general (Guler & Aydin, 2022) respectively. Current findings show that cognitive emotion regulation strategies (CERS) are critical in shaping psychological well-being by mediating the relationship between adaptive and maladaptive perfectionism and eating disorders (Soltani, Salehi & Kheirabadi, 2024), as well as between certain personality traits and Internet Use Disorder tendencies (Hasani et al., 2024). The direct and indirect effects of negative life events (NLEs) on psychological distress have been found to vary depending on the level of CERS, further emphasizing their regulatory role (Duru & Balkıs, 2024). In addition, CERS was shown to moderate the relationship between mindfulness and anxiety, revealing the interactive effects of adaptive and maladaptive strategies (Malik & Perveen, 2023). This highlights the complexity of emotion regulation processes and their significant impact on mental health outcomes. CERS can influence psychological well-being by affecting the formation of positive and negative effects, which in turn impacts overall life satisfaction and mental health (Kouchi et al., 2022; Daniel et al., 2020). Overall, these findings suggest that both cognitive flexibility and emotion regulation strategies are essential in promoting psychological well-being across various

populations, including students and clinical groups. Furthermore, individuals with heightened cognitive flexibility may exhibit more adaptability to deploy adaptive CER strategies. For instance, those possessing strong cognitive flexibility might demonstrate greater ease in altering their perspective on a given situation or seamlessly transitioning to alternative cognitive frameworks conducive to adaptive CER. On the contrary, individuals with low cognitive flexibility may engage in maladaptive strategies associated with cognitive rigidity, consequently adversely affecting their psychological well-being. To our knowledge, no prior studies have focused specifically on examining the role of CER in the relationship between cognitive flexibility and psychological well-being in Turkey. The complex interplay between these factors provides valuable insights into developing interventions that enhance well-being and prevent mental health problems (Chaudhry, Tandon, Shinde & Bhattacharya, 2024; Dessauvagie et al., 2022). In this context, this study aimed to examine the mediating role of adaptive CER strategies in the relationship between cognitive flexibility and psychological well-being. Within this framework, the mediating role of 4 sub-dimensions of CER was examined.

2. Method

In this section, the research model, population and sample type, information on the permission processes required for data collection, and data collection and analysis steps are explained.

2.1. Research Model and Sample

This research was designed within the framework of the correlational research model, which is among the quantitative research approaches. In this model, situations that have occurred in the past or present are described as they are (Karasar, 2010). General survey studies, which are among the descriptive studies, are used when the data obtained from a smaller and appropriate group representing the universe, or in other words, from a sample group, represents the larger population. The data obtained from this representative group is used to describe the situation in the universe (Frankel et al., 2011).

A total of 312 individuals from various provinces of Turkey, who are continuing their education at different state universities, participated in the research. Among them, 216 (69.2%) were female and 96 (30.8%) were male and the ages of them ranged from 18 to 55. Out of the 312 participants, 53 (17%) were first-year, 34 (10.9%) were second-year, 87 (27.9%) were third-year, and 138 (44.2%) were fourth-year students.

2.2. Measures

Four instruments were employed in this study. The first instrument, the Demographic Information Form, was developed by the researchers to gather data on participants' age, gender, academic level, and the university they were enrolled in.

2.2.1. Psychological Well-Being Scale (PWBS).

The Psychological Well-Being Scale, developed by Diener et al., (2010), was adapted into Turkish by Telef (2013). The scale is unifactorial, comprising 8 items rated on a 7-point Likert scale (ranging from ' strongly disagree' to ' strongly agree'). There are no reverse items in the scale and all items are formulated as positive. The highest score that can be obtained from the scale is calculated as 56 and the lowest score is 8, with higher scores indicating a higher level of psychological well-being. The scale explains 42% of the total variance with its unidimensional structure. The factor loadings of the items are between .54 and .76. The fit indices for the scale were calculated as RMSEA= 0.08, SRMR=0.04, RFI= 0.92, NFI= 0.94, GFI= 0.96, IFI=0.95 and CFI= 0.95. Within the scope of criterion validity, the Psychological Well-Being Scale was positively correlated 0.30 with Autonomy, 0.53 with Environmental Dominance, 0.29 with Individual Development, 0.41 with Positive Relationship with Others, 0.38 with Life Purposes, 0.56 with Self-Acceptance and 0.56 with total psychological well-being. In addition, the relationship with

the sub-dimensions of the Need Satisfaction Scale was examined and positive relationships were calculated at the level of 0.30 with Autonomy, 0.69 with Competence, 0.57 with Relatedness and 0.73 with total need satisfaction. The reliability analysis yielded a Cronbach's Alpha internal consistency coefficient of 0.80 and a significant positive correlation was observed between the two applications as a result of the test-retest ($r=0.86$, $p<0.001$). Additionally, the item-total correlations of the scale were calculated between 0.41 and 0.63. In this study, the Cronbach's Alpha value for the scale was calculated to be .87.

