

Development of a Scale for Determining the Level of Sociotropic Personality in Athletes

Sporcularda Sosyotropik Kişilik Düzeyini Belirleme Ölçeğinin Geliştirilmesi

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ABSTRACT

The aim of this study is to develop a valid and reliable measurement tool to determine the level of sociotropic personality among athletes. Sociotropic personality refers to individuals' tendency to value interpersonal relationships, seek social approval, and desire to be loved and accepted by others. In the scale development process, a literature review was conducted, and a 15-item pool was created. For content validity, expert opinions were obtained from two sports psychology academicians and one linguist, after which necessary revisions were made and approved. A pilot study with 12 athletes confirmed the clarity of the items. The study population consisted of amateur athletes in Beylikdüzü, Istanbul, and the sample included athletes from Beylikgücüspor, Beylikdüzü Yakupluspor, and Beylikdüzü Demirspor. Data were collected using a 5-point Likert-type scale. Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Cronbach's Alpha reliability tests were conducted. As a result, a scale with two sub-dimensions and 11 items was developed. The overall Cronbach's Alpha value of the scale was 0.714, while the reliability coefficients of the sub-dimensions were .866 (physical), .622 (cognitive), and .933 (behavioral).

Keywords: Sport, sociology, sociological, sociotropic personality, scale development

ÖZET:

Bu araştırmanın amacı, sporcularda sosyotropik kişilik düzeyini belirlemeye yönelik geçerli ve güvenilir bir ölçme aracı geliştirmektir. Sosyotropik kişilik, bireylerin başkalarıyla olumlu ilişkiler kurma, sevgi ve sosyal kabul görme isteğiyle ilişkili bir kişilik yapısıdır. Ölçek geliştirme sürecinde literatür taraması sonucunda 15 maddelik bir madde havuzu oluşturulmuştur. Kapsam geçerliliği için iki spor psikolojisi akademisyeni ve bir dil bilimci öğretmenden uzman görüşü alınmış, gerekli düzenlemeler yapılarak ölçek son hâlini almıştır. Pilot uygulama 12 sporcu üzerinde gerçekleştirilmiş ve maddeler anlaşılır bulunmuştur. Araştırmanın evrenini İstanbul ili Beylikdüzü ilçesindeki amatör sporcular oluştururken, örneklem Beylikgücüspor, Beylikdüzü Yakupluspor ve Beylikdüzü Demirspor sporcularından seçilmiştir. Veriler 5'li Likert tipi ölçekle toplanmış, analizlerde Açımlayıcı ve Doğrulayıcı Faktör Analizi ile Cronbach Alpha güvenirlilik analizi kullanılmıştır. Analizler sonucunda iki alt boyut ve toplam 11 maddeden oluşan bir ölçek geliştirilmiştir. Ölçeğin genel Cronbach Alpha değeri 0,714 olarak, alt boyutların güvenirlik katsayıları ise ,866 (fiziksel), ,622 (bilişsel) ve ,933 (davranışsal) olarak bulunmuştur.

Anahtar Kelimeler: Spor, sosyoloji, sosyolojik, sosyotropik kişilik, ölçek geliştirme

Introduction

The concept of “personality,” deriving from the word “person,” entered English from the Latin word “persona,” which gets its meaning from the “mask” worn on the faces of theater artists in Ancient Rome. The masks worn by the actors were used to describe the characters, roles, people, and personalities they assumed in the scenes they played (Yıldız & Kurt, 2017). According to the Turkish Language Association dictionary, the concept of personality is defined as “a distinctive feature unique to human beings, the whole of their spiritual and moral characteristics, personality.” It is a unique form of relationship that a person establishes with their internal and external environment (Cüceloğlu, 2017). Pervin and John (1999) define personality as a set of behaviors that shapes a person’s lifestyle and life. It refers to a person’s unique characteristics that differentiate them from others. These characteristics consist of the patterns of emotions, thoughts, and behaviors an individual develops with their internal and external environment (Sayar & Dinç, 2017). Many scientists have proposed theories to investigate personality traits. Aaron T. Beck’s cognitive theory mentions two different personality types: “autonomy and sociotropy” (Hançer & Güler, 2023). These two personality concepts have distinct styles. Sociotropic individuals seek socially intimate and trusting relationships and strive to gain approval and support from their social environment. In contrast, autonomous people prefer emotionally distant relationships. These interpersonal styles, in Karen Horney’s words, are defined as “moving toward people” style and “moving away from people” style (Otani et al., 2014).

