

The Development of the “Sense of Belonging to School” Scale

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Abstract

Problem Statement: The sense of belonging to school can be described as the perception of students as individuals, respecting their existence, and supporting them in the social environment of the school. Academic achievement is a factor that is related to the sense of belonging to school. In many studies the direct link was revealed between sense of belonging to school and school attendance, preparation for school, fulfilling the given tasks and homework, and active participation in social and sports activities. Another factor related to sense of belonging to school is “leaving the school”. Due to all these reasons, valid and dependable measuring tools are needed for determining the primary school students’ (10-15 years old) sense of belonging to school.

Purpose of Study: This study developed a reliable and valid scale to assist in research related to the sense of belonging of students studying in primary schools in a Turkish context.

Methods: The sample of this study is composed of 781 students attending the 6th, 7th, and 8th grades of a primary school in Aydın. The sample was randomly divided into two parts. For the first half (N=387) explanatory factor analysis was carried out and for the second half (N=394) confirmatory factor analysis was performed. Students’ personal profile form, social support appraisals scale for children, and UCLA Loneliness Scale were implemented for the students.

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Findings and Results: The data first were subjected to an exploratory factor analysis. Results yielded two different factors with eigenvalues of 4.2 and 1.9. This two-factor solution or structure accounted for 60.72 % of the total variance (32.72% and 28.01 %). Other results indicated that the factor loading of the items varied from .68 to .86. The item factor correlation values varied from .57 to .75. Additionally, the unpaired t-test findings from upper and lower groups of 27% for each factor indicated that there were significant differences between the groups. Ten items of SEBES were subjected to a confirmatory factor analysis. Although the obtained chi-square value was found to be meaningful ($\chi^2 = 80.93$; $df = 34$; $p = 0.00$, CFI=0.98, NNFI=0.97, RMSEA=0.059), when the compatibility indicators are examined it is observed that the two-factor structure of the Sense of Belonging to School Scale is in fine accordance with the sample data.

Conclusions and Recommendations: SEBES can be considered a valid and reliable tool for measuring primary students' belongingness to school. Future research should be conducted to explore students' sense of belonging to school based on this 2-factor model across different cultures.

Keywords: Sense of belonging to school, Loneliness, Perceived social support, Primary school.

Lately, it is observed that the media handles the concept of school in conjunction with concepts such as violence, school gangs, and outrage. This situation leads to most countries reviewing their curricula, with various measures being taken considering the cultural differences among societies. Ma (2003) emphasizes that the lack of sense of belonging to school has become a more important concept with the upsurge of violence in schools. Especially in North America, this issue has begun to be studied due to the increase of violence (Ma, 2003). Naturally, as school is perceived as a society, it is important to discuss and study the concepts related to belonging to society also inside the school. Just as an individual's sense of belonging to social groups and society brings along the feeling of protecting and improving this structure, a student's feeling as a part of the school is crucial in terms of his/her protecting and improving it. So the concept of "belonging", which is a sociological and psychological concept and which has a significant place in Maslow's hierarchy of needs, is an especially critical concept not only for the society but also for the school in terms of the success of curriculum.

Goodenow and Grady (1993) describe the sense of belonging to school as the perception of the students as individuals, respecting their existence, and supporting them in the social environment of the school. Crandall (1981, cited in Beck & Malley, 1998) determined that a student, whose sense of belonging to school is high, feels more valuable and self-confident. In their study, Burnett and Valz (1994) indicated that school gang problems increase with the lack of sense of belonging to school. And in his study, Fine (1991) revealed that sense of belonging to school has a direct effect on school truancy. Omizo, Omizo and Honda (1997) in their qualitative study interviewed male students, who are members of gangs and determined that such factors

as sense of belonging to school and self-respect were important themes in becoming a gang member. As Cornell and Wellborn (1991) also stated students whose level of commitment to school is higher may also have higher levels of obedience to school and classroom rules. Another factor related to sense of belonging to school is academic success. A great number of studies in literature indicate that as sense of belonging to school increases, academic success increases, too (Goodenow, 1991; Goodenow and Grady, 1993; Gonzalez and Padilla, 1997). In addition to this, in many other studies the direct link between sense of belonging to school and school attendance, preparation for school, fulfilling the given tasks and homework, and active participation at social and sports activities was revealed (Finn, 1989; Goodenow & Grady, 1993; Voelkl, 1995).