2.2.2. Cognitive Flexibility Inventory (CFI).

The CFI, developed by Dennis and Vander Wal (2010), was designed to assess individuals' capacity to generate alternative, congruent, suitable, and balanced thoughts in challenging circumstances. The adaptation of the scale into Turkish was done by Gülüm and Dağ (2012). It is a 20-item instrument yielding both total cognitive flexibility score and separate scores of two subscales, with higher scores indicating higher cognitive flexibility. The Cronbach's alpha value for the Alternatives subscale was calculated as 0.91 in both the initial and final measurements, whereas for the Control subscale, it was 0.86 in the initial measurement and 0.84 in the final measurement. In Gülüm and Dağ's (2012) study, the internal consistency coefficient was calculated as 0.90 for the entire CFI, while it was calculated as 0.89 for the Alternatives subscale and 0.85 for the Control subscale. The Cognitive Flexibility Scale, Beck Depression, and Beck Anxiety Scales were used for criterion validity with correlation values of 0.44, -0.27, and -0.16, respectively. In this study, Cronbach's alpha value was calculated as .88 for the whole scale, 83 for the Control sub-dimension, and .88 for the Alternatives sub-dimension.

2.2.3. Cognitive Emotion Regulation Questionnaire (CERQ).

Developed by Garnefski, Kraaij and Spinhoven (2001), CERQ is a five-point Likert scale ranging from 1 (not at all suitable for me) to 5 (completely suitable for me). The scale comprises 36 items and nine sub-dimensions. The resulting Cronbach's alpha values of the scale range between .67 and .81. The score in each subscale indicates that the relevant feature increases, and all items in the scale function as straightforward items in the dimension they are included in. The total score is not calculated from the scale. Onat and Otrar (2010) adapted the scale into Turkish. The Cronbach's alpha value calculated for the reliability evidence of the scale in the adaptation study was .78. The Cronbach's Alpha values calculated in nine sub-dimensions range between .42 and .72. Following the Pearson correlation analysis conducted for both item-total and item-remaining correlations of the scale, it was found that there exists a significant correlation between all items within the scale and the total score. In addition, according to the independent group t-test performed to determine the discrimination of the items, the difference between the means of the lower and upper groups for all items is statistically significant. In the criterion validity studies, the relationships between the CERQ and the Negative Mood Regulation Scale were examined and significant relationships were calculated between the positive and negative sub-dimensions of the two scales. In this study, Cronbach's Alpha values were calculated between .41 and .77 for the adaptive sub-dimensions of the scale. Accordingly, Positive Refocusing at .41, Refocus on Planning at .77, Positive Reappraisal at .75 and Putting into Perspective at .65 were obtained.

2.3. Procedure

Ethical approval to conduct the research was obtained from the Ethics Committee of Muş Alparslan University, dated 08/11/2023 and number 112498/9/73, prior to data collection. After this procedure, data was collected using both online and in-person methods. Initially, researchers transferred data collection tools, including the Open Consent/Consent Form and details of the Ethics Committee, to an online platform (Google Forms). Accordingly, participants were given clear information about the research and informed that they could withdraw from the research. Upon receiving their consent, participants were provided with access to the data

collection tools, which were similarly explained and employed during the face-to-face data collection process. Data was gathered from 312 university students who volunteered for the study. Following this step, data was transferred to the software and prepared for analysis.

2.4. Statistical Analysis

The present study was carried out to investigate the relationships between cognitive flexibility, psychological well-being and the cognitive regulation of emotions. Prior to the analysis, a review was performed to ensure that the assumptions required for the analysis were met. Descriptive statistics (mean, skewness, kurtosis, and standard deviation) and graphical representations confirm that the dataset met the necessary assumptions. After that, Preacher and Hayes's (2008) regression-based mediation macro was used to demonstrate direct and indirect effects. Therefore, to determine that the indirect effect is significant, the lower and upper bounds of the confidence interval should not contain zero (Hayes, 2013). The analysis was conducted utilizing the IBM SPSS Statistics 22.00 software.

3. Findings

In this section, descriptive statistics were calculated for the variables of cognitive flexibility, psychological well-being and CER, and Pearson Product Moment Relationships between variables were examined using correlation analysis. Table 1 shows the results.

Table 1.

