

Are We Loyal to Ourselves? Development of the Self-Loyalty Scale

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Abstract

Being loyal to oneself improves mental health. Betrayal and self-betrayal can harm mental health. This study aims to develop a valid and reliable Self-Loyalty Scale for Turkish adults and proposes a hypothetical model. The current research has been conducted in three studies. Item response analysis revealed that the scale items were highly discriminative in Study I (N = 258). Various reliability analyses (McDonald's ω , Cronbach's α , Guttman's λ_6) showed the Self-Loyalty Scale's reliability. In Study II (N = 419), correlation and network analysis revealed substantial associations with depression, anxiety, stress, and life satisfaction. Additionally, all of the Big Five personality traits were linked to self-loyalty. Study III (N = 457) found that mindfulness and resilience serially mediated self-loyalty and mental well-being. So, self-loyalty predicts mental health directly and indirectly through mindfulness and resilience. According to this view, self-loyal people are more conscious of their environment and can handle problems more readily, leading to increased well-being. This pioneering and comprehensive study on self-loyalty highlights the concept's importance in terms of mental health.

Keywords

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Kendimize Sadık mıyız? Öz Sadakat Ölçeğinin Geliştirilmesi*

Öz

Kişinin kendisine sadık olması ruh sağlığını daha iyi bir hale getirir İhanet ve kendine ihanet ruh sağlığına zarar verebilir. Bu çalışma Türk yetişkinler için geçerli ve güvenilir bir Öz-Sadakat Ölçeği geliştirmek ve varsayımsal bir model önermek amacıyla yapılmıştır. Mevcut araştırma üç çalışma halinde yürütülmüştür. Madde tepki analizi, Çalışma I'de (N = 258) ölçek maddelerinin yüksek düzeyde ayırt edici olduğunu ortaya koymuştur. Çeşitli güvenilirlik analizleri (McDonald's ω , Cronbach's α , Guttman's λ_6) Öz Sadakat Ölçeği'nin güvenilirliğini göstermiştir. Çalışma II'de (N = 419), korelasyon ve ağ analizi depresyon, anksiyete, stres ve yaşam doyumu ile önemli ilişkiler ortaya koymuştur. Ayrıca Beş Büyük kişilik özelliğinin tamamı öz-sadakat ile ilişkilendirilmiştir. Çalışma III (N = 457), bilinçli farkındalık ve sağlamlığın öz sadakat ile mental iyi oluş arasında seri olarak aracılık ettiğini ortaya koymuştur. Dolayısıyla öz-sadakat, bilinçli farkındalık ve sağlamlık aracılığıyla doğrudan ve dolaylı olarak mental iyi oluşu yordamaktadır. Bu duruma göre kendine sadık bireyler çevrelerine karşı daha bilinçli olup sorunlarla daha kolay başa çıkabilmekte ve bu da iyi olma halinin gelişmesine yardımcı olmaktadır. Öz-sadakat üzerine yapılan bu öncü ve kapsamlı çalışma kavramın ruh sağlığı açısından önemini vurgulamaktadır.

Anahtar Sözcükler

Öz-sadakat
Bilinçli farkındalık
Sağlamlık
Mental iyi oluş
Ölçek geliştirme

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Geniştirilmiş Türkçe Özet

Giriş

Sadakat, kişilerarası ve bireyin kendisiyle olan ilişkilerinde temel bir değerdir. İhanet, güveni sarsarak bireyin gerçeklik algısını zedeleyebilir. Kendine ihanet ise bireyin kendi inanç ve değerlerine aykırı davranışları sonucu oluşur (Filosofova ve diğer., 2017; Freyd ve Birrell, 2013). Sadakat, sosyal birimlere ve değerlere bağlılık olarak tanımlanır ve farklı bağlamlarda farklı biçimlerde ortaya çıkabilir (Baxter ve diğer., 1997; James ve Cropanzano, 1994). Marcel'e (1962, 1963, 1967, akt. Allen, 1989) göre sadakat, bireyin kendini aşarak geleceğe bağlılık geliştirmesidir. Bandura'nın öz-düzenleme kuramı da bireyin amaçlarına göre davranışlarını planladığını belirtir. Öz-sadakat, bireyin kendi değer ve inançlarına sadık kalmasıdır. Bu durum, bireyin öz saygısını korur ve kendilik algısını güçlendirir. Öz-bağlılıktan farklı olarak, öz-sadakat bireyin içsel değerlere kararlı bir şekilde sahip çıkmasını ifade eder (Klussman ve diğer., 2022; Morishima, 1982). Sadakat çalışmaları genellikle müşteri, marka ve kurumsal bağlamlarda yürütülmüş ancak bireysel yönü ihmal edilmiştir (Beer ve Watson, 2009; Coşkun, 2014). Öz-sadakatın, öz-düzenleme, bilinçli farkındalık, psikolojik sağlamlık ve iyi oluş ile ilişkili olabileceği kuramsal olarak öne sürülmektedir. Kendi değerlerine göre hareket eden bireylerin, ruh sağlığı ve yaşam doyumu açısından avantajlı olduğu düşünülmektedir. Önceki araştırmalar, bilinçli farkındalık ve sağlamlığın iyi oluş ile ilişkilerine dikkat çekmiştir (Bajaj ve Pande, 2016; Masten, 2001). Literatürde öz-sadakat kavramını ölçen geçerli bir araç bulunmadığından bu araştırmanın amacı Türkiye'de yetişkin örnekleminde kullanılabilecek geçerli ve güvenilir bir öz-sadakat ölçeği geliştirmek ve bunu hipotetik bir modelde test etmektir. Bu doğrultuda mevcut araştırma üç çalışmadan oluşmuştur.

Yöntem

Çalışma I

Çalışma I'ın (N = 258) temel amacı Öz-Sadakat Ölçeği'nin madde havuzunu belirlemek ve ölçeğin psikometrik özelliklerini değerlendirmektir. Bu kapsamda sırasıyla açımlayıcı faktör analizi (AFA) ile boyut yapısı ve madde seti belirlendi, doğrulayıcı faktör analizi (DFA) ile model uyumu değerlendirildi, madde ayırt ediciliğini incelemek üzere Madde Tepki Kuramı (MTK) uygulandı, ölçüm değişmezliliği test edildi ve güvenilirlik için Cronbach's α , McDonald's ω ve Guttman λ_6 katsayıları hesaplandı. 7 maddeden oluşan Öz-Sadakat Ölçeği doğrulayıcı faktör analizi kullanılarak doğrulanmış ve Madde Tepki Analizi yapılarak ölçek maddelerinin iyi derecede ayırt edici olduğu görülmüştür. Öz-Sadakat Ölçeği'nin güvenilirliği farklı güvenilirlik analizleri (McDonald's ω , Cronbach's α , Guttman's λ_6) yapılarak kanıtlanmıştır.

Çalışma II

Çalışma II'de (N = 419), Çalışma I'de elde edilen açımlayıcı faktör analizi (AFA) ve doğrulayıcı faktör analizi (DFA) sonuçları yeniden test edilmiştir. Ardından eşdeğerliği değerlendirmek amacıyla faktör yapısı cinsiyete göre ölçüm değişmezliği açısından tekrar incelenmiştir. Ölçeğin ayırt ediciliği, güçlüğü ve bilgilendiriciliğinin değerlendirilmesi Chalmers (2012) tarafından önerilen Madde Tepki Kuramı (MTK) kullanılarak tekrar yapılmıştır. Çalışma 2'nin devamında Öz-Sadakat Ölçeği ile Beş Büyük Envanter, depresyon, anksiyete, stres ve yaşam doyumu arasındaki ilişkiler SPSS yazılımı kullanılarak korelasyon analizi ile incelenmiştir. Daha sonra kavramlar arasındaki ilişkiler JASP yazılımı kullanılarak network analizi yoluyla görselleştirilmiştir. Yapılan analizler sonucunda öz-sadakatın depresyon, anksiyete, stres ve yaşam doyumu ile anlamlı düzeyde ilişkili olduğu bulunmuştur. Ayrıca öz-sadakatın büyük beş kişilik özelliğinden tamamı ile anlamlı düzeyde ilişkili olduğu görülmüştür.

Çalışma III

Çalışma III'ün (N = 457) amacı öz-sadakat ile bilinçli farkındalık, sağlamlık ve mental iyi oluş kavramları arasındaki ilişkileri incelemektir. Ayrıca çalışma bu değişkenleri teorik bir çerçevede değerlendirmeyi amaçlamıştır. Bu noktada öncelikle değişkenler arasındaki korelasyon ortaya konulacak, ardından analiz için yapısal eşitlik modellemesi uygulanmıştır. Modelleme aşağıdaki hipotezleri test etmiştir.

H1. Öz-sadakat ile mental iyi oluş arasında pozitif yönde ilişki vardır.

H2. Öz-sadakat ile mental iyi oluş arasında sağlamlık aracı bir role sahiptir.

H3. Öz-sadakat ile mental iyi oluş arasında bilinçli farkındalık aracı bir role sahiptir.

H4. Öz-sadakat ile mental iyi oluş arasında bilinçli farkındalık ve sağlamlık seri aracı bir role sahiptir.

Bulgular

Analiz sonuçlarına göre öz-sadakat ve mental iyi oluş ilişkisinde bilinçli farkındalık ve sağlamlığın seri araçlar olduğu ortaya çıkmıştır. Diğer bir ifadeyle öz-sadakat, mental iyi oluşu hem doğrudan hem de bilinçli farkındalık ve sağlamlık üzerinden dolaylı olarak yordamaktadır. Buradan hareketle kendine sadık olan bireylerin içinde

bulundukları ana dair farkındalıklarının daha yüksek, zorluklarla başa çıkma kapasitelerinin daha güçlü ve buna bağlı olarak iyi oluş düzeylerinin daha yüksek olduğu görülmektedir.