Sociotropy refers to an investment in positive interactions with others. Individuals with highly sociotropic personality behaviors overvalue others to promote interpersonal interactions. They believe that they should be loved, respected, and accepted by others (Clark et al., 1995). Beck (1983) states that people with high sociotropic personality traits are vulnerable to events involving the disruption or loss of interaction with their social environment (Clark & Beck, 1991). Sociotropic people’s ability to maintain a positive self-image depends on the love, respect, approval, and attention they receive from people they value. People with sociotropic personalities have special characteristics in terms of commitment to others, valuing social relationships, and orientation toward others. Therefore, they need support, closeness, guidance, and help from their social environment (Özdemir, 2015).

These behaviors are similar for athletes with high sociotropic personality levels. Having a sociotropic personality type can create an emotional structure within athletes that is based on their level of being loved and accepted by others. The emotional state engendered by a strong sociotropic personality can affect both athletic performance and social life. This personality type can effectuate burnout in athletes when opposing behaviors occur. This study therefore develops a scale that measures the level of sociotropic personality in athletes. The data obtained when using this scale could assist in analyzing the effects and correlations of sociotropic personality behaviors on many different issues in athletes. Consequently, the as

the sociotropic personality levels of athletes participating in this scale can be measured, the results can be used to improve their emotional states.

Method

This research is a “validity and reliability” study that was conducted using the “questionnaire” technique, a quantitative research method.

Universe and sample

The universe of this study comprised amateur athletes from the Beylikdüzü district of Istanbul, and the sample encompassed some athletes of Beylikgücüspor, Beylikdüzü Yakupluspor, and Beylikdüzü Demirspor clubs. The “Purposive (Monographic) and Theoretical Sample Selection Technique” a non-probabilistic (judgmental) sample selection technique was used to select the sample.

Working group

In the content validity phase, the opinions of three experts—two academics from psychosocial fields in sports and one linguist teacher—were obtained. Interviews were held in which the questions were presented to the experts in the form of a specification table (Table 7).

Table 1. Sample symptom table used in the context of content and appearance validity

Scale Items	Item Suitability Degree			Description
	Not Suitable at all	Partially Suitable	Suitable	
Item 1				
Item 2				
Item 3				

The three experts informed us that one question needed to be changed. The question was revised as requested, and submitted to experts for their approval. The new question pool was approved by the experts. Twelve athletes participated in this pilot study. As no broken question patterns existed on the scale, the scale successfully passed the content and appearance validity tests with 15 items.

Within the scope of content and appearance validity, the “not suitable at all” option meant that the item should be removed from the scale. The “partially suitable” option implied that the item could be used after making the suggested corrections. The “suitable” option signified that the item could be included in the scale in its present form. Two experts participating in our study found all items in the 15-item question pool appropriate for measuring sociotropic personality levels. One expert observed a semantic disorder in one article and suggested correction to remove the semantic disorder. After applying the correction process,

in accordance with the recommendations, the item pool was resubmitted to the experts. The experts confirmed the validity of the scope and appearance of all the questions.

The study group comprised 164 athletes, including 70 athletes of Beylikgücüspor—U14/B, U15/A, U16/B, U17/A, and U18/A teams; 56 athletes of Beylikdüzü Yakupluspor—U14/A, U15/A, U16/A, and U17/A teams; and 38 athletes of Beylikdüzü Demirspor—U15/A and U18/B teams. Some athletes belonged to the senior category teams.

Questionnaires were administered to the athletes by allowing the necessary time before training. The study sample was limited to Beylikgücüspor, Beylikdüzü Yakupluspor, and Beylikdüzü Demirspor athletes because of the time constraints of the study. It was assumed that participants responded to all questions with sincerity.

Data analysis

SPSS and AMOS software were used to analyze the data. In the findings section, an exploratory factor analysis (EFA) was initially used. The Kaiser–Meyer–Olkin (KMO) method and Bartlett's test of sphericity were used to measure the relationships between variables—a prerequisite for EFA (Tabachnick & Fidel, 2014). Owing to the possibility of more than one factor in the scale, a “varimax” vertical rotation was performed. While removing the scale items, a minimum difference of 0.10 was sought for overlapping items loaded onto two or more factors. The factor structure was established after removing items M13 and M14 from the scale, which did not meet this condition. These two items were excluded from the scale, and the EFA was finalized. The KMO value of the scale and *P* value were determined to be 0.695 and 0.000, respectively. Thirteen items were retained from the 15-item pool, because of EFA. Thus, the scale for determining the level of sociotropic personality in athletes consisted of 13 items and 2 factors.