Relationships and descriptive statistics between cognitive flexibility, psychological well-being and adaptive sub-dimensions of CER

	Correlations					Descriptive Statistics		
	1	2	3	4	5	Mean (SD)	Skewness	Kurtosis
1.Cognitive flexibility	-					76.1(10.6)	-.004	-.073
2.Psychological well-being	.481**	-				41.5(8.47)	-.722	.274
3.Positive Refocusing	.246**	.289**	-			12.9(2.74)	.000	.159
4.Refocus on the planning	.626**	.525**	.425**	-		15.9(2.87)	-.507	.056
5.Positive reappraisal	.532**	.405**	.511**	.707**	-	15.4(3.05)	-.516	.177
6.Putting into perspective.	.178**	.190**	.381**	.428**	.523**	13.6(3.07)	-.193	.464

As can be seen in Table 1, all variables meet the normality assumption in terms of skewness and kurtosis values. When the correlations between the variables were analyzed, it was found that there was a significant positive relationship between cognitive flexibility and psychological well-being ($r = 0.481$; $p < .001$). Likewise, significant positive correlations were found between cognitive flexibility and the sub-dimensions of CER, including positive refocusing ($r = 0.246$; $p < .001$), refocus on planning ($r = 0.626$; $p < .001$), positive reappraisal ($r = 0.532$; $p < .001$), and putting into perspective ($r = 0.178$; $p < .001$). Additionally, psychological well-being

showed significant positive relationships with these adaptive subscales; r values ranged from 0.190 to 0.525 (all $p < 0.001$). At this stage, it was found that there were statistically significant and positive relationships between the variables, and then a mediation test was performed.

Table 2.

Path coefficients and ındirect effect results of the mediation model for positive refocusing

Path Coefficients			Bootstrap Indirect Effect		
				%95 CI	
	Psychological Well-Being (PWB)	Positive Refocusing (PR)	Coefficients (SE)	Lower Limit	Upper Limit
Model					
Cognitive Flexibility (CF)	.48 (.40)	.25 (.014)			
Positive Refocusing (PR)	.18(.15)				
CF→PWB→PR			.035(.015)	.011	.068

Note: ** $p < .01$, CI = Confidence Interval, SE = Standart Error

Table 2 shows the bootstrapped results regarding the mediating role of positive refocusing between cognitive flexibility and psychological well-being. Upon analyzing the direct effects, cognitive flexibility was found to predict psychological well-being (BSE = 0.48040) and positive refocusing (BSE = 0.25014). However, positive refocusing was also found to predict psychological well-being (BSE = 0.1815). When evaluating the indirect effect, positive refocusing was found to have a mediating role between cognitive flexibility and psychological well-being (bootstrap coefficient = .35, SE = .015; 95% CI = .011, .068). However, the significant relationship between cognitive flexibility and psychological well-being did not become insignificant when positive refocusing was included in the model.

Table 3.

Path coefficients and ındirect effect results of the mediation model for refocus on the planning

Path Coefficients			Bootstrap Indirect Effect		
				%95 CI	
	Psychological Well-Being (PWB)	Refocus on the Planning (RP)	Coefficient (SE)	Lower Limit	Upper Limit
Model					
Cognitive Flexibility (CF)	.48(.049)	.63(.012)			
Refocus on the Planning (RP)	.35(.182)				
CF→PWB→RP			.18(.048)	.093	.28

Note: ** p < .01, CI = Confidence Interval, SE = Standart Error

Table 3 shows the bootstrapped results regarding the mediating role of refocusing on the plan between cognitive flexibility and psychological well-being. Upon analyzing the direct effects, it was found that cognitive flexibility predicted psychological well-being (BSE = 0.48049) and refocus on the planning (BSE = 0.63012). However, it was also found that refocusing on planning predicted psychological well-being (BSE = 0.35182). When evaluating the indirect effect, it was found that refocusing on the plan had a mediating role between cognitive flexibility and psychological well-being (bootstrap coefficient = .18, SE = .048; 95% CI = .093, .28). However, the significant relationship between cognitive flexibility and psychological well-being did not become insignificant when the mediating variable of refocus on the planning was included in the model.

Table 4.

Path coefficients and ındirect effect results of the mediation model for positive reappraisal

Path Coefficients			Bootstrap Indirect Effect		
				%95 CI	
	Psychological Well-Being (PWB)	Positive Reappraisal (PReap)	Coefficient (SE)	Lower Limit	Upper Limit
Model					
Cognitive Flexibility (CF)	.48(.046)	.53(.014)			
Positive Reappraisal (PReap)	.19(.162)				
CF→PWB→PReap			.08(.029)	.028	.143

Note: ** p < .01, CI = Confidence Interval, SE = Standart Error

Table 4 shows the bootstrapping results regarding the mediating role of positive reappraisal between cognitive flexibility and psychological well-being. Upon analyzing the direct effects, it was found that cognitive flexibility predicted psychological well-being (BSE = 0.48046) and positive reappraisal (BSE = 0.53014). In addition, positive reappraisal was also found to predict psychological well-being (BSE = 0.19162). When evaluating the indirect effect, it was found that positive reappraisal had a mediating role between cognitive flexibility and psychological well-being (bootstrap coefficient = .08, SE = .029; 95% CI = .028, .143). However, the significant relationship between cognitive flexibility and psychological well-being did not become insignificant when positive revision was included in the model.