Tartışma ve Sonuç

Sadakat, farklı bağlamlarda ele alınmış ve müşteri, marka, birey ve grup sadakati gibi türlere ayrılmıştır. Bu türlerin bireylerden farklı talepleri olması, öz-sadakat kavramını gerekli kılmıştır. Öz-sadakat, bireyin kendi değer, inanç ve kararlarına öncelik vererek bu doğrultuda tutarlı davranması olarak ifade edilebilir. Bu tutum bireyin vicdani rahatlığını destekleyebilir. Kavramın kavramsallaştırılması ve ölçülmesi, hem diğer sadakat türlerinden ayrımını netleştirmek hem de ruh sağlığı alanında potansiyel katkılarını incelemek açısından önemlidir. Bu çalışmada Öz-Sadakat Ölçeği geliştirilmiş ve bazı psikolojik değişkenlerle ilişkisi değerlendirilmiştir.

Bu çalışmada öz-sadakat ile yaşam doyumu, depresyon, anksiyete, stres ve Beş Faktör Kişilik Özellikleri arasındaki ilişkiler incelenmiştir. Yaşam doyumu ile öz-sadakat arasında pozitif yönlü anlamlı bir ilişki bulunmuştur, bu sonuç önceki çalışmalarla tutarlıdır (Dinh ve diğer., 2022; Nghiêm-Phú, 2016). Ayrıca depresyon, kaygı ve stresin özdenetimle negatif ilişkili olduğu gözlemleriyle mevcut araştırmanın bulgusu örtüşmektedir (Valikhani ve diğer., 2018). Kişilik özellikleri açısından, açıklık, vicdanlılık, dışadönüklük ve uyumluluğun öz-sadakat ile pozitif, nevrozluğun ise negatif ilişkili olduğu görülmüştür. Bu durum, bireysel ve grup sadakati ile benzerlik göstermektedir (Beer ve Watson, 2009).

Çalışma III'te test edilen ilk hipotez doğrulanmış ve öz-sadakat ile mental iyi oluş arasında pozitif bir ilişki bulunmuştur. Bu bulgu sosyal iyi oluş ile topluluk sadakati arasındaki pozitif ilişkiyi gösteren önceki çalışmalarla tutarlıdır (Han ve diğer., 2019). Kendine sadık bireylerin daha yüksek mental iyi oluş yaşadığı görülmektedir. İkinci hipotez, sağlamlığın öz-sadakat ve mental iyi oluş ilişkisindeki aracılık rolünü test etmiş ve kısmi aracılığı desteklemiştir. Örgütsel bağlamda sağlamlık ile sadakat arasında pozitif ilişkiler olduğu bilinmektedir (Saad ve diğer., 2022). Araştırmalar da sağlamlığın iyi oluşu artırdığını göstermektedir (Labrague, 2021; Yıldırım ve Arslan, 2022). Diğer bir hipotezde ise bilinçli farkındalığın aracılığı incelenmiş ve kısmi bir aracılık saptanmıştır. Önceki bulgular bilinçli farkındalığın sadakat ve iyi oluşla pozitif ilişkili olduğunu göstermektedir (Bajaj ve Pande, 2016; Klussman ve diğer., 2020). Kendilerine sadık bireylerin, anda yargılamadan kalarak daha yüksek düzeyde iyi oluş yaşadığı sonucuna ulaşılabilir. Çalışma III'ün temel hipotezi, bilinçli farkındalık ve sağlamlığın, öz-sadakat ile mental iyi oluş arasında seri aracılar olduğunu göstermiştir. Öz-sadakat, iyi oluşu hem doğrudan hem de bu iki değişken aracılığıyla dolaylı olarak yordamaktadır. Önceki araştırmalar da bilinçli farkındalık, sağlamlık ve iyi oluş arasında pozitif ilişkiler bulmuştur (Bajaj ve Pande, 2016; Zubair ve diğer., 2018). Bilinçli farkındalık, yargılamadan anda kalma bilinci olarak tanımlanır (Kabat-Zinn, 2003). Kendilerine sadık olan bireylerin daha dirençli, dikkatli ve zihinsel olarak daha sağlıklı olmaları beklenebilir. Gelecek araştırmalarda öz-sadakat daha iyi anlamak adına deneysel ve boyamsal çalışmaların yapılmasına ihtiyaç duyulmaktadır. Ayrıca kavramın dünyanın farklı coğrafyalarında ölçülebilmesi için farklı kültürlerle uyarlamalarının da yapılması gerekmektedir.

Introduction

Loyalty is a key factor in friendship, romantic, and organizational relationships (Beer & Watson, 2009). However, betrayal can damage relationships and traumatize individuals. Someone who was trustworthy becomes untrustworthy as a result of betrayal. The fundamental response to betrayal is for the individual to reorganize their perceptions of what has happened to rewrite the past. Therefore, betrayal occupies an important position in an individual's perceptions of reality (Freyd & Birrell, 2013). Self-betrayal happens when actions contradict internal beliefs. Behavioral and cognitive personality traits collide. Beyond betraying beliefs, self-betrayal violates moral principles and values, which form one's self-perception (Filosofova et al., 2017).

Loyalty is desirable in both intrapersonal and societal interactions. James and Cropanzano (1994) define loyalty as a commitment to one's social unit, goals, symbols, and values. Loyalty is an emotional response to commitment exhibited through behaviors. Friendships, families, groups, professions, countries, and faiths are common sources of loyalty (Kleinig, 2022). Individuals may demonstrate loyalty to a group, friend, spouse, brand, or consumer good/service. But loyalty can indicate different requirements in different settings (Beer & Watson, 2009). This means loyalty may be shown differently across various partnerships. If its objects make a big mistake or the demands are too strong, loyalty might disappear. One loyalty may be more significant than another, or other ideals may prevail. Choosing loyalty may also be necessary (Baxter et al., 1997). An individual's value system may favor loyalty above money gain or a spouse over a friend. Given these diverse contexts, research has increasingly focused on how loyalty can be assessed and operationalized. To understand loyalty, it must be evaluated in a variety of settings. Previous research has developed scales to measure loyalty in various contexts, including customer loyalty (Bobâlcă et al., 2012), attitudinal loyalty (Heere & Dickson, 2008), individual and group loyalty (Beer & Watson, 2009), and e-loyalty (Khoa & Nguyen, 2020).

From a dialectical perspective, Baxter et al. (1997) argue that loyalty involves betrayal of other objects and that it generates meaning in tandem with its inverse, disloyalty. This perspective shows loyalty as the unity of opposites. Marcel (1962, 1963, 1967, as cited in Allen, 1989) defines loyalty as how a person reacts to a disloyal aspect of himself. This illustrates the individual's ability to rise above. In summary, loyalty entails surpassing the current self and the conditioned and fluctuating reality of daily life, while simultaneously committing to the future. According to him, the individual secures and builds the future's structure ahead of time, rather than simply creating it. However, Bandura (1991) claims in his social cognitive theory of self-regulation that self-regulatory systems and predictions enable goal-directed action. He says that people build ideas about their abilities, foresee their actions' effects, set goals, and create action plans that will achieve them. In conclusion, predictions inspire and direct behavior. Marcel says that people who guarantee their future by being loyal to themselves are like Bandura's self-regulated people.

A person can be loyal to himself/herself or betray himself/herself. Understanding self-loyalty as a novel term helps distinguish it from other forms of loyalty and traits. Self-loyalty, like loyalty to others, reflects an individual-centered truth about oneself (Arvidson & Axelsson, 2019). Similarly, Peterson and Seligman (2004) included loyalty as one of 24 character traits, defining it as unshakable dedication and trust toward a person or group. In contrast, self-loyalty emphasizes consistency with one's own goals, ideals, values, and beliefs, even when it might be easier to choose otherwise. In other words, self-loyalty means being honest, loyal, and devoted to oneself. Self-loyal individuals plan their actions in line with their wants, values, beliefs, and ideals, thereby minimizing contradictions between their actions and perspectives. They avoid acting against their morals, look inward rather than outward when making difficult choices, and demonstrate clear dedication to their ethical standards. By keeping promises made to themselves, they preserve their self-esteem and protect themselves from the negative consequences of self-betrayal. Conversely, prioritizing external principles over personal values may lead to a negative self-perception. Individuals can reinterpret their experiences of self-loyalty to cope with this risk, and in some cases, being self-loyal may require disloyalty to values outside of one's own system. Thus, people loyal to themselves maintain a distinct set of values and beliefs, consistently reflected in their actions. Beyond these Western conceptualizations, cultural traditions also provide insights into self-loyalty. In Chinese thought, the idea of loyalty is closest to self-loyalty, where loyalty signifies honesty and sincerity toward one's conscience. Confucianism refers to this form of self-loyalty as "chung" (Morishima, 1982).

Self-connection, which is related to self-loyalty, and self-loyalty, which involves focusing on and being compatible with one's inner reality, must be distinguished. People who are self-connected know, accept, and act on themselves (Klussman et al., 2022). Self-loyalty is operating in accordance with one's principles, beliefs, and needs while defending them. Self-loyalty is when people put themselves first.