A confirmatory factor analysis (CFA) was used to confirm the scale's factor structure. In CFA, a difference of at least 0.45 in the factor loading value was required to decide whether to remove an item from the scale (Büyüköztürk, 2016). Items M3 and M11 were removed, and appropriate goodness-of-fit values were obtained for the scale. Thus, the “Scale for Determining Sociotropic Personality Level in Athletes” comprising 2 factors and 11 items emerged, based on the CFA results.

Finally, a Cronbach's alpha reliability test was performed. For the two-factor structure, Cronbach's alpha values were 0.803 and 0.623 for the expectation and communication subdimensions, respectively. The overall Cronbach's alpha of the scale was 0.702. Cronbach's alpha reliability coefficients higher than 0.60 are interpreted as highly reliable (Kayış, 2009).

Subsequently, scale was accepted, and the validity and reliability of the scale for determining the level of sociotropic personality in athletes suitable for use were determined.

Ethics approval and consent to participate

For this research, ethics committee approval was obtained from the XXX University's Social and Human Sciences Ethics Committee, dated October 9, 2024 (approval no: 281). Informed consent was obtained from all research participants. The survey was conducted in accordance with the relevant guidelines and regulations.

Findings

Table 2. KMO and Bartlett's test

Kaiser–Meyer–Olkin measure of sampling Adequacy .686			
Bartlett's test of sphericity	Approx. Chi-Squared	971.378	
	df	78	
	Sig.	.000	

(KMO=Kaiser–Meyer–Olkin, df=Degree of Freedom)

The KMO value for determining the level of sociotropic personality in athletes was 0.686 (0.686>0.60), while the Bartlett sphericity test was statistically significant at the 99% confidence level (Table 2.). The sample size was adequate for factor analysis.

Table 3 Eigenvalues of exploratory factor analysis

Factors	Total	% of Variance	Cumulative %
1. Factor	3.342	25.711	25.711
2. Factor	3.095	23.808	49.518

When the reliability levels of the factors were examined in EFA, the subdimension of the items under the first factor solely explained 25.71% of the scale, with an eigenvalue of 3.711. When the items under the second factor were analyzed, this subdimension explained 23.80% of the scale, with an eigenvalue of 3.095 (Table 3).

Table 4. Exploratory factor analysis factor loadings of items

Factor	Items	Questions	Load Value
1. Factor (Expectance)	M1	I take it upon myself to win over even people who behave negatively toward me.	0.812
	M2	If I feel that I am not loved enough by the people around me, I am devastated.	0.739
	M5	I live in constant fear of rejection by people.	0.720
	M7	People must approve of all the actions I take.	0.704
	M12	I struggle to endear myself to everyone.	0.692

	M10	If I have resentment toward someone, I analyze my own mistakes.	0.546
2. Factor (Communication)	M4	Being successful in social relations is a must for me.	0.863
	M8	Every day I do an internal accounting of the success of the relationships I build.	0.796
	M15	If I see two people who are angry with each other, I always attempt to reconcile them.	0.710
	M6	If I see brawls or fights in my social life, I intervene, even at the risk of injury.	0.599
	M9	Even if I know my behavior is right, if there is an objection from society, I stop it.	0.571
	M11	It gives happiness to my life to know that I am loved by all living things.	0.514
	M3	I always talk about the importance of communication in my social circle.	0.457

As shown in Table 4, when the items collected under the factors were analyzed, the first subdimension was named “expectation” and the second subdimension was named “communication.” When the EFA data of the scale were examined, the factor load values of the items were 0.45–0.90, within the acceptable range for the factor loadings.