In an OECD report (Willms, 2003) of PISA research, which was published in 2000 and performed in 43 countries on comprehending the 15-year-old age group, it was stated that there is a direct link between sense of belonging to school and student engagement in school activities. Another factor related to sense of belonging to school is "leaving the school". Kagan (1990) emphasizes that this particular behavior of the students who have the risk of truancy leaving the school is a symptom of institutional pathology instead of personal pathology. He states that these students do not acquire the sense of belonging to school, which is related to the application of level groups. Kaplan and Johnson (1992) assert that the students who do not have a sense of belonging to school try to create a different channel for belonging and this leads to the emerging of antisocial behavior patterns. Thus, a student, who does not have a sense of belonging to school, may satisfy his/her feelings of belonging and self-expression in the form of a gang. As Burnett and Valz (1994) also state school gangs become popular groups created by these kinds of students. Balkis, Duru and Bulus (2005) through a comprehensive literature review found that there is a correlation between being a member of a gang and acts of violence at schools and anxiety, perceived social support, bad temper, thievishness, smoking, experience of sexual intercourse at early ages, harmful behavior, social isolation, attitudes of the parents, separation of mother-father and child, academic failure, and having siblings or peers prone to crime. In their study conducted with 517 students aged 11 to 15 years, Balkis, Duru and Bulus (2005) concluded that while attitude towards violence is positively related to media containing violence, social circle, and belief in violence, it is also negatively related to the sense of belonging to school and belief of school self-sufficiency. Ocak (2004), in the study carried out in Turkey, found that there is a negative correlation between the undesirable behaviors of 4th and 5th grade primary school students and their levels of sense of belonging to school. And in their study performed on high school students in the USA, Shears, Edward and Stanley (2006) determined that there is a negative correlation between the level of sense of belonging to school and alcohol and substance use.

Berman (1997, cited from Beck & Malley, 1998) suggested the concept of "pedagogy of belonging" as a solution to these kinds of problems, which are seen throughout the world. Berman also suggests that classroom and school climate should be arranged in a constructive way in which teacher-student and student-student relation-

ships support each other's existence. Berman adds that democratic attitudes should be actualized and cooperative teachers should become a school culture. Again in Pisa research (Willms, 2003), the terms of low sense of belonging to school and alienation are used together and students who do not participate in the activities inside and outside the curriculum are defined as alienated. Certainly there are a number of factors that feed or prevent the development of sense of belonging to school. As Ma (2003) also implied the attitudes of the teachers and directors, discipline insight of the school, homogeneous or heterogeneous structure of the class, socioeconomic status of the family, and school climate are some of these factors. In order to implement the curriculum successfully, it is significant for students to find their presence in the school meaningful and to have a sense of belonging to the school. All these reasons support the need for valid and dependable measuring tools for determining primary school students' (10-15 years old) sense of belonging to school. Developing these kinds of measuring tools and performing validity-reliability studies in different cultures is also important for making intercultural comparisons in the field of education and taking common precautions.

Method

Research Design

This study aims at developing a reliable and valid scale to enhance research related to the sense of belonging to school in primary school in a Turkish context. Within this framework, the study utilizes a descriptive survey method.

Sample

The sample of this study is composed of 781 students attending the 6th, 7th, and 8th grades of primary school, located in Aydın Province Center. The students belong to the mid- socioeconomic level according to the listing obtained from Provincial Directorate for National Education. The sample is randomly divided into two parts. Exploratory factor analysis was carried out with the first half (N=387) and confirmatory factor analysis with the second half (N=394). The analysis showed that 54.2% of the participants are female and 45.8% are male, with ages ranging from 10 to 15 (M=12.68, SD=0.89). The confirmative factor analysis showed that 47.8% of the participants are female and 52.2% male. Again the ages range from 10 to 15 (M=12.70, SD=0.88).