The Present Study

Loyalty research has primarily focused on business, public relations, banking, and customer and brand loyalty (Coşkun, 2014; Ertürk, 2020; Karadeniz, 2020). Beer and Watson (2009) discovered that individual and group loyalty were negatively related to avoidance and positively related to positive affectivity, both of which are

dimensions of adult attachment. Happiness, on the other hand, has been linked to both "concrete" (loyalty to individuals) and "abstract" (loyalty to large groups based on high-level abstractions) loyalty (Aksoy et al., 2015). Self-regulation was found to be positively correlated with mindfulness and life satisfaction (Ay, 2023; Kandemir, 2014). Considering that individuals manage their actions through self-regulation (Bandura, 1991), it is conceivable that individuals who are self-loyal use self-regulatory systems to manage their actions, thus self-regulation and related concepts are expected to be related to self-loyalty.

According to some, mental health is a prerequisite for physical health (Prince et al., 2007). This study therefore examined self-loyalty and mental health. Self-loyalty is expected to promote well-being because it describes individuals acting in line with their values. In addition, since they make choices that align with their values, individuals who live by their own principles may be more psychologically resilient when faced with challenges. Since self-loyalty necessitates constant awareness, people who exhibit self-loyalty may also be thought of as having a greater awareness of the present. According to previous studies (Peterson & Seligman, 2004; Arvidson & Axelsson, 2019), self-loyalty is conceptually related to concepts like mindfulness, resilience, and well-being. For instance, mindfulness, which has its roots in Buddhist philosophy (Kabat-Zinn, 2003), goes beyond meditation and entails actively engaging with present-moment experiences (Brown & Ryan, 2003). Empirical studies show a positive relationship between mindfulness, resilience, and well-being (Bajaj & Pande, 2016; Keye & Pidgeon, 2013). Bajaj and Pande (2016) found that resilience partially mediates the relationship between life satisfaction and mindfulness. In a similar vein, resilience—which is characterized as positive adaptation—has been associated with greater levels of well-being and represents the capacity to maintain or restore mental health following adversity (Masten, 2001). Other studies have revealed that resilience in adults has a positive and significant relationship with mindfulness and well-being (Akyıl, 2025; Akyıl & İme, 2024; Sarı et al., 2025). When combined, these results offer conceptual and empirical evidence in favor of incorporating resilience and mindfulness into the current model. In order to determine whether resilience and mindfulness mediate the relationship between self-loyalty and well-being, a hypothetical model was developed.

As a new term, self-loyalty should be examined in relation to the Big 5 personality traits—depression, anxiety, stress, and life satisfaction—to better comprehend mental health and the idea. Mental health is associated with life satisfaction, depression, anxiety, and stress (Lombardo et al., 2018; Sarai, 2016). However, McCrea and Costa (1997) claim five personality traits distinguish people. Openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism are Big Five-Factor Model qualities. Some of these personality qualities strongly influence individual and group loyalty (Beer & Watson, 2009). As a result, it is necessary to examine the relationships of self-loyalty in order to better define the concept.

The literature review found no self-loyalty measuring instrument. Thus, this study aimed to develop a valid and reliable self-loyalty measurement tool for Turkish adults and evaluate it in a hypothetical model. Future research and psychological intervention studies may benefit from the Self-Loyalty Scale.

Method and Results

This investigation was conducted as three different studies with their own samples to ensure validity and reliability. Study I determined the Self-Loyalty Scale items. Study II examined self-loyalty with the Big 5 personality traits of depression, anxiety, stress, and life satisfaction. Study III used serial mediation to assess self-loyalty and well-being.

Study I

Study I aimed to determine the item pool for the Self-Loyalty Scale. First, an exploratory factor analysis (EFA) was conducted to identify the latent structure. Next, a confirmatory factor analysis (CFA) was performed to evaluate model fit and item loadings. Item discrimination was then examined within an item response theory (IRT) framework. Measurement invariance across gender was tested, and reliability was assessed using Cronbach's α , McDonald's ω , and Guttman's λ_6 .

Study I Method

Study I Participants. The convenience sampling method was used to recruit participants for the study. A total of 258 participants, including 164 women (63.6%) and 94 men (36.4%) from various provinces in Türkiye, completed the survey online. Therefore, the current number of participants ensures that the minimum ratios of participants per item are 5/1 or 10/1, as proposed by Gorsuch (1983). The study included participants aged 18 to 50 with various educational backgrounds. The participants' mean age was 25.37 years, with a standard deviation of 3.57. Data were collected via Google Forms over a period of approximately four weeks. Participants were reached through announcements on social media platforms, and the snowball technique was also employed, as participants were encouraged to share the survey link with others in their networks. Incomplete survey responses were not recorded.

by the system; therefore, the number of partially filled questionnaires and a conventional response rate could not be determined.

Study I Data Analysis. The study aims to construct the Self-Loyalty Scale. Before creating scale items, a thorough literature review was done. Thus, the concept was deepened, and 20 components were produced by identifying self-loyalty qualities. The idea of loyalty in Peterson and Seligman's (2004) 24 character traits and Bandura's (1991) social cognitive theory of self-regulation were relevant for this item pool. Five faculty members who are experts in their domains were given the prepared items. Experts identified 15 items with similar conformity. In other words, the item pool contained objects that all five experts believed were associated with the notion. After finalizing the 5-point Likert-type scale from Never to Always, analyses proceeded.

Participants in the study who gave informed consent via Google Form received the scales. Following the Helsinki Declaration, the study was planned. This study's validity and reliability began with SPSS EFA. The scale contained items with factor loadings of 0.40 or greater. In addition, parallel analysis determined the scale's dimensions within EFA results (Timmerman & Lorenzo-Seva, 2011). CFA with AMOS corroborated the Self-Loyalty Scale's factor structure. GFI, NFI, and CFI of .90, as well as RMSEA and SRMR of .08, are acceptable fit indices (Hu & Bentler, 1999; Marsh et al., 2004). It should be emphasized that the analyses were not limited to Study 1; both EFA and CFA were also conducted in Study 2 with a different sample. This approach allowed for cross-validation of the factor structure. The findings from both studies are presented comparatively in Table 1. To determine equivalency, the structure of gender-specific measurement invariance components was evaluated. The goal was to compare male and female participants. This test included configurational, metric, and scalar evaluations. According to Chen (2007) and Cheung and Rensvold (2002), $\Delta CFI < .010$ implies measurement invariance across groups.

Chalmers' (2012) IRT rated the scale's discrimination, difficulty, and informativeness. IRT delivers more complete and reliable individual and item data than classical test theory. IRT is a statistical method used to study scale-based question responses (Baker, 2001). Zero (none), 0.01-0.34 (very low), 0.35-0.64 (low), 0.65-0.1.34 (moderate), 1.35-1.69 (high), 1.70 and above (very high), and zero or higher (excellent).

Study I Results. Seven of 15 items had factor loadings over 0.40. Item 1 had a factor loading of 0.840, item 2 = 0.796, item 3 = 0.764, item 4 = 0.759, item 5 = 0.741, item 6 = 0.727, and item 7 = 0.727. The direct oblimin rotation and 3.87 eigenvalue validated the one-factor structure. EFA and parallel analysis eigenvalues were also compared. Since the eigenvalues calculated for the other dimensions, except for the first one from parallel analysis, were bigger than those from EFA, it supported that the scale has a single-dimensional structure. CFA was used to validate the items. (Hair et al., 2009) The CFA revealed that the chi-square statistic is significant for fit statistics. Acceptable limits were determined for χ^2/df ratio ($.640 \leq 5$), SRMR ($.03 \leq .08$), RMSEA ($.05 \leq .08$), GFI ($.975 \geq .90$), NFI ($.971 \geq .90$), RFI (.956), IFI (.988), TLI (.982), and CFI (.988). Significant ($p < .001$) standardized factor loadings for items: .67 (item 1), .82 (item 2), .75 (item 3), .63 (item 4), .68 (item 5), .72 (item 6), and .71 (item 7). Table 1 displays item details as well as Study II.

Table 1
Self-Loyalty Scale Factor Loadings and Descriptive Statistics

Item	N		EFA		CFA		Mean		Df		Corelation	
	S-I	S-II	S-I	S-II	S-I	S-II	S-I	S-II	S-I	S-II	S-I	S-II
1. I keep my promises to myself./ Kendime verdiğim sözleri tutarım.	258	419	0.84	0.83	0.67	0.80	3.60	3.84	0.98	0.90	0.62	0.76
2. I am loyal to myself./ Kendime sadığım.	258	419	0.80	0.86	0.82	0.83	3.95	4.14	0.96	0.87	0.76	0.79
3. I do not betray my trust in myself./ Kendime olan güvene ihanet etmem.	258	419	0.76	0.82	0.75	0.79	3.96	4.17	0.98	0.90	0.70	0.75
4. I am loyal to my desires./ İsteklerime karşı sadık biriyim	258	419	0.76	0.86	0.63	0.84	3.88	4.11	0.94	0.92	0.59	0.80
5. I am committed to my principles./ İlkelerime bağlı biriyim.	258	419	0.74	0.82	0.68	0.78	4.07	4.25	0.95	0.85	0.64	0.75
6. I respect myself./ Kendime saygı gösteririm.	258	419	0.73	0.83	0.72	0.80	3.93	4.30	1.11	0.86	0.66	0.77
7. When I have to make difficult decisions, I stick to what I believe in./ Zor kararlar vereceğimde kendi inandıklarına sadık kalırım.	258	419	0.70	0.78	0.71	0.73	4.04	4.11	0.92	0.86	0.66	0.70

Study I Measurement Invariance. The scale was examined by gender after the CFA results of the Self-Loyalty Scale were verified. Configurational, metric, and scalar invariance tests were then performed. The findings are presented in Table 2, along with the findings from Study II.

