

## Turkish Validity And Reliability Study of The Social Behavior Scale for Preschool Children

DOI: 10.26466/opus.762096

\*

Seda Sakarya\* - Aygen akmak\*\* - Hande řahin\*\*\*

\*Dr. Öğr. Üyesi, Kırıkkale Üniversitesi

E-Posta: [sedasadakarya33@gmail.com](mailto:sedasadakarya33@gmail.com)

ORCID: [0000-0002-8105-809X](https://orcid.org/0000-0002-8105-809X)

\*\* Doç. Dr., Kırıkkale Üniversitesi

E-Posta: [ayalp7133@gmail.com](mailto:ayalp7133@gmail.com)

ORCID: [0000-0003-0692-336X](https://orcid.org/0000-0003-0692-336X)

\*\*\* Prof. Dr., Kırıkkale Üniversitesi

E-Posta: [hande\\_k1979@yahoo.com](mailto:hande_k1979@yahoo.com)

ORCID: [0000-0002-0012-0294](https://orcid.org/0000-0002-0012-0294)

### Abstract

*This study was conducted to perform the validity and reliability analyses of the Social Behavior Scale for Preschool Children (SBS). The data were obtained as a result of the evaluation of the social behaviors of 315 children aged between 4 and 6, who were attending 6 independent kindergartens affiliated to the Ministry of National Education in Kırıkkale, by 20 teachers. In testing the validity of the scale, the expert opinion was obtained for content validity, exploratory and confirmatory factor analysis was performed, and the significance of the difference between the test scores of the groups, the face validity and characteristics of which were known, was checked for construct validity. For testing the reliability of the scale, the internal consistency coefficient and the test-retest reliability coefficient were calculated for each age group and each dimension of the scale. It was concluded that the sample included in the study was adequate for the structural equation method. In the study, it was determined from the exploratory factor analysis and the confirmatory factor analysis that 15 items were gathered under 3 factors. In the reliability analysis of the scale, the total Cronbach's alpha coefficient value was found to be 0.745. The Social Behavior Scale for Preschool Children is a valid and reliable scale for Turkish children.*

**Keywords:** Preschool, Social Behavior, Social Behavior Scale

## Okul Öncesi Çocukları İçin Sosyal Davranış Ölçeği Geçerlik Ve Güvenirlik Çalışması

\*

### Öz

Bu çalışma, "Okul Öncesi Çocuklar İçin Sosyal Davranış Ölçeği"nin geçerlilik ve güvenilirlik analizlerini gerçekleştirmek amacıyla yürütülmüştür. Veriler, Kırkkale'de Milli Eğitim Bakanlığı'na bağlı 6 bağımsız anaokuluna devam eden, yaşları 4-6 arasında değişen 315 çocuğun sosyal davranışlarının 20 öğretmen tarafından değerlendirilmesi sonucunda elde edilmiştir. Ölçeğin geçerliğini test etmede; kapsam geçerliği için uzman görüşü, yapı geçerliği için açımlayıcı ve doğrulayıcı faktör analizi, görünüş geçerliği ve özelliği bilinen grupların test puanları arasındaki farkın anlamlılığı yöntemleri kullanılmıştır. Ölçeğin güvenilirliğini test etmek için ise, her yaş grubu ve ölçeğin her bir boyutu için iç tutarlılık katsayısı ve test-tekrar test güvenilirlik katsayısı hesaplamaları yapılmıştır. Araştırmaya alınan örneklemin yapısal eşitleme yöntemi için yeterli olduğu değerlendirilmiştir. Çalışmada, açımlayıcı faktör analizi ve doğrulayıcı faktör analizi sonucunda, 15 maddenin 3 faktörde toplandığı sonucuna ulaşılmıştır. Ölçeğin güvenilirlik analizlerinde ise, toplam Cronbach's Alpha katsayı değerinin 0,745 olduğu saptanmıştır. Okul Öncesi Çocukları İçin Sosyal Davranış Ölçeği Türk çocukları için geçerli ve güvenilir bir ölçektir.