Table 1

Sample Characteristics in terms of Explanatory Factor Analysis, Confirmatory Factor Analysis, and Criteria-Related Validity Analysis

	Explanatory Factor Analysis		Confirmatory Factor Analysis		Criteria-Related Validity	
	<i>f</i>	<i>N</i>	<i>F</i>	<i>n</i>	<i>f</i>	<i>n</i>
Gender						
Female	208	54.2	188	47.8	84	50.0
Male	176	45.8	205	52.2	84	50.0
Total	384*	100.0	393**	100.0	168	100.0
Class						
6 th degree	137	35.4	129	32.7	60	35.7
7 th degree	121	31.3	144	36.5	56	33.3
8 th degree	129	33.3	121	30.7	52	31.0
Total	387	100.0	394	100.0	168	100.0

* Three respondents didn't indicate their gender

** One of the respondents didn't indicate his/her gender

Research Instruments

Item Generation and Evaluation of the Sense of Belonging to School Scale (SEBES). The items for the scale were generated through a literature review made by a group of researchers. The literature was searched by using key terms like "sense of belonging", "belonging to school", "school violence", "student alienation", and "gender". The resources were carefully screened to generate 25 items (e.g. Uzun-Yukse, 2006; Sanberk, 2003; Ma, 2003; Willms, 2003; Goodenow, 1991; Goodenow and Grady, 1993). Nine additional items were adopted from a previous study (Sanberk, 2003). The results of this process led to 34 items.

Student Personal Profile Form. This questionnaire was prepared by the researchers to collect information on students' gender, age, and grade level.

Social Support Appraisals Scale for Children. An important feature of this tool developed by Dubow and Ullman (1989) is that it evaluates perceived friend, classroom, teacher, and family support separately. Cronbach's alpha was .93. The test has 41 items. Its reliability and validity were studied by Gokler (2007). In this study, for the validity of similar measures, classroom and teacher dimensions (8 items for classroom dimension, 10 items for teacher dimension) of the Social Support Appraisals Scale for Children were used.

UCLA Loneliness Scale. The validity and reliability of the UCLA Loneliness Scale developed by Russel, Peplau and Ferguson (1978) was performed by Demir (1989) for Turkish society. This is a Likert scale measuring the loneliness of the individual with 20 items. Higher points indicate that the individual experiences a more intense feeling of loneliness. Cronbach's alpha was .96 for the total scale. In this study, the whole UCLA Loneliness Scale (20 items) was used with the aim of validity of different scales.

Procedures

The research was carried out in four state schools belonging to the mid-socioeconomic level according to the information obtained from Provincial Directorate for National Education. The scale and personal information form were applied by the researchers according to a determined agenda and sometimes by the psychological counselors during lessons after official permission was acquired from Directorate of National Education and school administrations. Application of the pilot scales lasted an average of 25 minutes.

For criterion-related validity, correlations between the SEBES and two different scales were analyzed. UCLA Loneliness Scale and Social Support Appraisals Scale for Children's classroom and teacher sub-scales were administered to 168 students (50.0% are girls and 50.0% are boys) from two different typical primary schools in Aydin. Schools were chosen from state-mandated primary schools having mid-socioeconomic status. The sample for criteria-related validity is composed of 168 students from 6th, 7th, and 8th grade levels.

Data Analyses

To assess construct validity and determine the scale's dimensionality of the "A Sense of Belonging to School Scale", data were analyzed through factor analysis, Pearson product-moment correlation analysis to further assess the scale's construct validity, and Cronbach's alpha to assess the scale's internal reliability. In order to test the structure obtained as a result of the explanatory factor analysis, confirmative factor analysis was performed for the second half of the sample, which was selected randomly.

Results

Exploratory Factor Analysis

Several stages were followed to test the psychometric properties of the "A Sense of Belonging to School Scale". First, the means, standard deviations, and anti-image correlation coefficient values of the 34 items were investigated. After the total sample composed of 781 individuals was randomly divided into two halves by SPSS programme, explanatory factor analysis was performed with the first sample of 387 individuals and confirmative factor analysis was performed with the second half (N:394).

The compatibility of the data obtained from the 387 individuals composing the first half of the factor analysis was proven with Kaiser-Meyer-Olkin (KMO) and Bartlett Test. This value can be defined as satisfactory due to the fact that Pallant (2001) stated that the lowest KMO (.86) value should be .60 for making factor analysis. Moreover, the chi-square ($\chi^2=1526.71$, $df=45$, $p=0.000$) value obtained with the Bartlett test was found to be meaningful.