Table 2

Study 1 and Study 2 Fit indices of gender invariance

Study 1 Invariance	χ^2	df	χ^2/df	$\Delta\chi^2$	Δdf	p	NFI	TLI	SRMR	RMSEA	CFI	ΔCFI	$\Delta Mc NCI$	$\Delta gamma hat$
Configural invariance	53.49	28	1.91	-	-	-	.94	.95	.06	.06	.97	-	-	-
Metric invariance	57.65	34	1.70	4163	6	.000	.93	.96	.07	.05	.97	.03	.000	0.0016
Scalar invariance	66.29	40	1.66	8645	6	.000	.92	.97	.07	.05	.97	.04	.000	0.0027
Study 2 Invariance	χ^2	df	χ^2/df	$\Delta\chi^2$	Δdf	p	NFI	TLI	SRMR	RMSEA	CFI	ΔCFI	$\Delta Mc NCI$	$\Delta gamma hat$
Configural invariance	71.83	28	2.57	-	-	-	.96	.97	.04	.06	.98	-	-	-
Metric invariance	75.44	34	2.22	3612	6	.000	.96	.97	.05	.05	.98	.002	.000	0.00080
Scalar invariance	89.79	40	2.25	14345	6	.000	.95	.97	.05	.06	.97	.005	.000	0.00255

In Table 2, measurement invariance analysis confirmed configural and metric invariance ($\Delta CFI = .03$) and a scalar model ($\Delta CFI = .04$) of the Self Loyalty Scale that was well-fitted across genders. This shows that men and women see Self-Loyalty Scale items similarly.

Study 1 Item Response Theory. Popular for evaluating educational instruments, IRT is also being utilized for personality measurement (Colledani et al., 2019). The S-shaped item characteristic curve (ICC) illustrates essential IRT parameters. The Self-Loyalty Scale is a five-point Likert scale; hence, the Graded Response Model was used for ICC analysis. IRT results are in Appendix A and Table 3.

Table 3

Item Response Theory parameter estimates for the Self Loyalty Scale Study 1 and Study 2

Item	Item parameter estimates									
	S-I	S-II	S-I	S-II	S-I	S-II	S-I	S-II	S-I	S-II
	a	a	b ₁	b ₁	b ₂	b ₂	b ₃	b ₃	b ₄	b ₄
1	1.77	3.09	-2.68	-2.63	-1.56	-1.74	-.32	-0.46	1.29	0.65
2	3.23	3.73	-2.44	-2.62	-1.56	-1.85	-.66	-0.85	.50	0.16
3	2.43	3.22	-2.39	-2.86	-1.65	-1.77	-.81	-0.94	.53	0.08
4	1.75	3.80	-2.72	-2.83	-2.20	-1.59	-.70	-0.80	.82	0.14
5	1.98	3.06	-2.74	-2.99	-2.21	-2.15	-.93	-0.95	.38	-0.05
6	2.29	3.42	-2.15	---	-1.37	-1.89	-.78	-1.01	.39	-0.14
7	2.16	2.36	-2.83	-3.31	-2.03	-2.25	-.89	-0.85	.47	0.26

S-I: Study 1; S-II: Study 2

Table 3 demonstrates that all values exceed 1.0. Baker (2001) considers values over 1.0 highly discriminating. These values were categorized according to the following scale: 0 (none), 0.01–0.34 (very low), 0.35–0.64 (poor), 0.65–1.34 (moderate), 1.35–1.69 (high), and 1.70 and above (very high). The IRT framework is commonly used to study and conceptualize item responses. This approach solves many measuring problems. IRT evaluates individual things rather than aggregating results from several elements (Baker & Kim, 2017). IRT in Likert scales helps people understand their options, according to Fraley et al. (2000). IRT revealed that Self-Loyalty Scale items were discriminative.

Study 1 Reliability. The JASP program assessed scale reliability. Cronbach's α , McDonald's ω , and Guttman's λ_6 reliability values were evaluated. The results showed good internal consistency and reliability. According to Nunnally (1978), a value of .70 is an acceptable lower limit for alpha. Table 4 shows coefficients.

Table 4

Self-Loyalty Scale reliability analysis results study 1, 2 and 3

	McDonald's ω	Cronbach's α	Guttman's λ_6
Study 1	.88	.88	.87
Study 2	.92	.92	.92
Study 3	.91	.91	.90

Study II

After testing psychometric qualities, the second study employed EFA to identify Self-Loyalty Scale dimensions and items. Parallel analysis was repeated to confirm the scale's dimensions within EFA results. CFA checks item fit indices. For the Big Five Inventory, depression, anxiety, stress, and life satisfaction, we will utilize IRT to test item discrimination, measurement invariance, and criterion correlation validity.

Study II Method

Study II Participants. Participants in Study II were selected using convenience sampling. A total of 419 participants, including 343 women (81.9%) and 76 men (18.1%), from various Turkish provinces, were surveyed online. The study included participants aged 18 to 49 with a variety of educational backgrounds. The participants' mean age was 22.32 years, with a standard deviation of 4.23. Participants were reached via social media announcements and encouraged to share the survey link with their networks using the snowball technique. All participants completed the survey form via Google Forms.

Study II Measures. Self-loyalty scale. The scale that was developed within the context of the present study is a dependable and valid measurement instrument that can be employed to assess the self-loyalty levels of adult individuals. The Cronbach alpha reliability coefficient for the scale in Study II is .90. The scale exhibited a satisfactory fit, as indicated by the analysis results: $\chi^2/df = 1.640$, SRMR = .03, RMSEA = .05, GFI = .975, NFI = .971, RFI = .956, IFI = .988, TLI = .982, and CFI = .988. The scale is unidimensional, consisting of seven items without any reverse items. "I am a person who is loyal to my principles," "I keep my promises to myself," and "I stick to my principles when I make difficult decisions." are examples of the scale's items. The scale is responded to on a 5-point Likert scale, with a minimum score of 7 and a maximum score of 35. The scale is categorized as follows: 1 = never, 5 = always. Individuals are more loyal to themselves when they receive higher scores.

The satisfaction with life scale. Dağlı and Baysal (2016) conducted a study to adapt, validate, and verify the reliability of the "Life Satisfaction Scale" (LSS) from Diener et al. (1985) into Turkish. This study measured adult life satisfaction. Cronbach Alpha gave the scale an internal consistency coefficient of 0.88. Fit indices showed a strong fit for the scale's factor structure. Only one dimension makes up the five-item scale. One denotes strong disagreement, and five indicates strong agreement on the five-point Likert scale. People with high scores are really happy with their lives.

Big five inventory. The Rammstedt and John (2007) Big Five Inventory is a ten-item simplified personality test that assesses five personality traits in adults. Türküm et al. (2016) examined Turkish use. Each item's rating scale spans from 1 (strong disagreement) to 5 (strong agreement). Each BFI-10 subscale—"openness," "conscientiousness," "extraversion," "agreeableness," and "neuroticism,"—has two items. The scale's five-factor structure has satisfactory fit indices.

Depression anxiety and stress scale (DASS-21). Brown et al. (1997) tested a condensed stress, anxiety, and depression scale. This scale is a valid and reliable measure in adult samples. The 21-question DASS-21 scale was translated into Turkish by Yılmaz et al. (2017). The DASS-21 scale evaluates "depression," "stress," and "anxiety" individually with seven items. The calculations show that depression, anxiety, and stress sub-dimensions have Cronbach's alpha reliability coefficients of .81, .80, and .75. 0 means "not appropriate for me," 1 means "somewhat appropriate for me," 2 means "generally appropriate for me," and 3 means "completely appropriate for me."

Study II Data Analysis. Study II analyzed the EFA and CFA values of the items from Study I's exploratory and confirmatory item analysis. The factor structure was reevaluated for gender measurement invariance to determine equivalency. Chalmers' (2012) IRT was used again to evaluate the scale's discrimination, difficulty, and informativeness. The second portion of the study examined the Self-Loyalty Scale, Big Five Inventory, depression, anxiety, stress, and life satisfaction using correlation analysis. The JASP network analysis program visualized the concepts' relationships.

Study II Results. Table 1 compares Study I and Study II with EFA and CFA results as well as item descriptive data. The one-factor structure was validated by the 4.80 eigenvalue and direct oblimin rotation. Parallel analysis also confirmed one element to keep. Measurement invariance results for investigations I and II are in Table 2. Table 3 concludes the IRT comparison of investigations I and II. The Self-Loyalty Scale's EFA and CFA results are consistent and satisfactory in the first three tables. The two investigations show that item discrimination is significant and gender-independent. Table 4 shows the second study's reliability analysis.

The results of the correlation analysis are presented in the following section. The concepts' networks are then presented using network analysis.

Table 5

Relationship of the Self Loyalty Scale with the Variables

	Mean	SD	Correlation with Self-Loyalty	
			r	p
Self Loyalty	28.94	5.14	-	-
Life Satisfaction	15.26	4.61	0.381	<0.001
Depression	8.28	5.71	-0.246	<0.001
Anxiety	7.40	6.13	-0.381	<0.001
Stress	9.00	5.92	-0.327	<0.001
Big five personality traits				
Openness	7.30	1.75	0.322	<0.001
Conscientiousness	7.39	1.70	0.490	<0.001
Extraversion	6.78	1.95	0.267	<0.001
Agreeableness	7.88	1.50	0.350	<0.001
Neuroticism	6.26	1.83	-0.217	<0.001

Table 5 shows that self-loyalty has a negative correlation with depression ($r = -.24$ $p < .001$), anxiety ($r = -.38$ $p < .001$), stress ($r = -.32$ $p < .001$), and neuroticism ($r = -.21$ $p < .001$), but a positive correlation with openness ($r = .32$ $p < .001$), conscientiousness ($r = .49$ $p < .001$), extraversion ($r = .26$ $p < .001$), agreeableness ($r = .35$ $p < .001$), and life satisfaction ($r = .38$ $p < .001$).