**Anahtar Kelimeler:** Okul Öncesi, Sosyal Davranış, Sosyal Davranış Ölçeği

## Introduction

Preschool education, which is the first step of educational life, includes the period from the birth of a child until primary education (Alisinanoglu and Kesicioglu, 2010, p. 93). Within this period, the physical, cognitive, social, psychomotor, and language development of the child is completed to a large extent. One of the main objectives of preschool education is to teach children to control their behaviors, such as obeying the classroom rules and getting along well with their friends, and to prevent their negative impulses (Mihic et al., 2016, p.45). Preschool education should support not only cognitive development and academic learning but also social and emotional development (Anthony et al., 2005, p.31). The child has an expanding social environment with preschool education. With preschool education, the child, who experiences his first social relationships with his family, joins a group of teachers and friends with whom he will exhibit social behaviors in his environment (Karaca et al., 2011, p.65). These social behaviors which emerge with the interaction of people with others in their environment also comprise a social interaction process. This process enables social organization and people with similar characteristics to come together with their desire for joining a certain group (Kağıtçıbaşı, 2012).

Social behaviors are divided into two groups as positive and negative behaviors. Positive social behaviors include behaviors that will enable children to easily meet their own needs, to solve problems that are also related to other people in a mutually respectful way, and to adapt to changing social conditions (Mihic et al., 2016, p.45). Acceptance by peers is closely associated with social behaviors (Markiewicz et al., 2001, p.429). Negative social behaviors are defined as behaviors such as aggression and shyness, which prevent the child from socializing and have negative results such as rejection by peers, non-inclusion in the game, and not getting on well (Merrell,1993, p.115).

Since children do not have these basic social behavioral skills, their possibility of exhibiting aggressive and adverse behaviors will increase, and they may have concerns and depression. Small children with behavioral problems above the average tend to have social skills below the average (Mihic et al., 2016, p.45). Children who are popular or accepted by their peers have more social behaviors that improve their adaptation not only in social areas but also in their personal and school lives (Ingles et al., 2003, p.505).

In the literature, the number of measurement tools, which have been adapted to Turkish, have high psychometric quality and evaluate the social behaviors of preschool children, is quite limited. Therefore, the Social Behavior Scales, which were developed or adapted to Turkish by Şen and Teke (2019), Şen and Arı (2011), Seven (2010), Şen (2009) Karakuş (2008), and Nazlı (2008), are often used by researchers. Nowadays, one of the most significant objectives of the teaching and developmental programs of preschool children is to support their social behaviors positively. In this respect, measurement tools that can measure social behaviors accurately and reliably are needed. The early recognition of social behavior problems that prevent children's development plays a vital role in early intervention and thus raising healthy generations. In the light of this information, the Social Behavior Scale (SBS), which was prepared for preschool children, was adapted to Turkish and studied for validity and reliability for guidance in the literature.

## **Method**

In this study, it was aimed to conduct the validity and reliability analyses of the Social Behavior Scale for Preschool Children (SBS), which had been developed by Lanciano, Cassibba, Elia, and D'Odorico (2017).

### ***Study Group***

The study group of the research consisted of 20 kindergarten teachers who were working in the related classes and accepted to participate in the study in order to collect data about the social behaviors of 315 (150 girls, 165 boys) children aged between 4 and 6 ( $5.00 \pm .78$ ) attending 6 independent kindergartens affiliated to the Ministry of National Education in Kırıkkale province between February and September 2016. Since the original scale had 19 items, the number of the study groups was determined by meeting the criterion of five to ten times of the number of items suggested for factor analysis (Büyüköztürk, 2014; Tabachnik and Fidell, 2001). Furthermore, the "Ethics Committee Approval" numbered 04-132-16 and dated February 22, 2016, was obtained from the Non-Interventional Research Ethics Committee of Kırıkkale University.