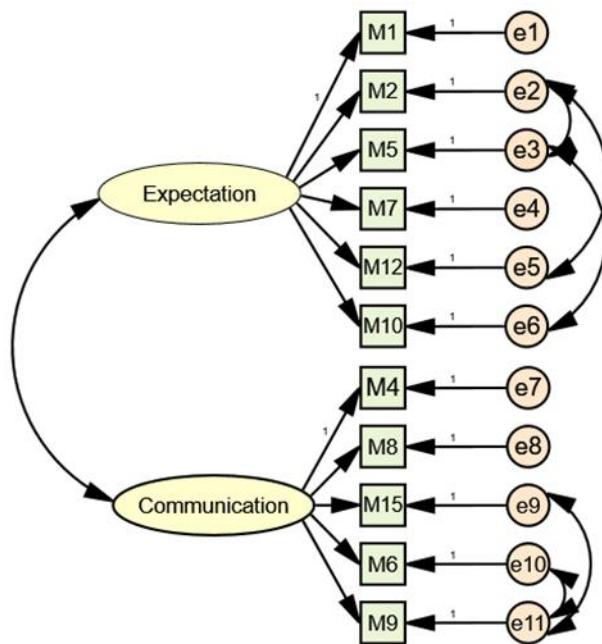
Table 5. Confirmatory factor analysis goodness-of-fit values

X ² /SD	p	RMSEA	CFI	GFI	NFI
2.004	0.000	0.079	0.953	0.921	0.912

(SD=Standart deviation, RMSEA=Root Mean Square Error of Approximation, CFI=Comparative Fit Index, GFI=Goodness of Fit Index, NFI=Normed Fit Index)

A CFA was used to determine whether the factor structure described in the EFA of the scale for determining the level of sociotropic personality in athletes was confirmed. The factor loading values of items M3 and M11 were unsuitable and disrupted the scale fit values. Related items were removed from the scale. The CFA path diagram is presented in Figure 1. Thus, based on the CFA results, a scale for determining the level of sociotropic personality in athletes encompassing 2 factors and 11 items emerged. Appropriate goodness-of-fit values were obtained (Table 5).

The analysis of the fit criteria values obtained since CFA showed that the ratio of the X² value to the SD value was 2.004, and the RMSEA value was 0.079. Other fit values were within the acceptable and perfect range.

Figure 1. Confirmatory factor analysis path diagram

Table 6. Cronbach's alpha reliability values

Subdimensions	Expectance	Communication	General
Values	0.803	0.623	0.702

Table 6 indicates that none of the items in the scale have a value below the expected value of 0.30 in their correlations with other items. The overall reliability of the scale was 0.702, indicating acceptable reliability.

Table 7. Scale for determining sociotropic personality level in athletes

Factor	Queue	Questions	1	2	3	4	5
Expectance	1	I take it upon myself to win over even people who behave negatively toward me.					
Expectance	2	Being successful in social relations is a must for me.					
Expectance	3	I live in constant fear of rejection by people.					
Expectance	4	People must approve of all the actions I take.					
Expectance	5	I struggle to endear myself to everyone.					
Expectance	6	If I have resentment toward someone, I analyze my own mistakes.					
Communication	7	If I feel that I am not loved enough by the people around me, I am devastated.					
Communication	8	Every day I do internal accounting of the success of					

Communication	9	the relationships I build. If I see two people who are angry with each other, I always attempt to reconcile them.
Communication	10	If I see brawls or fights in social life, I intervene, even at the risk of injury.
Communication	11	Even if I know my behavior is right, if there is an objection from society, I stop it.

Table 7 presents the final structure of the scale for determining the level of sociotropic personality in athletes, with proven validity and reliability. The scale questions are all answered using a 5-point Likert scale and there are no reverse-structured items on this scale. The degree of agreement of the samples with the questions indicates that the higher the scores, the higher the sociotropic personality structure.

Discussion-Conclusion-Suggestion

In the scale development phase, sociotropic personality behaviors were examined by creating a question pool encompassing 15 items. One of the logical ways to test content validity is to apply for expert opinion (Büyüköztürk, 2016). In this context, the opinions of three experts were obtained at this stage. In the pilot study phase, 12 athletes were surveyed. The scale successfully passed the content validity stage with 15 items. The final version of the item pool questions was prepared in a format answered using a 5-point Likert scale and directed at the athletes in the sample group. After obtaining the data, an EFA, CFA, and Cronbach's alpha reliability analysis were conducted to determine the factor structure, construct validity, and internal reliability.

The suitability of the sample size for factor analysis can be interpreted with the help of the KMO test (Kaiser, 1970). The KMO value of the scale for determining the level of sociotropic personality in athletes was 0.686 ($0.686 > 0.60$). A KMO value of 0.60 is considered sufficient for sample size (Akbulut & Çapık, 2022). Therefore, the sample size was sufficient for factor analysis.