The relationship network between the concepts is shown in Figure 1.

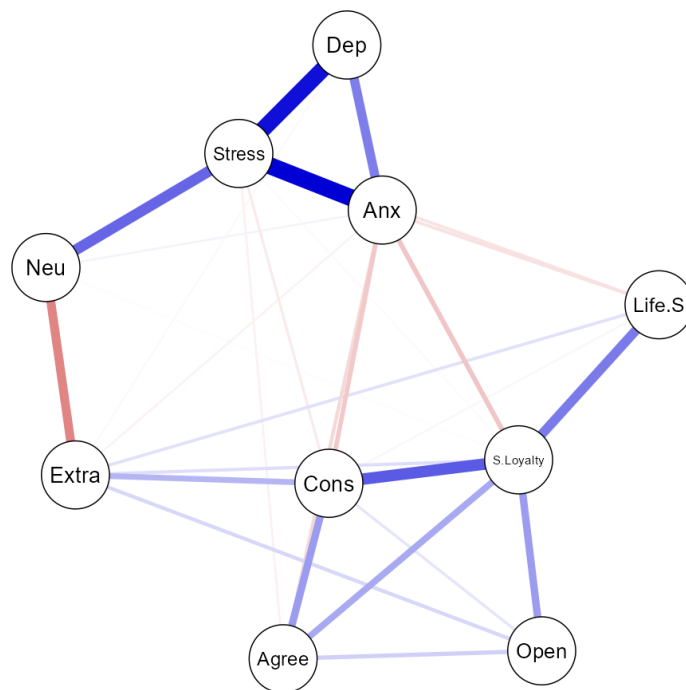


Figure 1. Network analysis for Self-Loyalty

Note. Blue lines represent positive correlations, and red lines represent negative correlations. DEP: Depression; Anx: Anxiety; Open: Openness; Cons: Conscientiousness; Extra: Extraversion; Agree: Agreeableness; Neu: Neuroticism; Life.S: Life satisfaction

Study III

The purpose of Study III is to investigate the relationships between self-loyalty and the concepts of mindfulness, resilience, and mental well-being. Furthermore, the study seeks to assess these variables within a theoretical framework. At this point, the correlation between the variables will be revealed, followed by an analysis using SEM. The hypotheses listed below will be tested through modeling.

- H1. There is a positive relationship between self loyalty and mental well-being.
- H2. Resilience has a mediating role between self loyalty and mental well-being.
- H3. Mindfulness has a mediating role between self loyalty and mental well-being.
- H4. Mindfulness and resilience have a serial mediating role between self loyalty and mental well-being.

Study III Participants. Participants in Study III were selected using convenience sampling. An online survey was conducted with 457 participants, including 390 women (85.3%) and 67 men (14.7%) from various Turkish provinces. The study included participants aged 18 to 48 with a variety of educational backgrounds. It is recommended that the sample size in SEM be greater than 100, preferably greater than 200 (Bagozzi, 2010). The participants' mean age was 22.74 years, with a standard deviation of 4.99. Social media announcements were used to contact participants, and they were then sent the Google Form to fill out. Participants were urged to forward the survey link to their personal networks using the snowball technique.

Study III Measures. Mindful attention awareness scale. Brown and Ryan (2003) devised this mindfulness assessment for adults. An adaptation study of this measurement tool to Turkish was undertaken by Özyeşil et al. (2011). It can measure mindfulness in Turkish culture and is valid and reliable. The Turkish version has 0.80 Cronbach's alpha. The 15-item scale is one-dimensional. Fit indices showed a strong scale match. The six-point Likert scale includes "1" for nearly usually, "2" for most of the time, "3" for occasionally, "4" for rarely, "5" for extremely rarely, and "6" for virtually never. Its lowest and highest scores are 15 and 90.

Brief psychological resilience scale. Smith et al. (2008) created a scale to measure adult psychological resilience. Doğan (2015) investigated the adaptation of the Turkish language for adult use. The scale's internal consistency coefficient was .83, indicating reliability. Fit indices were also good. The 6-item scale is fundamentally unidimensional. The responses are on a five-point Likert scale, with one meaning "not at all appropriate" and five meaning "completely appropriate." High scores on the scale reflect psychological resilience, which means the person can recover from challenging experiences on their own.

Warwick-Edinburgh mental well-being scale. Tennant et al. (2007) examined the positive psychology construct well-being in a sample of adults. Demirtaş and Baytemir (2019) customized the measurement technique for Turkish culture and introduced a valid and reliable tool for assessing adult mental well-being in Turkish literature. Cronbach's alpha reliability for the scale was .84 and .86, showing satisfactory reliability. The fit was good. The scale has seven one-dimensional elements. This study used a 5-point Likert scale with responses from 1 (never) to 5 (often). Scores range from 7 to 35 on the scale. Higher scale scores imply better mental health.

Study III Data Analysis. The study aims to integrate the ideas of self-loyalty, mindfulness, resilience, and mental well-being. SPSS, JASP, and AMOS were used to analyze data for normality, descriptive statistics, reliability, and correlation. Then, SEM was done. SEM is a powerful quantitative analysis tool that allows multi-parameter decision-making (Kline, 2011). The study used a two-stage SEM per Kline (2011). The first step tests the relationship between indicator variables and latent variables as well as the measurement model that handles these relationships. After measurement model validation, the hypothetical structural model was assessed. Hu and Bentler's (1999) goodness-of-fit metrics assessed SEM results. In addition to chi-square (χ^2) and degrees of freedom, GFI, RFI, CFI, NFI, IFI, TLI, SRMR, and RMSEA values were calculated. Key values include a χ^2 to DOF ratio of <5, GFI, RFI, CFI, NFI, IFI, and TLI values above .90, and SRMR and RMSEA values below .08. (Hu & Bentler 1999; Tabachnick & Fidell 2001). On the other hand, researchers used AIC, ECVI, and chi-square difference tests to select the optimal SEM model. A model with the lowest AIC and ECVI is preferable (Akaike 1987; Browne & Cudeck 1993).

SEM used item parceling because self-loyalty, mindfulness, resilience, and mental well-being are one-dimensional. Nasser-Abu Alhija and Wisenbaker (2006) found that parceling personality traits reduces the number of observed variables, boosts reliability, and helps scales form a normal distribution. The parceling method introduced two dimensions to the categories of loyalty, resilience, and mental well-being, while mindfulness gained three.

This study used bootstrapping in addition to SEM to bolster the findings and illustrate the mediation role (Preacher & Hayes, 2008). Bootstrapping increased the sample size to 5,000, and confidence intervals (C.I.I.) were determined. Confidence intervals without zero points indicate statistical significance for the tested mediation.

Study III Results. This section first presents the results of the correlation analysis. Then, SEM is explained.

Table 6

Descriptive Statistics and Correlation Coefficients for Research Variables

	N	Mean	SD	Skewness	Kurtosis	1	2	3
1-Self Loyalty	457	28.80	5.21	-.814	.718	-		
2-Mental Well-being	457	24.65	5.51	-.011	-.030	.48**	-	
3-Resilience	457	18.09	4.48	-.108	1.190	.19**	.40**	-
4-Mindfulness	457	56.11	13.95	-.169	.287	.21**	.27**	.12**

** $p < .001$

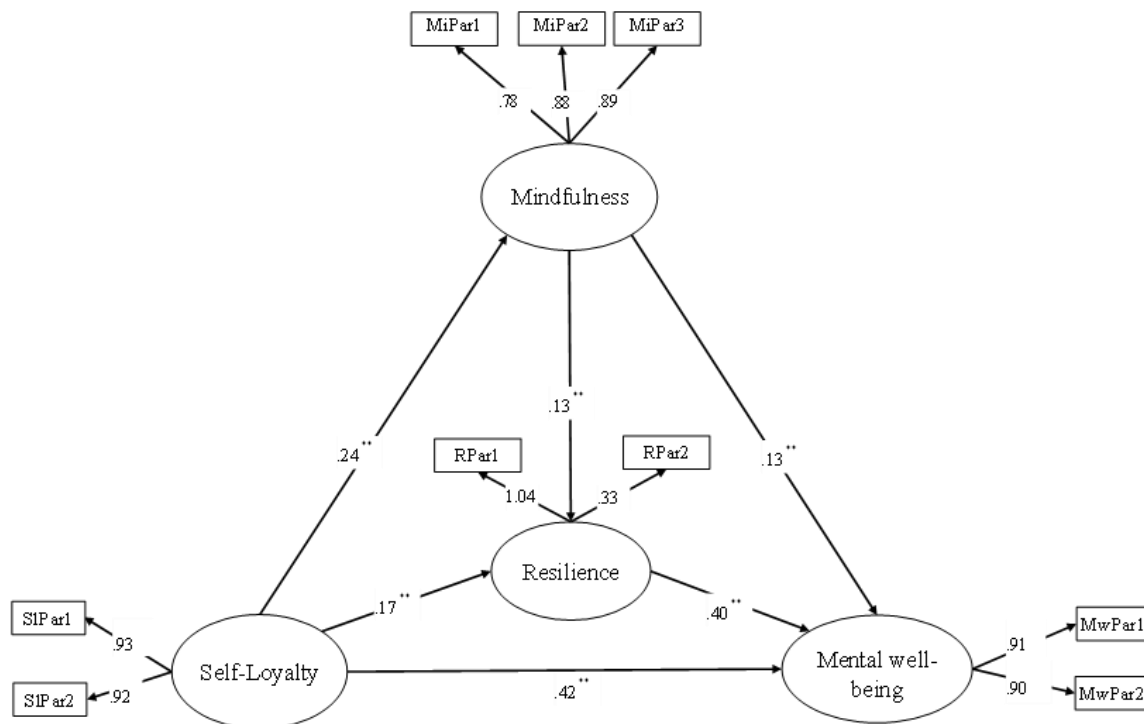
The variables' correlation, arithmetic mean, standard deviation, skewness, and kurtosis are shown in Table 6. Table 6 indicates that the variables' skewness (-.814 to -.011) and kurtosis (-.030 to 1.190) fulfill Finney and DiStefano's (2006) normalcy requirements of ± 2 and ± 7 , respectively.