### *Data Collection Tool*

**Original scale:** The original scale (The Social Behavior Scale for Preschool Children-SBS) was developed in Italian by Lanciano, Cassibba, Elia, and D'Odorico in Italy in 2017 in order to evaluate the social behaviors of preschool children. The first version of the original scale is a scale which was designed with 22 items, consisted of three sub-dimensions including Emotional Competence (10 items), Social Engagement (8 items) and Aggressiveness (4 items) and was of a 4-point Likert type (0=Almost never, 1=Occasionally, 2=Frequently, 3=Always). The teacher, who is the evaluator of the scale, is requested to state how often the child exhibits the behavior specified in each item. In the scale, items 1, 3, 6, 8, 9, and 22 are reversely scored. The norms belonging to the factor analysis of the scale were obtained from 169 children aged between 36 and 72 months who were attending preschool educational institutions, and those belonging to the confirmatory factor analysis were obtained from 127 children within the same age range. As a result of the factor analysis performed via the promax rotation technique, it was observed that the 22-item scale consisted of three factors, and the emotional competence factor explained the variance by 27.25%, the social engagement factor by 13.87% and the aggressiveness factor by 12.33%. .40 was used as the factor load criterion, and due to this criterion, three items in total, item 17, item 18 and item 21, were excluded from the scale. Thus, the item number of the scale was determined as 19 items, including 9 items for emotional competence, 6 items for social engagement, and 4 items for aggressiveness. The factor loads of the items related to the three dimensions of the scale varied between .41 and .87. Cronbach's alpha coefficient was calculated for each sub-dimension of the scale, and it was found to be .86 for emotional competence, .79 for social engagement, and .75 for aggressiveness (Lanciano et al., 2017, p.801). The fit indices of the scale were calculated as  $\chi^2=88.90$ ,  $p = .001$ ; CFI = .90; NFI = .87; RMSEA = .13 [90% CI = .10-.17]; RMR = .03; SRMR = .09).

### *Process of Adaptation to Turkish*

In the process of the adaptation of the Social Behavior Scale for Preschool Children - SBS - to Turkish, the necessary permissions were first obtained from TizianaLanciano by contacting her in writing, and then, the validity and reliability analyses were performed by using the 19-item form of the original

scale. At the stage of testing the construct validity, exploratory and confirmatory factor analyses were conducted. Exploratory factor analysis aims at finding various variables and the significant constructs which are identified in limited numbers and these variables explain together. In the confirmatory factor analysis, on the other hand, it is assessed at what level the created constructs comply with the real data in the theoretical sense. In the study, the reason for the execution of the exploratory factor analysis is to determine the structure of the original form of the measurement tool over the Turkish sample. The confirmatory factor analysis tests whether the factors of the original version of the scale are confirmed in the Turkish sample (Büyüköztürk et al. 2004). Multiple fit indices were used for CFA, and its reliability was found with Cronbach's alpha correlation coefficient. The data of the study were analyzed using SPSS and AMOS programs.

The items of the Social Behavior Scale were translated from English into Turkish. In this context, the scale was translated into Turkish by a language expert and researchers. Afterward, it was edited by domain experts and translated into English again by two different language experts in English. The consistency between the original version of the scale, which was translated from Turkish into English, and the translations was examined, and no difference was found between the Turkish and English forms. First English then Turkish meanings in the scale translated to Turkish were revised in line with the suggestions of the experts, and after the necessary corrections, they were ready for being presented to the expert opinion.

## **Results**

### ***Content validity***

One of the methods employed for testing content validity is expert opinion. The scale was presented to the opinion of 7 academicians in total, including 5 doctor assistant professors and 2 associate professors, in order to determine the content validity of the Social Behavior Scale. In the assessment form, the experts were requested to express their opinions as appropriate, inappropriate, and must be edited, and the final version of the scale was created. The experts evaluated all the items in the assessment tool as appropriate and suggested editing in some of them. Consequently, the content validity index

(CVI) of the items was calculated to be 1.00 when the opinions of 7 experts were considered (Yurdugül 2005).

### ***Construct validity***

For the validity study, the Kaiser–Meyer–Olkin (KMO) value was calculated, and Bartlett’s sphericity test was conducted. For the conformity of the data to the factor analysis, the KMO value needs to be found higher than .60, and Bartlett’s test needs to be significant (Büyüköztürk 2014). As a result of the analysis, the KMO value was calculated to be 0.772. Considering the resulting KMO value, the data were found to be suitable for the factor analysis. Furthermore, the results of Bartlett’s sphericity test were found to be significant ( $\chi^2 = 3946.87$ ,  $p = .000$ ).