Table 5.

Path coefficients and ındirect effect results of the mediation model for putting into perspective

Path Coefficients			**Bootstrap Indirect Effect**		
				%95 CI	
	Psychological Well-Being (PWB)	Putting into Perspective (PP)	Coefficient (SE)	Lower Limit	Upper Limit
Model					
Cognitive Flexibility (CF)	.48(.040)	.18(.016)			
Putting into Perspective	.10 (.139)				
CF→PWB→PP			.014(.010)	-.001	.037

Note: ** p < .01, CI = Confidence Interval, SE = Standart Error

Table 5 shows the bootstrapping results regarding the mediating role of putting into perspective between cognitive flexibility and psychological well-being. Upon analyzing the direct effects, it was found that cognitive flexibility predicted psychological well-being (BSE = 0.48046) and putting into perspective (BSE = 0.10139). In addition, putting into perspective was also found to predict psychological well-being (BSE = 0.18016). When evaluating the indirect effects, it was found that putting into perspective did not have a mediating role between cognitive flexibility and psychological well-being (bootstrap coefficient = .014, SE = .010; 95% CI = -.001, .037).

4. Discussion & Conclusion

The current study concluded that there is a statistically significant and positive relationship between cognitive flexibility and psychological well-being. Moreover, adaptive CER strategies; refocus on planning, and putting into perspective, including positive refocusing and positive reappraisal demonstrated a significant positive correlation with both cognitive flexibility and psychological well-being. The outcomes of this study align with earlier research findings (Malkoç & Mutlu, 2019; Panahi et al., 2016). Furthermore, cognitive flexibility and adaptive CER strategies significantly predicted psychological well-being. The results revealed that cognitive flexibility and adaptive CER strategies are protective psychological variables for university students' well-being. Accordingly, higher cognitive flexibility can be a facilitator for improving adaptive CER strategies, thus strengthening psychological well-being. No study has been found exploring the impact of CER on the association between cognitive flexibility and psychological well-being. However, our findings that cognitive emotion regulation strategies mediate the relationship between cognitive flexibility and psychological well-being are consistent with recent studies highlighting the critical roles of both CF and CERS in mental health outcomes (Hasani et al., 2024; Kırca et al., 2024; Soltani et al., 2024; Tanhan et al., 2024). To elaborate further, Arici-Ozcan and colleagues (2019) found that cognitively more flexible university students experience less difficulty in emotion regulation. In another study, Panahi and colleagues (2016) found that CER strategies explain 41% of psychological well-being among graduate students. Our results expand on these findings by demonstrating that adaptive CERS serve as mediators between CF and psychological well-being.

Furthermore, all adaptive CER strategies except putting into perspective played partially mediating roles in the relationship between university students' cognitive flexibility and psychological well-being. Studies indicate that the utilization of these strategies enhances psychological well-being by enabling goal attainment. (MacLeod, Coates, & Hetherton, 2008), reducing anxiety and depression (Sacchi & Dan-Glauser, 2021) and maintaining emotional balance (McRae, 2016). However, it has been stated that different adaptive CER strategies might have different effects (Garnefski et al., 2001) and their effectiveness varies depending on the severity of stressors (Troy et al., 2013). In this context, the absence of a mediating role for the "putting into perspective" strategy can be elucidated in several ways. For instance, while one individual may reduce stress by placing a problem into a broader context, another person may struggle to alleviate their stress using the same strategy or may prefer not to employ it.

Cognitive flexibility allows individuals to adjust their cognitive processes flexibly, enabling them to effectively cope with diverse and complex situations. Recent studies have suggested that cognitive flexibility significantly predicts adaptive responses to stressors, indicating its potential impact on psychological well-being (Hemi et al., 2022) and has a significant positive correlation with the mental health of university students (Damirchi et al., 2018). Moreover, cognitive flexibility is a protective factor for promoting emotion regulation (Cai & Qui, 2023). Studies have indicated that individuals with high cognitive flexibility demonstrate greater effectiveness in employing multiple emotional regulation strategies (Gao et al., 2021), while those with advanced emotional regulation abilities can better manage the impact of emotions on themselves (Lockwood et al., 2013). In addition, individuals with high cognitive flexibility tended to show reduced levels of depression following challenging circumstances (Wang and Liu, 2017). This study enhances understanding of interrelationships between concepts and highlights the importance of considering the interplay between cognitive flexibility and emotion regulation in understanding psychological well-being. It is deemed important to incorporate theoretical and practical dimensions into the curriculum and provide guidance on acquiring and fostering emotion regulation skills in alignment with various programs.