Table 6 shows significant positive correlations between self-loyalty and mental well-being ($r = .48$, $p < .001$), resilience ($r = .19$, $p < .001$), and mindfulness ($r = .21$, $p < .001$). Positive correlations were found between mental well-being and resilience ($r = .40$, $p < .001$), mindfulness ($r = .27$, $p < .001$), and resilience ($r = .12$, $p < .001$).

After determining the significance of the relationships between the concepts, the measurement model was developed. The measurement model is made up of four latent variables: self-loyalty, mindfulness, resilience, and mental well-being, as well as nine observed variables that support each one. According to the results, the fit values are as follows: $\chi^2/SD = 1.153$, GFI = .989, CFI = .999, NFI = .989, TLI = .997, RFI = .981, IFI = .999, SRMR = .01, RMSA = .01. Factor loadings are widely accepted to range from 0.33 to 1.04. As a result, the core variables can be identified by their measurable values.

The structural model was the study's first focus, and it looked specifically at the role of resilience and mindfulness as full mediators in the relationship between self-loyalty and mental health. The full mediation model includes the idea that self-loyalty indirectly predicts mental health via resilience and mindfulness. However, the entire mediation model of resilience and mindfulness was found to be statistically insignificant. Therefore, the partial mediation model was tested. Although there is a direct link between self-loyalty and mental well-being, the partial mediation model investigates the mediation status of resilience and mindfulness. It is clear that the findings are significant. The fit values of the test results ($\chi^2/SD = 1.15$, GFI = .989, CFI = .999, NFI = .989, TLI = .997, RFI = .981, IFI = .999, SRMR = .019, RMSA = .018) are acceptable.

The partial mediation model was chosen to investigate the mediating role of resilience and mindfulness because the full mediation model was not significant, whereas the partial mediation model was significant and consistent. Among the findings, the preferred model demonstrates that resilience and mindfulness play a systematic and comprehensive mediation role in the relationship between self-loyalty and mental health. Figure 2 shows the path coefficients for this model.



Note. $N = 457$; ** $p < .001$; *SIPar* parcels of self loyalty; *RPar* parcels of resilience; *MiPar* parcels of mindfulness; *MwPar* parcels of mental well-being.

Figure 2. Standardised factor loadings for the partially mediated structural model

Bootstrapping was used to support and strengthen the research. As a result, each direct path coefficient is significant. The results are shown in Table 7.

Table 7

Bootstrapping Results

Path	Coefficient	95% CI	
		LL	UL
Self Loyalty → Mindfulness → Mental Well-Being	.043	.015	.086
Self Loyalty → Resilience → Mental Well-Being	.085	.027	.165
Self Loyalty → Mindfulness → Resilience → Mental Well-Being	.113	.053	.196

CI confidence interval, LL lower limit, UL upper limit

All of these findings point to resilience and mindfulness as partial mediators between self-loyalty and mental well-being. Furthermore, resilience and mindfulness serve as serial mediators of self-loyalty and mental well-being.

Discussion

Loyalty has historically been dealt with in a variety of contexts. Thus, each of the resulting loyalty types demands different things from individuals. This necessitated the introduction of self-loyalty as a new concept in an intrapersonal context. Self-loyalty occurs when people sincerely prioritize their own values, wishes, beliefs, needs, and decisions and then act on them. Individuals who are self-loyal perform behaviors consistent with their own principles regardless of external influences, which can provide them with moral comfort. Keeping promises to oneself, not deceiving oneself, and not being disloyal to oneself can be character strengths that can help people feel at ease with themselves and thus maintain good mental health. Conceptualizing and measuring the level of this concept in individuals is important not only for understanding that the concept of self-loyalty differs from other loyalties and values but also for utilizing the potential that can lead to better levels of mental health in mental health services. As a result, the purpose of this research is to create the Self-Loyalty Scale in order to assess individuals' levels of self-loyalty and investigate its relationship with certain variables. In this direction, the hypotheses proposed and the results obtained are discussed in light of the literature.

In Study II, the relationships between depression, anxiety, stress, life satisfaction, and the Big 5 personality traits with self-loyalty were investigated. The analysis revealed a significant positive relationship between life satisfaction and self-loyalty. A previous study found that life satisfaction positively predicted behavioral loyalty intentions (Dinh et al., 2022). Nghiêm-Phú (2016) found that positive affective life satisfaction correlates with country loyalty. As a result, the current study's findings appear to be supported. In a study, depression, anxiety and stress were found to be negatively related to self-control and self-knowledge (Valikhani et al., 2018). Individuals who are self-loyal are expected to be able to regulate their behaviors according to their values and, thus, to be able to control themselves and to have high self-knowledge. When this research is evaluated from this perspective, it can be understood that it is consistent with the findings of the current research.

Evidence suggests that openness, conscientiousness, extraversion, and agreeableness are positively related to self-loyalty, whereas neuroticism is negatively related. Similarly, individual and group loyalty have been shown to be positively related to conscientiousness, extraversion, and agreeableness (Beer & Watson, 2009). All of this demonstrates that different types of loyalty share similarities with concepts related to self-loyalty.

The first hypothesis tested in the study was confirmed. The analysis revealed a positive relationship between self-loyalty and mental well-being. A previous study (Han et al., 2019) found a significant positive relationship between social well-being and community loyalty, supporting the current finding. From this perspective, it is understood that people who keep their promises to themselves in a consistent manner with their behaviors and thoughts and who are loyal to themselves in this way experience a higher level of mental well-being.

Another hypothesis tested as part of the study was the mediating role of resilience in the relationship between self-loyalty and mental well-being, and the analysis revealed that resilience was partially mediated. Organizational resilience and customer loyalty are known to be positively related (Saad et al., 2022). Research indicates that resilience improves well-being (Labrague, 2021; Yildirim & Arslan, 2022). These studies corroborate the findings of the current study. Based on these findings, it is possible to conclude that people with high levels of self-loyalty can easily adapt to life's challenges by adhering to their own value systems, beliefs, and wishes, returning to their previous state and experiencing a higher level of well-being.

Another hypothesis being tested is mindfulness's role in mediating the relationship between self-loyalty and mental health. According to the findings, self-loyalty predicts mental well-being both directly and indirectly via mindfulness. This demonstrates that mindfulness plays a partial mediating role. Previous research found a statistically significant positive relationship between mindfulness and both organizational and customer loyalty

(Quang & Thuy, 2024; Zoubi et al., 2024). Previous research has shown that there are significant positive relationships between self-control and acting with awareness (Ghorbani et al., 2014). It is known that self-control is a necessary ingredient for self-regulation, and individuals can direct their behaviors through self-regulation (Bandura, 1991; Johnson et al., 2018). Self-loyal people can act in ways that are consistent with their own values and principles. This means that these studies support the idea that self-loyalty and mindfulness are linked. An experimental study found that mindfulness interventions improved loyalty intentions and well-being (Bossi et al., 2022; Sousa & Freire, 2023). A study found that mindfulness predicts well-being (Klussman et al., 2020). According to Bajaj et al. (2016), mindfulness has a positive correlation with mental well-being. Based on these, it is possible to conclude that individuals who act in accordance with their own truths and values rather than the expectations of others by being self-loyal are also aware of the present moment without judgment and will have a higher level of well-being in relation to these.

Finally, the study's main hypothesis revealed mindfulness and resilience as serial mediators of self-loyalty and mental well-being. In other words, self-loyalty predicts mental well-being both directly and indirectly through resilience and mindfulness. All of these variables have relationships with the theoretically related concepts of loyalty based on the results of past research. Furthermore, a study looking into the relationship between mindfulness, resilience, and well-being (Zubair et al., 2018) found positive relationships between these concepts, which supports the current study's findings. Another study investigated the relationships between affect and life satisfaction as well-being indicators, as well as mindfulness and resilience. As a result, in addition to the fact that mindfulness predicts well-being indicators, resilience has been identified as a partial mediator in the relationship between mindfulness and life satisfaction (Bajaj & Pande, 2016). Mindfulness is the awareness that arises from deliberately paying attention to what is happening in the present moment and experiencing it moment by moment without judgment (Kabat-Zinn, 2003). It is possible to believe that if people are self-loyal, they will be able to deal with difficulties more easily, be more mindful, and thus have a better level of mental and physical health.