For testing the construct validity of the scale, the *exploratory factor analysis* was performed in the determination of the factor structure, and the *confirmatory factor analysis* techniques were used for confirming the pre-determined factor structure of the scale.

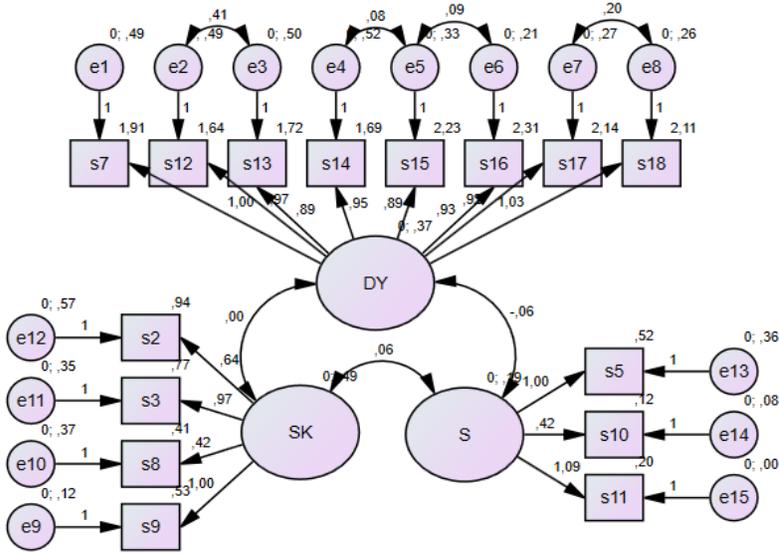
***Exploratory factor analysis:*** After a decision was made on the conformity of the data to the factor analysis, the minimum factor load was determined as .40, and the exploratory factor analysis was performed to find out how many factors the Turkish version consisted of. It was revealed that the Turkish version of the scale was comprised of 3 factors. The factor load values of the components rotated via the varimax method and the corrected item-total correlations were calculated in order to identify the items included in these 3 factors of the scale. As a result of the analysis, since item 6 and item 19 in the original version of the scale were included in an irrelevant factor, item 1 had more than one factor load value, and the factor load of item 4 was found to be below .40, it was decided to exclude them from the Turkish version. These questions were excluded from the scale, and the calculations were made again.

**Table 1. Exploratory factor analysis results of the Social Behavior Scale**

Name of Factor	Item No	New Item No	Factor1	Factor2	Factor3	Common Factor Variance
Emotional Competence	M7	M4	.674			.464
	M12	M9	.752			.581
	M13	M10	.722			.550
	M14	M11	.686			.504
	M15	M12	.749			.564
	M16	M13	.765			.632
	M17	M14	.815			.667
	M18	M15	.836			.699
Social Engagement	M2	M1		.711		.508
	M3	M2		.798		.654
	M8	M5		.529		.449
	M9	M6		.841		.737
Aggressiveness	M5	M3			.555	.387
	M10	M7			.904	.818
	M11	M8			.790	.644
Described Variance (Total 54.28%)			28.44	15.25	10.57	

As a result of the Exploratory Factor Analysis (EFA), 15 items were gathered in 3 factors, the first factor named “Emotional Competence” consisted of eight items and explained 28.44% of the total variance by itself. An item of this sub-scale can be exemplified with “The child tries to console his peer if he is crying.” While the second factor named “Social Engagement” explains 15.25% of the variance, an item of this sub-scale is “Although his peers are busy with other activities, the child tries to play near them.” Whereas the third factor named “Aggressiveness” explains 10.57% of the total variance, an exemplary item for this sub-scale can be “The child physically aggresses other children (For example, he hits them, scratches them, pulls their hair.)” The factor load values vary between .67-.83 for the first factor, .52-.84 for the second factor, and .55-.90 for the third factor.