This study has several limitations, particularly concerning the constraints of the dataset used and the generalizability of the model. First, it is recommended future researchers to enhance the accuracy of mediation models by utilizing larger datasets and employing different methodologies. The cross-sectional design of the research prevents drawing definitive conclusions about the causality directions between the variables mentioned. Additionally, since the findings of this study were derived from a sample comprising exclusively university students, caution should be exercised when extending results to other populations. Third, investigating additional variables that may influence the relationship between these variables in future research would increase a more comprehensive understanding of this relationship.

Çıkar Çatışması Bildirimi

Yazarlar, bu makalenin araştırılması, yazarlığı ve/veya yayınlanmasına ilişkin herhangi bir potansiyel çıkar çatışması beyan etmemiştir.

Destek/Finansman Bilgileri

Yazarlar, bu makalenin araştırılması, yazarlığı ve/veya yayınlanması için herhangi bir finansal destek almamıştır.

Etik Kurul Kararı

Bu araştırma için Muş Alparslan Üniversitesi Bilimsel Araştırma ve Yayın Etiği Kurulu'ndan 08.11.2023 tarihinde 112498-9-73 sayılı etik izin alınmıştır.

Yapay Zeka Kullanımı Bildirimi

Yazarlar**,** bu makalenin araştırılması, yazarlığı veya yayınlanması için herhangi bir yapay zekâ aracından faydalanmamıştır.

Kaynakça/References

d'Arbeloff, T., Freedy, K., Knodt, A., Radtke, S., Brigidi, B., & Hariri, A. (2018). Emotion regulation and the experience of future negative mood: The importance of assessing social support. *Frontiers in Psychology*, *9*, 2287. https://doi.org/10.3389/fpsyg.2018.02287.

Aldao, A., & Nolen-Hoeksema, S. (2010). Specificity of cognitive emotion regulation strategies: a transdiagnostic examination. *Behaviour Research And Therapy*, *48*, 974-983. https://doi.org/10.1016/j.brat.2010.06.002.

Alsaif, B., Hassan, S. U. N., Alzain, M. A., Almishaal, A. A., & Zahra, A. (2024). Cognitive flexibility's role in reducing academic stress during the COVID-19 pandemic. *Psychology Research and Behavior Management, 17*, 457-466.

Arici-Ozcan, N., Cekici, F., & Arslan, R. (2019). The relationship between resilience and distress tolerance in college students: The mediator role of cognitive flexibility and difficulties in emotion regulation. *International Journal of Educational Methodology*, *5*(4), 525-533.

Ateş-Ös, A., & Bulut-Serin, N. (2024). Cognitive flexibility and belonging among university students: Mediating role of adaptation. *Current Psychology, 43*(4), 3234-3242.

Balzarotti, S., Biassoni, F., Villani, D., Prunas, A., & Velotti, P. (2016). Individual differences in cognitive emotion regulation: Implications for Subjective and Psychological Well-Being. *Journal of Happiness Studies*, *17*, 125-143. https://doi.org/10.1007/S10902-014-9587-3.

Buttelmann, F., & Karbach, J. (2017). Development and plasticity of cognitive flexibility in early and childhood. *Frontiers in Psychology*, *8,* 1040. https://doi.org/10.3389/fpsyg.2017.01040.

Cai, Z., & Qi, B. (2023). Cognitive flexibility as a protective factor for empathy. *Frontiers in Psychology*, *13*, 1064494. https://doi.org/10.3389/fpsyg.2022.1064494

Chaudhry, S., Tandon, A., Shinde, S., & Bhattacharya, A. (2024). Student psychological well-being in higher education: The role of internal team environment, institutional, friends and family support, and academic engagement. *PLOS ONE, 19*(1), e0297508.

Chen, D., Wen, X., Zhou, Y., Zhang, Q., & Xu, W. (2024). Cognitive flexibility and social adjustment in daily life among children: The role of perceived social support. *Current Psychology*, *43*, 18463–18473.

Dajani, D., & Uddin, L. (2015). Demystifying cognitive flexibility: Implications for clinical and developmental neuroscience. *Trends in Neurosciences*, *38*, 571-578. https://doi.org/10.1016/j.tins.2015.07.003.

Damirchi, E., Mohammadi, N., & Abad, N. (2018). Prediction of mental health based on moral ıntelligence and cognitive flexibility in nursing Students. *Medical Ethics Journal, 12*, 1-10.