Implications

The study's conclusions have several important implications for both research and practical applications. By enabling the measurement of an existing trait, the Self-Loyalty Scale created in this study makes a substantial contribution to the literature. Despite addressing loyalty in various contexts, earlier research did not specifically conceptualize the individual as the object of loyalty. The theory of self-loyalty has only been the subject of one study to date (Arvidson & Axelsson, 2017), and that study only offered the theoretical framework rather than a measurement instrument. Therefore, by offering a valid and trustworthy scale for evaluating self-loyalty, the current study closes a significant gap. The scale provides practitioners with a useful tool for determining people's levels of self-loyalty and for creating intervention programs that aim to improve resilience, mindfulness, and well-being. These programs could promote healthier self-perceptions, prevent self-betrayal, and help people confront negative experiences more skillfully. The scale may also serve as a conceptual and methodological guide for future studies on the connections between self-loyalty and different facets of mental health.

Limitations and Future Research

It is possible to identify some limitations when interpreting the study's findings. First and foremost, it should be noted that social desirability errors can occur as a result of the use of self-report scales, even if participants volunteered to collect data. To avoid this, future studies can employ a variety of data collection methods (for example, observation, interviews, peer assessment, and so on). Another limitation is the difficulty of establishing causality due to the study's cross-sectional design. Longitudinal or experimental studies can be planned and carried out for future research using current research findings. Furthermore, despite the fact that this study included multiple reliability analyses, test-retest reliability was not calculated. Future research can determine the scale's test-retest reliability coefficient for temporal reliability. In addition, across the three studies, the number of female participants exceeded that of male participants. This imbalance in gender distribution may limit the generalizability of the findings, and future studies should aim to recruit more balanced samples. Finally, because the data were collected only from the Turkish sample and the concept of loyalty is universal, this limitation can be overcome by collecting data from other cultures and conducting cross-cultural research or adaptation studies in the future.

Conclusion

The current study examined self-loyalty in three phases. The self-loyalty scale is a valid and reliable measurement tool, according to the first stage. The Big-5, DASS-21, and satisfaction with life scales—all of which had previously been acknowledged as valid and reliable—were used in the second stage to illustrate the scale's criterion correlation validity. Third, the study found that self-loyalty predicts mental well-being by enhancing people's resilience and mindfulness. Beyond these results, the study adds a new, quantifiable construct that can enhance personality and well-being research, which is a major advance for the field. The scale may also have positive social effects by promoting resilience, mindfulness, and general mental health, as practitioners can use it to create interventions that encourage self-loyalty. Furthermore, since loyalty can mean different things in different cultures, the idea of self-

loyalty should be studied from a cultural standpoint. Understanding the universality and cultural specificity of self-loyalty will require cross-cultural adaptations and validations.

Declaration of Competing Interest

No conflict of interest exists for this manuscript for any of the authors.

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References / Kaynakça

- Akaike, H. (1987). Factor analysis and AIC. *Psychometrika*, 52(3), 317-332.
- Aksoy, L., Keiningham, T. L., Buoye, A., Lariviere, B., Williams, L., & Wilson, I. (2015). Does loyalty span domains? Examining the relationship between consumer loyalty, other loyalties and happiness. *Journal of Business Research*, 68(12), 2464-2476. <https://doi.org/10.1016/j.jbusres.2015.06.033>
- Akyl, Y. (2025). Examining the connections between boredom proneness, resilience, mental well-being, and rumination. *Personality and Individual Differences*, 233, 112931. <https://doi.org/10.1016/j.paid.2024.112931>
- Akyl, Y., & İme, Y. (2024). The Mediating Role of Mental Well-Being Between Psychological Resilience, Life Satisfaction and Emotional Intelligence. *e-Kafkas Journal of Educational Research*, 11(4), 742-752. <https://doi.org/10.30900/kafkasegt.1433531>
- Allen, R. T. (1989). When loyalty no harm meant. *The Review of Metaphysics*, 281-294.
- Arvidson, M., & Axelsson, J. (2019). Exploring self-loyalty in the context of social acceleration: theorising loyalties as emotions and resistance. In *Resistance and Emotions* (pp. 7-22). Routledge. <http://dx.doi.org/10.1080/2158379X.2017.1335835>
- Ay, İ. (2023). Exploring the relationship between cognitive flexibility and mindfulness with self-regulation in university students. *Afr Educational Res J*, 11(3), 460-7. <https://doi.org/10.30918/AERJ.113.23.073>
- Bagozzi, R. P. (2010). Structural equation models are modelling tools with many ambiguities: Comments acknowledging the need for caution and humility in their use. *Journal of Consumer Psychology*, 20(2), 208-214. <https://doi.org/10.1016/j.jcps.2010.03.001>
- Bajaj, B., & Pande, N. (2016). Mediating role of resilience in the impact of mindfulness on life satisfaction and affect as indices of subjective well-being. *Personality and Individual Differences*, 93, 63-67. <http://dx.doi.org/10.1016/j.paid.2015.09.005>
- Bajaj, B., Gupta, R., & Pande, N. (2016). Self-esteem mediates the relationship between mindfulness and well-being. *Personality and Individual Differences*, 94, 96-100. <https://doi.org/10.1016/j.paid.2016.01.020>
- Baker, F. B. (2001). The basics of item response theory. In *ERIC clearing-house on assessment and evaluation* (2nd ed.). Retrieved from <https://files.eric.ed.gov/fulltext/ED458219.pdf>. Accessed 21 March 2024.
- Baker, F. B., & Kim, S. H. (2017). *The basics of item response theory using R* (Vol. 969). New York: Springer.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behavior and human decision processes*, 50(2), 248-287. [https://doi.org/10.1016/0749-5978\(91\)90022-L](https://doi.org/10.1016/0749-5978(91)90022-L)
- Baxter, L. A., Mazanec, M., Nicholson, J., Pittman, G., Smith, K., & West, L. (1997). Everyday loyalties and betrayals in personal relationships. *Journal of Social and Personal Relationships*, 14(5), 655-678. <https://doi.org/10.1177/0265407597145005>
- Beer, A., & Watson, D. (2009). The individual and group loyalty scales (IGLS): Construction and preliminary validation. *Journal of Personality Assessment*, 91(3), 277-287. <https://doi.org/10.1080/00223890902794341>
- Bobâlcă, C., Gătej, C., & Ciobanu, O. (2012). Developing a scale to measure customer loyalty. *Procedia Economics and Finance*, 3, 623-628. [https://doi.org/10.1016/S2212-5671\(12\)00205-5](https://doi.org/10.1016/S2212-5671(12)00205-5)
- Bossi, F., Zaninotto, F., D'Arcangelo, S., Lattanzi, N., Malizia, A. P., & Ricciardi, E. (2022). Mindfulness-based online intervention increases well-being and decreases stress after Covid-19 lockdown. *Scientific reports*, 12(1), 6483. <https://doi.org/10.1038/s41598-022-10361-2>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Brown, T. A., Chorpita, B. F., Korotitsch, W., & Barlow, D. H. (1997). Psychometric properties of the Depression Anxiety Stress Scales (DASS) in clinical samples. *Behaviour Research and Therapy*, 35(1), 79-89. [https://doi.org/10.1016/S0005-7967\(96\)00068-X](https://doi.org/10.1016/S0005-7967(96)00068-X)
- Browne, M. W., & Cudeck, R. (1993) Alternative ways of assessing model fit. *Sage Focus Editions*, 154, 136-136. <https://doi.org/10.1177/0049124192021002005>
- Chalmers, R. P. (2012). Mirt: a multidimensional item response theory package for the Renvironment. *Journal of Statistical Software*, 48, 1-29. <http://hdl.handle.net/10.18637/jss.v048.i06>
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling*, 14, 464-504. <https://doi.org/10.1080/10705510701301834>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9, 233-255. https://doi.org/10.1207/S15328007SEM0902_5
- Colledani, D., Anselmi, P., & Robusto, E. (2019). Using multidimensional item response theory to develop an abbreviated form of the Italian version of Eysenck's IVE questionnaire. *Personality and Individual Differences*, 142, 45-52. <https://doi.org/10.1016/j.paid.2019.01.032>
- Coşkun, A. N. (2014). *The reflections of brand loyalty on consumer attitudes and behaviors: a study on brand loyalty development in fast moving consumer goods* [Unpublished doctoral dissertation]. İstanbul University.