Subsequently, an EFA was applied. When the reliability levels of the factors were analyzed, the items under the first factor explained 25.71% of the scale, with an eigenvalue of 3.711. The items under the second factor explained 23.80% of the scale, with an eigenvalue of 3.095. When the items collected under the factors were examined, the first and second subdimensions were named "expectation" and "communication," respectively. When removing scale items, a minimum difference of 0.10 was sought for overlapping items loaded on two or more factors (Uygun et al., 2014). The factor structure was established after the items M13 and M14, which did not meet this condition, were removed from the scale. Table 3 shows that the factor load values of the items are 0.45–0.90 when the EFA data of the scale for determining the level of sociotropic personality in athletes is examined. These values are accepted within the factor load limits.

A CFA was applied to determine whether the factor structure described in EFA was confirmed. In CFA, the factor loading values of items M3 and M11 were unsuitable and disrupted the scale fit values. The related items were removed from the scale. Thus, a scale for determining the level of sociotropic personality in athletes consisting of 2 factors and 11 items emerged. In this form, appropriate goodness-of-fit values were obtained.

Finally, a Cronbach's alpha reliability test was applied. If Cronbach's alpha coefficient (α) is between 0.60 and 0.80 and between 0.80 and 1, the scale is considered "highly reliable," (Kayış, 2009). In this context, when Cronbach's alpha values in Table 5 are analyzed, the expectation factor is 0.803, and the communication factor is 0.623. The Cronbach's alpha value of the whole scale is 0.702.

Individuals with high sociotropy personality traits attach great importance to loving and being loved and receiving approval from other people. They interact positively with others, are prone to be used by others, and are amenable (Akgün, 2017). In the sport environment, athletes may aim to appeal to or attract coaches, managers, or friends within their sport. The question persists as to whether sociotropic behaviors affect other indicators of an athlete.

The findings of this study demonstrated that sociotropic personality among athletes can be represented by two primary dimensions: *expectation* and *communication*. This structure aligns conceptually with the theoretical framework of sociotropy, where interpersonal dependence and the desire for approval manifest as distinct but related tendencies. The internal consistency values were within acceptable limits, indicating that the scale items coherently measure the same construct. These results support the notion that sociotropic behaviors in athletes can be reliably operationalized through measurable psychological dimensions.

Limitations

Due to temporal constraints, the sample of this study was limited to athletes from Beylikgürüspon, Beylikdüzü Yakupluspor, and Beylikdüzü Demirspor.

At the end of the study, the validity and reliability of the scale for determining the level of sociotropic personality in athletes were proven, and its final structure is presented in Table 6. The scale consists of a 5-point Likert type explaining 2 factors and 11 items. Through this scale, the sociotropic personality levels of athletes can be measured in future research. There are no reverse-structured items in the scale. The higher the degree of agreement of the participants with the questions, and the higher the scores, the higher the sociotropic personality structure. Participants with low scores show a low sociotropic personality. With this scale, the correlation of sociotropic personality level with other psychological-emotional states can be measured. Furthermore, analysis based on demographic information with

sociotropic personality levels will be possible. The research is an original study, and is presented for the use of other researchers. Researchers can use the scale by citing it without permission.

Suggestion

This study provides a reliable and valid scale for assessing the level of sociotropic personality traits. In light of the findings, the following recommendations can be proposed:

1. Individual Awareness and Motivation: Coaches and sport psychologists can better understand athletes' social approval needs and motivational sources by identifying their sociotropic tendencies. This information can be used to set personalized performance goals.
2. Team Communication and Cohesion: Athletes with high sociotropic tendencies may influence team interactions and cohesion. Coaches can utilize this awareness to manage team dynamics and enhance group performance.
3. Psychological Support and Intervention Planning: The scale allows for the analysis of athletes' social and emotional needs. Sport psychologists can develop tailored support and intervention strategies for athletes with high or low sociotropic tendencies.
4. Performance and Psychological Assessment: Sociotropic personality levels can be correlated with other psychological and emotional indicators. This enables the identification of social behavior patterns that may affect athletes' performance and psychological well-being.
5. Demographic and Sport-Specific Applications: When combined with demographic information such as age, gender, and sport discipline, the scale provides a basis for developing customized training programs and interventions for different athlete groups.