**Confirmatory factor analysis:** Confirmatory Factor Analysis (CFA) was performed by using the Amos software in order to evaluate the validity of the three-factor structure that emerged as a result of the exploratory factor analysis. The diagram regarding the fit of the results of the confirmatory factor analysis of the Social Behavior Scale is presented in Figure 1.



EC: Emotional Competence, SE: Social Engagement, A: Aggressiveness  
 Figure 1. The diagram of the confirmatory factor analysis of the Social Behavior Scale

CFA was applied to test the accuracy of the pattern that was revealed as a result of EFA, and the measurement model was established. In line with the suggestion of the analysis software, the modification was performed between items 12 and 13, items 14 and 15, items 15 and 16, and then items 17 and 18, which are under the emotional competence factor. The modifications were applied without damaging the theoretical structure of the scale (Çokluk et al., 2012). The statistics related to the fit of the results of the confirmatory analysis of the Social Behavior Scale are given in Table 2.

Table 2. The statistics related to the fit of the results of the confirmatory analysis of the Social Behavior Scale

Model	X <sup>2</sup>	df	X <sup>2</sup> /df	p	CFI	NFI	TLI	RMSEA
Conceptual model	241.882	83	2.914	.000	.936	.907	.908	.078

In order to test the fit of the data in CFA, the chi-square, CFI (Comparative Fit Index), NFI (Non-Normed Fit Index), TLI (Tucker-Lewis Index), and RMSEA (Root Mean Square Error of Approximation) values are widely used. If the value which is found as a result of dividing the chi-square value into the degree of freedom is less than 3, it is interpreted as an acceptable fit. When

CFI, NFI, and TLI, among other fit indices, get values above 0.90 and when RMSEA gets a value below 0.80, this is considered as acceptable goodness of fit (Engel and Moosbrugger, 2003, p.23). As a result of these modifications,  $X^2/df = 2.914$ ; CFI= 0.936; NFI= 0.907; TLI= 0.908; RMSEA= 0.078 were calculated for the 3-factor model in the measurement model. It is observed that the values of the whole model are at an acceptable level.

### **Reliability**

**Table 3. Cronbach's alpha values of the Social Behavior Scale**

Sub Dimensions	Number of item	Cronbach Alpha Reliability Coefficient
Emotional Competence	8	.891
Social Engagement	4	.739
Aggressiveness	3	.669
Total	15	.745

When Table 3 was reviewed, it was detected that Cronbach's alpha value of the emotional competence sub-dimension was .891, the social engagement sub-dimension .739, and the aggressiveness sub-dimension .669. The total Cronbach's alpha coefficient value of the scale was found to be 0.745. When the number of the scale items is low and Cronbach's alpha value is .60 and above for reliability, the scale is considered reliable (Durmuş et al., 2013).

**Table 4. Item analysis results of the Social Behavior Scale**

Sub Dimensions	Item	Item Total Correlation
Emotional Competence	M4	.887
	M9	.875
	M10	.878
	M11	.885
	M12	.878
	M13	.875
	M14	.873
Social Engagement	M15	.871
	M1	.722
	M2	.616
	M5	.763
Aggressiveness	M6	.584
	M3	.676
	M7	.692
	M8	.329

In Table 4, according to the item-total correlation results, the highest correlation coefficient of the scale was found to be 0.887, and the lowest coefficient was observed to be 0.329. The item-total correlations equal to and above .30 show that the items in the measurement tool can differentiate individuals at a good rate, items with values between .20 and .30 can stay in the measurement tool if required, and items with values less than .20 need to be excluded from the measurement tool (Büyüköztürk, 2014).

## **Discussion and Conclusion**

The aim of the study is to conduct the Turkish adaptation study and the validity and reliability analyses of the Social Behavior Scale for Preschool Children, which was developed by Lanciano, Cassibba, Elia, and D'Odorico (2017). The validity of a measurement tool refers to what the scale measures and how well it measures (Anastasi and Urbina, 1997). There are different classifications in the validity studies. These can be stated as content validity, criterion-referenced validity, and construct validity (Büyüköztürk, 2014).