- Dağlı, A., & Baysal, N. (2016). Adaptation of the satisfaction with life scale into Turkish: The study of validity and reliability. *Electronic Journal of Social Sciences*, 15(59), 1250-1262. <https://doi.org/10.17755/esosder.75955>
- Demirtaş, A. S. ve Baytemir, K. (2019). Warwick-Edinburgh mental iyi oluş ölçeği kısa formu'nun Türkçe'ye uyarlanması: Geçerlik ve güvenirlik çalışması. *Elektronik Sosyal Bilimler Dergisi*, 18(70), 689-701. <https://doi.org/10.17755/esosder.432708>
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13
- Dinh, H. P., Van Nguyen, P., Trinh, T. V. A., & Nguyen, M. H. (2022). Roles of religiosity in enhancing life satisfaction, ethical judgements and consumer loyalty. *Cogent Business & Management*, 9(1), 2010482. <https://doi.org/10.1080/23311975.2021.2010482>
- Doğan, T. (2015). Adaptation of the Brief Resilience Scale into Turkish: A validity and reliability study. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Ertürk, H. (2020). *Factors affecting customer loyalty and the effect of customer complaint management on customer loyalty: Research on the customers of a private bank* [Unpublished masters dissertation]. Beykent University.
- Filosofova, A., Mironova, O., & Kozyreva, V. (2017). Psychological and philosophical approaches to studying the "self-betrayal" experience. *Economic and Social Development: Book of Proceedings*, 1121-1128.
- Finney, S. J., & DiStefano, C. (2006). Non-normal and categorical data in structural equation modeling. *Structural Equation Modeling: A Second Course*, 269-314.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78(2), 350. <https://doi.org/10.1037/0022-3514.78.2.350>
- Freyd, J., & Birrell, P. (2013). *Blind to betrayal: Why we fool ourselves we aren't being fooled*. Turner Publishing Company.
- Ghorbani, N., Watson, P. J., Farhadi, M., & Chen, Z. (2014). A multi-process model of self-regulation: Influences of mindfulness, integrative self-knowledge and self-control in Iran. *International journal of psychology*, 49(2), 115-122. <https://doi.org/10.1002/ijop.12033>
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Multivariate data analysis: Global edition. 7th Edition: Pearson Education*.
- Han, J., Jun, M., & Kim, M. (2019). Impact of online community engagement on community loyalty and social well-being. *Social Behavior and Personality: an International Journal*, 47(1), 1-8. <https://doi.org/10.2224/sbp.7545>
- Heere, B., & Dickson, G. (2008). Measuring attitudinal loyalty: Separating the terms of affective commitment and attitudinal loyalty. *Journal of Sport Management*, 22(2), 227-239. <https://doi.org/10.1123/jsm.22.2.227>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- James, K., & Cropanzano, R. (1994). Dispositional group loyalty and individual action for the benefit of an ingroup: Experimental and correlational evidence. *Organizational Behavior and Human Decision Processes*, 60(2), 179-205. <https://doi.org/10.1006/obhd.1994.1080>
- Johnson, R. E., Lin, S. H., & Lee, H. W. (2018). Self-control as the fuel for effective self-regulation at work: Antecedents, consequences, and boundary conditions of employee self-control. In *Advances in Motivation Science*, 5, 87-128. <https://doi.org/10.1016/bs.adms.2018.01.004>
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144-156. <https://doi.org/10.1093/clipsy.bpg016>
- Kandemir, M. (2014). Reasons of academic procrastination: Self-regulation, academic self-efficacy, life satisfaction and demographics variables. *Procedia-Social and Behavioral Sciences*, 152, 188-193. <https://doi.org/10.1016/j.sbspro.2014.09.179>
- Karadeniz, Y. (2020). *Customer loyalty in e-commerce 'a critical review of the e-loyalty literature and conceptual framework of the antecedents of e-loyalty in B2C online markets'* [Unpublished masters dissertation]. Queen Mary University of London.
- Keye, M. D., & Pidgeon, A. M. (2013). Investigation of the relationship between resilience, mindfulness, and academic self-efficacy. *Open Journal of Social Sciences*, 1(6), 1-4. <http://doi.org/10.4236/jss.2013.16001>
- Khoa, B. T., & Nguyen, M. H. (2020). Electronic loyalty in social commerce: scale development and validation. *Gadjah Mada International Journal of Business*, 22(3), 276-300. <https://search.informit.org/doi/10.3316/informit.783274230941744>
- Kleinig, J. (2022). *Loyalty*. The Stanford Encyclopedia of Philosophy.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. Guilford Press.

- Klussman, K., Curtin, N., Langer, J., & Nichols, A. L. (2020). Examining the effect of mindfulness on well-being: Self-connection as a mediator. *Journal of Pacific Rim Psychology*, 14, e5. <https://doi.org/10.1017/prp.2019.29>
- Klussman, K., Nichols, A. L., Curtin, N., Langer, J., & Orehek, E. (2022). Self-connection and well-being: Development and validation of a self-connection scale. *European Journal of Social Psychology*, 52(1), 18-45. <https://doi.org/10.1002/ejsp.2812>
- Labrague, L. J. (2021). Resilience as a mediator in the relationship between stress-associated with the Covid-19 pandemic, life satisfaction, and psychological well-being in student nurses: A cross-sectional study. *Nurse Education in Practice*, 56, 103182. <https://doi.org/10.1016/j.nepr.2021.103182>
- Lombardo, P., Jones, W., Wang, L., Shen, X., & Goldner, E. M. (2018). The fundamental association between mental health and life satisfaction: results from successive waves of a Canadian national survey. *BMC Public Health*, 18, 1-9. <https://doi.org/10.1186/s12889-018-5235-x>
- Marsh, H. W., Hau, K. T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling*, 11(3), 320-341. https://doi.org/10.1207/s15328007sem1103_2
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227. <https://doi.org/10.1037/0003-066X.56.3.227>
- McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. *American Psychologist*, 52(5), 509-516. <https://doi.org/10.1037/0003-066X.52.5.509>
- Morishima, M., (1982). *Why has Japan 'succeeded'?*. Cambridge: Cambridge University Press.
- Nasser-Abu Alhija, F., & Wisenbaker, J. (2006). A Monte Carlo study investigating the impact of item parceling strategies on parameter estimates and their standard errors in CFA. *Structural Equation Modeling*, 13(2), 204-228. <https://doi.org/10.1080/10705500802222972>
- Nghiêm-Phú, B. (2016). Country image, country attachment, country loyalty, and life satisfaction of foreign residents in Vietnam. *Tourism and Hospitality Research*, 16(4), 329-344. <https://doi.org/10.1177/1467358415600218>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- Özyeşil, Z., Arslan, C., Kesici, Ş. ve Deniz, M. E. (2011). Bilinçli farkındalık ölçeği'ni Türkçeye uyarlama çalışması. *Eğitim ve Bilim*, 36(160).
- Peterson, C., & Seligman, M. E. (2004). *Character strengths and virtues: A handbook and classification* (Vol. 1). Oxford university press.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. <https://doi.org/10.3758/BRM.40.3.879>
- Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *The Lancet*, 370(9590), 859-877. [https://doi.org/10.1016/S0140-6736\(07\)61238-0](https://doi.org/10.1016/S0140-6736(07)61238-0)
- Quang, N. N., & Thuy, D. C. (2024). Mindfulness affecting loyalty with mediating role of customer experience in the context of adventure tourism in Vietnam. *Cogent Social Sciences*, 10(1), 2312651. <https://doi.org/10.1080/23311886.2024.2312651>
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of research in Personality*, 41(1), 203-212. <https://doi.org/10.1016/j.jrp.2006.02.001>
- Saad, N. A., Elgazzar, S., & Mlaker Kac, S. (2022). Investigating the impact of resilience, responsiveness, and quality on customer loyalty of MSMEs: Empirical evidence. *Sustainability*, 14(9), 5011. <https://doi.org/10.3390/su14095011>
- Saraei, F. H., Hatami, H., & Bagheri, F. (2016). Effectiveness of stress management on glycemic control and change of some of mental health indicators (depression, anxiety, stress, and quality of life) among patients with type 2 diabetes. *Mediterranean Journal of Social Sciences*, 7(4). <https://doi.org/10.5901/mjss.2016.v7n4p>
- Sarı, N., Çetiner, O., Çelik, R., Erdinç, B., Akyıl, Y., & Akçıl, S. (2025). Adolescents' relative deprivation and well-being in relation to parents' mindfulness and psychological resilience: a dyadic approach. *International Journal of Modern Education Studies*, 9(1). <https://doi.org/10.51383/ijonmes.2025.406>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Jennifer Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194-200. <https://doi.org/10.1080/10705500802222972>
- Sousa, E. C., & Freire, L. (2023). The effect of brief mindfulness-based intervention on patient satisfaction and loyalty after waiting. *Journal of Consumer Affairs*, 57(2), 906-942. <https://doi.org/10.1111/joca.12488>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Pearson Education.

- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): Development and UK validation. *Health and Quality of life Outcomes*, 5, 1-13. <https://doi.org/10.1186/1477-7525-5-63>
- Timmerman, M. E., & Lorenzo-Seva, U. (2011). Dimensionality assessment of ordered polytomous items with parallel analysis. *Psychological Methods*, 16(2), 209. <https://doi.org/10.1037/a0023353>
- Türküm, A. S., Satıcı, S. A., Yılmaz, M. F., & Kayis, A. R. (2016). *Turkish version of 10-Item Big Five Inventory's psychometric properties*. Paper presented at the X. European Conference on Social and Behavioral Sciences. Sarajevo, Bosnia and Herzegovina.
- Valikhani, A., Abbasi, Z., Radman, E., Goodarzi, M. A., & Moustafa, A. A. (2018): Insecure attachment and subclinical depression, anxiety, and stress: A three-dimensional model of personality self-regulation as a mediator. *The Journal of Psychology*. <https://doi.org/10.1080/00223980.2018.1468727>
- Yıldırım, M., & Arslan, G. (2022). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Current Psychology*, 41(8), 5712-5722. <https://doi.org/10.1007/s12144-020-01177-2>
- Yılmaz, Ö., Boz, H. ve Arslan, A. (2017). Depresyon anksiyete stres ölçeğinin (dass 21) Türkçe kısa formunun geçerlilik-güvenilirlik çalışması. *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, 2(2), 78-91.
- Zoubi, R. A. F., Jubran, A. M., & Al-Karasneh, S. M. (2024). The availability degree of mindfulness among Arab public school principals and its relationship with teachers' organizational loyalty within the green line. *Jordanian Educational Journal*, 9(2), 49-73. <https://doi.org/10.46515/jaes.v9i2.505>
- Zubair, A., Kamal, A., & Artemeva, V. (2018). Mindfulness and resilience as predictors of subjective well-being among university students: A cross cultural perspective. *Journal of Behavioural Sciences*, 28(2), 1.

Appendix A

Item characteristics curve of the Self Loyalty Scale