The items with a mean score below 2 or above 4, with a standard deviation value below 1.00, and an anti-image correlation coefficient value below .50 were excluded from the scale. The data first were subjected to an exploratory factor analysis that was performed by utilizing the Principal Component Analysis with varimax rotation.

Results yielded two different factors with eigenvalues of 4.2 and 1.9. The percentages of variance explained were 32.72% and 28.01 %. This two-factor solution or structure accounted for 60.72 % of the total variance. As a result of the Main Components analysis, when the line chart distribution was examined, two breaking points were determined in accordance with the two-factor solution. To reach this factor solution, 3 iterations were sufficient. When the coefficients of skewness and kurtosis were examined, the scale points had the features of normal distribution (skewness: .035, kurtosis: 1.6080). Kline (1998) states that in order to provide normal distribution, the maximum skewness value should be 3.00, and the maximum kurtosis value should be 10.000.

Other results indicated that the factor loading of the items varied from .68 to .86. The item factor correlation values varied from .57 to .75.

Explanatory factor analysis was repeated in the sample composed of 387 individuals on the basis of gender, in terms of girls and boys (N of Girls: 208, N of Boys: 176) and it was also repeated in accordance with the classroom level (N of Grade 6: 137, N of Grade 7: 121, N of Grade 8: 129). The two-dimensional structure composed of 10 items was obtained in a two-factor manner for girl and boy students alike at the 6th, 7th, and 8th grade levels. This case indicates that the scale has a consistent structure.

An expert in the subject matter, the first author, evaluated the items and attested to the construct validity of the scale. The final scale consisted of 10 items that were based on a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). When calculating the score, negative responses are reversed. Higher scores on the scale indicate higher levels of the sense of belonging to school.

The results of Pearson product-moment correlational analyses indicate that the sub-scales of the Sense of Belonging to School Scale have low ($r = .36, p < .01$) correlation with each other. On the other hand, Contentment in School Subscale ($r = .85, p < .01$) and Disobedience of School Rules Subscale ($r = .80, p < .01$) show high levels of correlation in total points.

An internal consistency analysis was utilized to test the scale's internal reliability. Cronbach's alpha was .85 for the total scale, .86 for the contentment in school subscale, .79 for the obedience of school rules subscale.

Confirmatory Factor Analysis

Ten items of SEBES were subjected to a confirmatory factor analysis. Use of both factor analysis methods on the same sample is an approved method of scale development (Jöreskog & Sörbom, 1993, p. 22-27; Thompson, 2005, p. 110-114). LISREL 8 was used to confirm two-factor structure of the scale. After the explanatory factor analysis of the scale was completed, confirmative factor analysis operations started. Also examined was whether the two-factor structure obtained from this analysis was in accordance with the sample data.

The obtained chi-square value was found to be meaningful ($\chi^2 = 80.93; df = 34; p = 0.00$). When the compatibility indicators were examined it was observed that the two-factor structure of the Sense of Belonging to School Scale was in fine accordance with the sample data. For example, from the chosen compatibility indicators, CFI (0.98) and NNFI (0.97) values were found to be above the value of 0.95 and RMSEA (0.059) value was found to be below 0.08.

Table 2

Factor Loadings, Item-Subscale Correlations, Upper-Lower Groups' t-Values, Anti-Image Correlations, Means and Standard Deviations of the Items in Sense of Belonging to School Scale