Daniel, S. K., Abdel-Baki, R., & Hall, G. B. (2020). The protective effect of emotion regulation on child and adolescent well-being. *Journal of Child and Family Studies, 29*(7), 2010–2027. https://doi.org/10.1007/s10826-020-01731-3

Demirtaş, A. S. (2020). Optimism and happiness in undergraduate students: Cognitive flexibility and adjustment to university life as mediators. *Anales de Psicología/Annals of Psychology*, *36*(2), 320-329.

Dennis, J. P., & Vander Wal, J. S. (2010). The cognitive flexibility inventory: Instrument development and estimates of reliability and validity. *Cognitive Therapy and Research, 34*, 241–253.

Dessauvagie, A. S., Dang, H.-M., Nguyen, T. A. T., & Groen, G. (2022). Mental health of university students in Southeastern Asia: A systematic review. *Asia Pacific Journal of Public Health, 34*(2–3), 172–181.

Diener, E., Wirtz, D., Biswas-Diener, R., Tov, W., Kim-Prieto, C., Choi, D., et al. (2009). New measures of wellbeing. *Social Indicators Research Series, 39*. https://doi.org/10.1007/978-90-481-2354-4 12.

Duru, E., & Balkıs, M. (2024). COVID-19 related negative life events and psychological distress: The role of emotion and cognitive emotion regulation strategies. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 42*(1), 69-91.

Frankel R. J., Wallen E. N. & Hyun, H. H. (2011). How to design and evaluate research in education. (8.Baskı). New York: McGraw-Hill.

Freire, C., Ferradás, M., Valle, A., Núñez, J., & Vallejo, G. (2016). Profiles of Psychological Well-being and Coping Strategies among University Students. *Frontiers in Psychology, 7*. https://doi.org/10.3389/fpsyg.2016.01554

Gabrys, R., Tabri, N., Anisman, H., & Matheson, K. (2018). Cognitive control and flexibility in the context of stress and depressive symptoms: The cognitive control and flexibility questionnaire. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.02219.

Gao, W., Chen, S., Chen, Y., He, F., Yang, J., and Yuan, J. (2021). The use and change of emotion regulation strategies: the promoting effect of cognitive flexibility. *Chinese Science Bulletin*, 66, 2405–2415. https://doi.org/10.1360/TB-2020-1035

Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). *Negative life events, cognitive emotion regulation and emotional problems. Personality and Individual Differences, 30(8), 1311–1327.* https://doi.org/10.1016/s0191-8869(00)00113-6

Garnefski, N., Kommer, T., Kraaij, V., Teerds, J., Legerstee, J., & Onstein, E. (2002). The relationship between cognitive emotion regulation strategies and emotional problems: comparison between a clinical and a non-clinical sample. *European Journal of Personality*, *16*, 403-420. https://doi.org/10.1002/per.458.

Gökçe, S., & Güner, P. (2024). Pathways from cognitive flexibility to academic achievement: Mediating roles of critical thinking disposition and mathematics anxiety. *Current Psychology, 43*(20), 18192-18206.

Gross, J. (2015). Emotion Regulation: Current Status and Future Prospects. *Psychological Inquiry*, *26*, 1 -26. https://doi.org/10.1080/1047840X.2014.940781.

Guler, K., & Aydin, A. (2022). Comparing the working memory capacity with cognitive flexibility, cognitive emotion regulation, and learning styles of university students: A domain general view. *Dementia and Geriatric Cognitive Disorders EXTRA*, 12, 131- 149. https://doi.org/10.1159/000526226.

Gülüm, İ.V. & Dağ İ. (2012). Tekrarlayıcı düşünme ölçeği ve bilişsel esneklik envanterinin türkçeye uyarlanması, geçerliliği ve güvenirliği. *Anadolu Psikiyatri Dergisi, 13,* 216-223.

Hasani, J., Chashmi, S. J. E., Firoozabadi, M. A., Noory, L., Turel, O., & Montag, C. (2024). Cognitive emotion regulation mediates the relationship between big-five personality traits and internet use disorder tendencies. *Computers in Human Behavior, 152*, 108020.

Hemi, A., Sopp, M., Schäfer, S., Michael, T., & Levy-Gigi, E. (2022). Adaptive responding to prolonged stress exposure: A binational study on the impact of flexibility on latent profiles of cognitive, emotional and behavioural responses to the COVID-19 pandemic. *Health & Social Care in the Community, 30*, e6163 - e6174. https://doi.org/10.1111/hsc.14053

Inozu, M., Gök, B.G., Tuzun, D. et al. (2023). Does cognitive flexibility change the nature of the relationship between intolerance of uncertainty and psychological symptoms during the COVID-19 outbreak in Turkey*? Current Psychology, 42*, 17412–17423. https://doi.org/10.1007/s12144-021-02450-8

Karasar, N. (2010). Bilimsel araştırma yöntemi. Ankara: Nobel Yayın Dağıtım.