References

Akbulut, Ö., & Çapık, C. (2022). Çok değişkenli istatistiksel analizler için örneklem büyülüğu [Multivariate statistical analysis and required sample size]. *Hemşirelik Dergisi*, 25(2), 111–116. <https://doi.org/10.5152/JANHS.2022.970637>

Akgün, B. M. (2017). Sosyotropi otonomi kişilik özelliklerini ve hemşirelik [Sociotropy autonomy personality traits and nursing]. *Anadolu Kliniği Tip Bilimleri Dergisi*, 26(2), 163–177. <https://doi.org/10.17827/aktd.280536>

Beck, A. T. (1983). Cognitive therapy of depression: New perspectives. In P. J. Clayton & J. E. Barrett (Eds.), *Treatment of depression: Old controversies and new approaches* (pp. 265–284). Raven Press.

Büyüköztürk, Ş. (2016). *Sosyal bilimler için veri analizi el kitabı* [Social science data analysis handbook]. Pegem Yayıncılık.

Clark, D. A., & Beck, A. T. (1991). Personality factors in dysphoria: A psychometric refinement of Beck's sociotropy-autonomy scale. *Journal of Psychopathology and Behavioral Assessment*, 13(4), 369–388. <https://doi.org/10.1007/BF00960448>

Clark, D. A., Steer, R. A., Beck, A. T., & Ross, L. (1995). Psychometric characteristics of revised sociotropy and autonomy scales in college students. *Behaviour Research and Therapy*, 33(3), 325–334. [https://doi.org/10.1016/0005-7967\(94\)00074-T](https://doi.org/10.1016/0005-7967(94)00074-T)

Cüceloğlu, D. (2017). *İnsan ve davranışları* (34. baskı) [Human and his behavior] (34th ed.). Remzi Kitabevi.

Divarcı, Ö. F., & Kaya, H. (2019). 8. sınıf “Maddenin halleri ve ısı” ünitesine yönelik geçerliliği ve güvenirliği sağlanmış bir akademik başarı testi geliştirme çalışması [A study to develop an academic achievement test with validity and reliability for the 8th grade “states of matter and heat” unit]. *Journal of Education, Theory and Practical Research*, 5(2), 214–238.

Hançer, A., & Güler, M. (2023). Sosyotropik ve otonom kişilik özelliklerinin besin neofobisi üzerine etkisi: Sivas Cumhuriyet Üniversitesi örneği [The effect of sociotropic and autonomous personality traits on food neophobia: Sivas Cumhuriyet University example]. *Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi*, 25(3), 1133–1144. <https://doi.org/10.32709/akusosbil.1067140>

Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, 35(4), 401–415. <https://doi.org/10.1007/BF02291817>

Kayış, A. (2009). Güvenirlik analizi [Reliability analysis]. In Ş. Kalaycı (Ed.), *SPSS uygulamalı çok değişkenli istatistik teknikleri* [SPSS applied multivariate statistical techniques] (pp. 403–419). Asil Yayıncılık.

Otani, K., Suzuki, A., Matsumoto, Y., Sadahiro, R., Enokido, M., Kuwahata, F., & Takahashi, N. (2014). Distinctive correlations of sociotropy and autonomy with working models of the self and other. *Comprehensive Psychiatry*, 55(7), 1643–1646. <https://doi.org/10.1016/j.comppsych.2014.05.013>

Özdemir, L. (2015). Kırgızistan-Türkiye Manas Üniversitesi öğrencilerinin sosyotropik-otonom kişilik özellikleri ile girişimcilik eğilimleri arasındaki ilişki [The relationship between sociotropic-autonomous personality traits and entrepreneurship tendencies of Kyrgyzstan-Turkey Manas University students]. *Yönetim Bilimleri Dergisi*, 13(25), 115–139.

Pervin, L., & John, O. (Eds.). (1999). *Handbook of personality: Theory and research* (2nd ed.). The Guilford Press.

Sayar, K., & Dinç, M. (2017). *Psikolojiye giriş* (4. baskı) [Introduction to psychology] (4th ed.). Dem Yayıncılıarı.

Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics* (6th ed.). Pearson Education Limited.

Uygun, M., Aktürkoğlu, B., & Dedeoğlu, H. (2014). The effects of self-regulated strategy development on writing expression, self-regulation of writing and writing attitude. *The Journal of Academic Social Science Studies*, 28, 131–156. <http://dx.doi.org/10.9761/JASSS2518>

Yıldız, E. Ç., & Kurt, D. G. (2017). *Kişilik kuramları* (1. baskı) [Theories of personality] (1st ed.). Pegem Akademi.