In the linguistic equivalence study of the scale, the correlations of the scores between the forms translated into English and Turkish were calculated, and the consistency between both form scores was found to be high. The rules applied during the translation stages of the scales are quite important for the validity of the studies conducted. It is necessary that the translated versions of the scales match their original versions. The mistakes made during translation may lead to the invalidity of the research results (Hansen, 1987, p.163; Prieto, 1992, p.1).

Content validity is defined as the balanced representation of what will be measured by the items in the measurement tool. From this perspective, cooperation is required with domain experts since the evaluation of the measurement tool by the individual himself may be misleading (Cronbach, 1990). In this study, expert opinions were obtained from a total of 7 academicians for content validity. It was observed that all the items in the forms received from the experts were evaluated as appropriate, and editing was suggested in some items; the measurement tool was applied after the necessary corrections.

For the researcher, the determination of the construct, in which the scores of the measurement tool are correlated, indicates that the scale functions in

line with its purpose. The data obtained as a result of the construct validity study enable explaining what the results are related to (Cited by Tavşancıl, 2010). In testing the construct validity of the scale in the study, the exploratory factor analysis was conducted to determine the factor structure, and the confirmatory factor analysis techniques were used to confirm the pre-determined factor structure of the scale. As a result of these analyses, it was discovered that 15 items were gathered under 3 factors. In the reliability analyses of the scale, the total Cronbach's alpha coefficient value was found to be 0.745.

Reliability refers to at what level of stability the measurement tool measures a characteristic or characteristics (Cited by Tavşancıl, 2010). In the reliability analyses, Cronbach's alpha value was found to be .891 for the emotional competence sub-dimension, .739 for the social engagement sub-dimension, and .669 for the aggressiveness sub-dimension, and the total Cronbach's alpha coefficient value was calculated to be 0.745. According to the item-total correlation results, the highest correlation coefficient of the scale was found to be 0.887, and the lowest coefficient was found to be 0.329.

Consequently, since the Social Behavior Scale for Preschool children, which contains 15 items, is a scale for the evaluation of children's social behaviors, valid and reliable results were acquired in the sample group during the process of its adaptation to Turkish. The Social Behavior Scale for Children can be said to be a valid and reliable measurement tool for determining the social behaviors of children on the basis of teachers' evaluation. It is assumed that this scale, which allows for measuring the social behaviors of preschool children, will contribute to the studies planned to be conducted in this context.

### **Limitation**

The current study was not conducted for a multi-centric purpose since Kırık-kale district is an urban area resembling the whole population in Turkey.

### **Kaynakça / References**

- Alisınanoğlu, F. ve Kesicioğlu, O.S. (2010). Okul öncesi dönem çocuklarının davranış sorunlarının çeşitli değişkenler açısından incelenmesi:Giresun İli örneği. *Kuramsal Eğitim bilim*, 3(1), 93-110.
- Anastasi, A.ve Urbina, S. (1997). *Psychological testing*. 7th ed. USA: Prentice Hall.