Kırca, B., Saruhan, V., Aydoğdu, B. N., & Avcu, A. (2024). Mediation effect of cognitive flexibility between fear of negative evaluation and interaction anxiety. *Current Psychology, 43*(3), 2327-2336.

Kouchi, T., Ahmadı, V., Mamı, S.H., & Nademi, A. (2022). Investigating the relationship between cognitive emotion regulation strategies and psychological well-being of university students in Ilam city, Iran through positive and negative affect. *Middle Eastern Journal of Disability Studies, 12*. https://sid.ir/paper/1124920/en

Lamb, S., Maire, Q., & Doecke, E. (2017). Key skills for the 21st century: An evidence-based review. *Future Frontiers Analytical Report*. NSW Department of Education.

Lockwood, P. L., Bird, G., Bridge, M., and Viding, E. (2013). Dissecting empathy: high levels of psychopathic and autistic traits are characterized by difficulties in different social information processing domains. *Frontiers in Human Neuroscience, 7*, 760. https://doi.org/10.3389/fnhum.2013.00760

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131*(6), 803–855. https://doi.org/10.1037/0033-2909.131.6.803

MacLeod, A. K., Coates, E., & Hetherton, J. (2008). Increasing well-being through teaching goal-setting and planning skills: Results of a brief intervention. *Journal of Happiness Studies, 9*(2), 185-196.

Maddux, J. E., & Lewis, J. (1995). Self-efficacy and adjustment. In J. E. Maddux (Ed.), *Self-efficacy, adaptation, and adjustment* (pp. 37-68). Springer. https://doi.org/10.1007/978-1-4419-6868-5_2

Magalhães, S., Carneiro, L., Limpo, T., & Filipe, M. (2020). Executive functions predict literacy and math achievements: The unique contribution of cognitive flexibility in grades 2, 4, and 6. Child Neuropsychology: *Journal on Normal and Abnormal Development in Childhood and Adolescence, 26*(7), 934–952. https://doi.org/10.1080/09297049.2020.1740188

Malik, S., & Perveen, A. (2023). Mindfulness and anxiety among university students: Moderating role of cognitive emotion regulation. *Current Psychology, 42*(7), 5621-5628.

Malkoç, A., & Mutlu, A. (2019). Mediating the effect of cognitive flexibility in the relationship between psychological well-being and self-confidence: A Study on Turkish university students. *The International Journal of Higher Education*, *8*, 278. https://doi.org/10.5430/ijhe.v8n6p278.

McRae, K. (2016). Cognitive emotion regulation: A review of theory and scientific findings. *Current Opinion in Behavioral Sciences*, *10*, 119-124.

Mendes, A.L., Canavarro, M.C. & Ferreira, C. (2023). The roles of self-compassion and psychological flexibility in the psychological well-being of adolescent girls. Current Psychology, *42*, 12604–12613. https://doi.org/10.1007/s12144-021-02438-4

Motevalli, S., Salahshour, H. M., & Bailey, R. P. (2023). The mediating role of cognitive flexibility in the relationship between cognitive emotion regulation strategies and mindfulness in patients with type 2 diabetes. *Journal of Affective Disorders*, *339*, 676-682.

Muyan-Yılık, M., & Demir, A. (2019). A pathway towards subjective well-being for turkish university students: The roles of dispositional hope, cognitive flexibility, and coping strategies. *Journal of Happiness Studies*, 21, 1945-1963. https://doi.org/10.1007/s10902-019-00162-2.

Odacı, H., Çıkrıkçı, Ö., Çıkrıkçı, N., & Aydın, F. (2019). An exploration of the associations among cognitive flexibility, attachment styles and life satisfaction. *International Journal of Happiness and Development, 28*, 242-256. https://doi.org/10.1504/ijhd.2019.10025013.

Onat, O. & Otrar, M. (2010). Bilişsel duygu düzenleme ölçeğinin Türkçe'ye uyarlanması: Geçerlik ve güvenirlik çalışmaları. M.*Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi, 31,* 123–143.

Özen, S.R. (2016).*Evli bireylerin bilişsel duygu düzenleme stratejilerinin psikolojik iyi oluşları ve evlilik doyumları ile ilişkisinin incelenmesi* [Yayınlanmış Yüksek Lisans Tezi]. Işık Üniversitesi Klinik Psikoloji Anabilim Dalı, İstanbul.