- Anthony, B. J., Anthony, L. G., Morrel, T. M., and Acosta, M. (2005). Evidence for social and behaviour problems in low-income, urban pre-schoolers: effects of site, classroom, and teacher, *Journal of Youth and Adolescence*, 34, 31–39.
- Büyüköztürk, Ş. (2014). *Sosyal bilimler için veri analizi el kitabı*. 20. Baskı, Ankara: Pegem Akademi.
- Büyüköztürk, Ş., Akgün, Ö., Kahveci, Ö., and Demirel, F. (2004). Gütülenme ve öğrenme stratejileri ölçeği'nin Türkçe formunun geçerlik ve güvenilirlik çalışması. *Kuram ve Uygulamada Eğitim Bilimleri*, 4(2), 207-239.
- Cronbach, L., J. (1990). *Essentials of psychological testing*. 5th edition. Newyork: Harper & Row Publishers.
- Çokluk, Ö., Şekercioğlu, G. ve Büyüköztürk, Ş. (2012). *Sosyal bilimler için çokdeğişkenli istatistik spss ve lisrel uygulamaları* (2. Baskı). Ankara: Pegem Akademi.
- Durmuş, B., Yurtkoru, E. S. and Çinko, M. (2013). *Sosyal bilimlerde Spss'le veri analizi*. 5. Baskı, İstanbul: Beta Yayıncılık.
- Engel, S. and Moosbrugger, K. (2003). Evaluating the fit of structural evaluation models: Test of significance and descriptive goodness of fit measures, *Methods of Psychological Research- Online*, 8(2), 23-74.
- Hansen, J. (1987). Cross-cultural research on vocational interests, *Measurement and Evaluation in Counseling and Development*, 19, 163-176.
- Inglés, C. J., Hidalgo, M. D., Méndez, F. X. ve Inderbitzen, H. M. (2003). The teenage inventory of social skills: reliability and validity of the Spanish translation, *Faculty Publications, Department of Psychology*, 26, 505-510
- Kağıtçıbaşı, Ç. (2012). *Benlik, aile ve insan gelişimi* (3. baskı). İstanbul: Koç Üniversitesi Yayınları.
- Karaca, N.H., Gündüz, A. and Aral, N. (2011). Okul öncesi dönem çocuklarının sosyal davranışının incelenmesi. *Kuramsal Eğitim Bilim*, 4 (2), 65-76
- Karakuş, A. (2008). *Okul öncesi sosyal davranış ölçeği öğretmen formunun güvenilirlik ve geçerlik çalışması*. Yayımlanmamış yüksek lisans tezi. Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.
- Lanciano, T., Cassibba, R., Elia, L. and D'Odorico, L. (2017). The social behavior scale for preschool children: Factorial structure and concurrent validity, *Current Psychology* 36, 801–811.
- Markiewicz, D., and Brendgen, M. (2001) The quality of adolescents' friendships: associations with mothers' interpersonal relationships, attachments to parents and friends, and prosocial behaviors, *Journal of Adolescence* 24, 429–445.

- Merrell, K. W. (1993). Using behavior rating scales to assess social skills and antisocial behavior in school settings: Development of the school social behavior scales, *School Psychology Review*, 22(1), 115-134.
- Mihic, J., Novak, M., Basic, J. and Nix, R. L. (2016). Promoting social and emotional competencies among young children in Croatia with preschool paths, *The International Journal of Emotional Education*, 8 (2), 45-5
- Nazlı, S. (2008). Sosyal davranış ölçeğinin türkçe formunun geçerlik ve güvenilirlik çalışması. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, 23, 57-62
- Prieto, A. (1992), A method for translation of instruments to other languages, *Adult Education Quarterly* 43,1-14.
- Seven, S. (2010). Sosyal davranış öğretmen değerlendirmesi ölçeğinin Türk kültürüne uyarlanması. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 23, 193-200
- Şen, M. (2009). 3-6 yaş grubu çocukların sosyal davranışlarının bazı değişkenler açısından incelenmesi. Yayımlanmamış doktora tezi. Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü, Ankara.
- Şen, M. and Arı, M. (2011). Okul öncesi sosyal davranış ölçeği öğretmen formunun geçerlik ve güvenilirlik çalışması. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 4(2):1-28.
- Şen, M., ve Teke, N. (2019). Okul öncesi sosyal davranış ölçeği-akran formu: türkçe geçerlik ve güvenilirlik çalışması. *Anatolian Journal of Psychiatry* 20(Suppl.1),82-90
- Tabachnik, B.G. and Fidell, L.S. (2001) *Using multivariate statistics*. (4 ed.). Allyn ve Bacon: Boston.
- Tavşancıl, E. (2010). *Tutumların ölçülmesi ve SPSS ile veri analizi*. Ankara: Nobel Yayınevi.
- Yurdugül, H. (2005). Ölçek geliştirme çalışmalarında kapsam geçerliği için kapsam geçerlik indekslerinin kullanılması. XIV. Ulusal Eğitim Bilimleri Kongresi, Pamukkale Üniversitesi, Denizli.

### Kaynakça Bilgisi / Citation Information

Sakarya, S., Çakmak, A. ve Şahin, H. (2020). Turkish validity and reliability study of the social behavior scale for preschool children. *OPUS–Uluslararası Toplum Araştırmaları Dergisi*, 16(31), 3853-3866. DOI: 10.26466/opus.762096