Pajouhinia, S., Abavisani, Y., & Rezazadeh, Z. (2020). Explaining the Obsessive-compulsive Symptoms Based on Cognitive Flexibility and Social Cognition. *Practice in Clinical Psychology*, *8*, 233-242. https://doi.org/10.32598/JPCP.8.3.10.717.1.

Panahi, S., Yunus, A., & Panahi, M. (2016). Influence of cognitive emotion regulation on psychological well-being of Malaysian graduates*, The European Proceedings of Social and Behavioral Sciences*, 53-67. https://doi.org/10.15405/EPSBS.2016.05.02.610.15405/EPSBS.2016.05.02.6

Parvizi, G., & Özabacı, N. (2022). Üniversite öğrencilerinin psikolojik iyi oluş ve yaşam doyumlarının yordayıcısı olarak bilişsel esnekliğin rolü. *Adnan Menderes Üniversitesi Eğitim Fakültesi Eğitim Bilimleri Dergisi, 13*(1), 65-81.

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science, 4*, 99-10.

Ryff, C., & Keyes, C. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719–727. https://doi.org/10.1037/0022-3514.69.4.719

Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies, 9*, 13–39.

Sacchi, L., & Dan-Glauser, E. (2021). Never too late to plan: "Refocus on planning" as an effective way to lower symptoms and difficulties in emotion regulation during the COVID-19 first lockdown. *Emotion, 21*(7), 1483-1498 https://doi.org/10.1037/emo0001039

Soltani, M., Salehi, B., & Kheirabadi, G. (2024). Explaining the relationship between perfectionism and binge eating disorder in female college students: The mediating role of cognitive emotion regulation. *Practice in Clinical Psychology, 12*(1), 67-80.

Sternheim, L., Burgh, M., Berkhout, L., Dekker, M., & Ruiter, C. (2014). Poor cognitive flexibility, and the experience thereof, in a subclinical sample of female students with obsessive-compulsive symptoms. *Scandinavian Journal of Psychology, 7*, 556, 573. https://doi.org/10.1111/sjop.12163

Tanhan, F., Özok, H. İ., Kaya, A., & Yıldırım, M. (2024). Mediating and moderating effects of cognitive flexibility in the relationship between social media addiction and phubbing. *Current Psychology, 43*(1), 192-203.

Telef, B. B. (2013). Psikolojik iyi oluş ölçeği (PİOO): Türkçeye uyarlama, geçerlik ve güvenirlik çalışması. *Hacettepe Eğitim Fakültesi Dergisi*, *28*(3), 374-384.

Troy, A., Shallcross, A., & Mauss, I. (2013). A person-by-situation approach to emotion regulation. *Psychological Science*, *24*, 2505-2514. https://doi.org/10.1177/0956797613496434

Uyar, M. (2019). *Beliren yetişkinlik dönemindeki bireylerin psikolojik iyi oluş düzeylerini yordamada bağlanma tarzları ve bilişsel duygu düzenlemenin rolünün incelenmesi* [Yayımlanmamış Yüksek Lisans Tezi]. Maltepe Üniversitesi.

Wang, X., Liu, X., & Feng, T. (2021). The continuous impact of cognitive flexibility on the development of emotion understanding in children aged 4 and 5 years: A longitudinal study. *Journal of Experimental Child Psychology, 203*, 105018.

Xu, X. (2014). A review on the cognitive emotion regulation strategies. *Journal of Jiangsu Normal University, 40,* 148-153.

Yeniad, N., Malda, M., Mesman, J., van Ijzendoorn, M. H., and Pieper, S. (2013). Shifting ability predicts math and reading performance in children: a metaanalytical study. Learning and Individual Differences, *23*, 1–9. https://doi.org/10.1016/j.lindif.2012. 10.004

Yıldız, M., & Eldeleklioğlu, J. (2021). The Relationship between Decision-Making and Intolerance to Uncertainty, Cognitive Flexibility and Happiness. *Eurasian Journal of Educational Research, 91,* 38-60. https://doi.org/10.14689/ejer.2021.91.3

Yıldız-Akyol, E., & Boyacı, M. (2020). Cognitive flexibility and positivity as predictors of career future in university students. *Turkish Psychological Counseling and Guidance Journal, 10*(57), 297-320.

Zhi, R., & Derakhshan, A. (2024). Modelling the interplay between resilience, emotion regulation and psychological well-being among Chinese English language teachers: The mediating role of self-efficacy beliefs. *European Journal of Education, 59,* e12643. https://doi.org/10.1111/ejed.12643

İletişim/Correspondence
Dr. Öğr. Üyesi Semra KİYE
s.kiye@alparslan.edu.tr

Arş. Gör. Ecem ÇİÇEK HABEŞ
ciceke@ankara.edu.tr