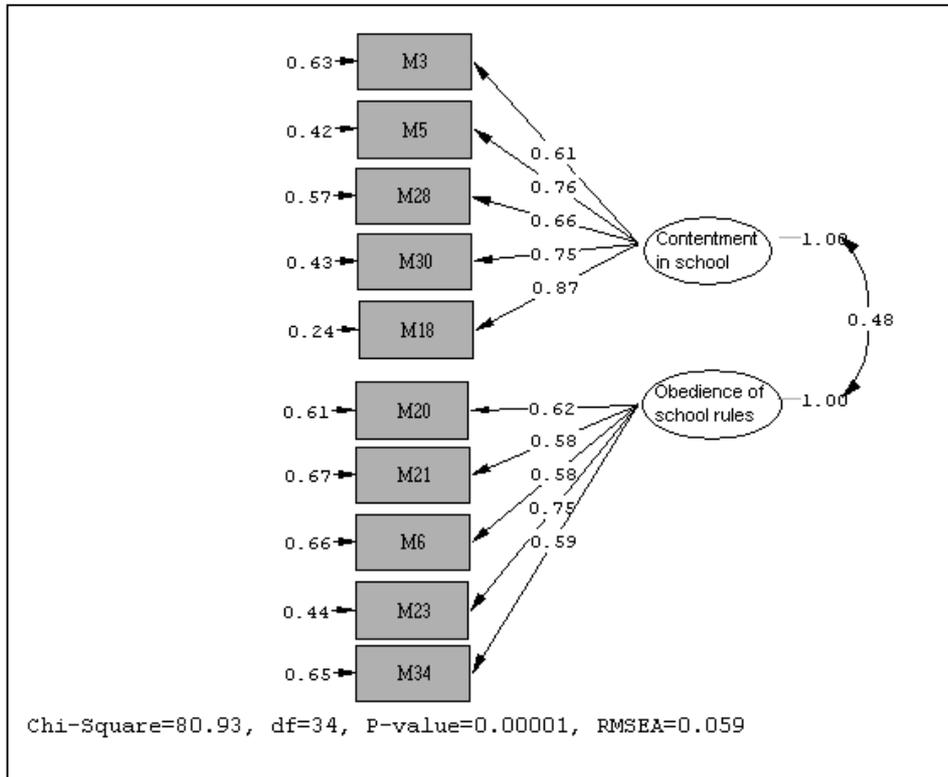
Subscales and Items	Factor Loadings		Item-Subscale <i>r</i>	Total Subscale <i>r</i>	Upper-Lower Groups' <i>t-value</i>	Anti-image <i>r</i>	<i>M</i>	<i>SD</i>
	1	2						
<i>Contentment in School</i> (Cronbach's alpha = .86)								
M18. I am glad to be at this school.	.86	.15	.86	.74	12.84*	.83	4.40	.93
M5. I feel lucky to be a student of this school.	.88	.15	.83	.74	11.26*	.85	4.35	.99
M30. I am proud of my school.	.80	.11	.79	.66	11.10*	.88	4.45	.89
M28. I am unhappy at this school.	.71	.24	.77	.68	10.15*	.92	4.55	.87
M3. If I had the chance, I would choose to go to another school.	.69	.10	.77	.61	11.18*	.87	4.16	1.24
<i>Obedience of School Rules</i> (Cronbach's alpha = .79)								
M23. I like disobeying the rules at the school.	.14	.79	.78	.63	11.27*	.55	4.48	.97
M34. During the ceremonies at the school, I chat with my friends. (Sanberk, 2003)	.13	.74	.75	.60	15.21*	.86	3.91	1.19
M6. I do not feel wrong about disobeying the school rules as long as I do not get caught. (Sanberk, 2003)	.13	.74	.74	.57	11.10*	.85	4.28	1,18
M20. I obey the school rules because I am afraid of the school administrators.	.11	.68	.73	.57	14.72*	.89	3.98	1,32
M21. Although I am aware that we should not write on the desks and walls, I do it sometimes. (Sanberk, 2003)	.18	.68	.70	.58	10.17*	.93	4.40	1.06

Table 3*Correlation Analyses (N=387)*

Subscales	Subscale r	Scale r	M	SD
Contentment in School	-	.81	19.60	2.58
Obedience of School Rules	.35**	.83	10.89	.2.93

 $p < .01$

Two separate DFA were performed in order to see whether the correlation values and error variance between the factors of the factor loads according to gender and grade showed any invariance after the factor analysis.



Factor 1 Contentment in school, Factor 2 Obedience of school rules

Figure 1

Two-dimensional Closed Structure Obtained with the Confirmatory Factor Analysis

Whether or not the three parameter values changed was investigated in this two-factor structure determined according to the gender in the first DFA and grade level

in the second DFA. It can be concluded that the correlation values and error variances of the factor loads show invariance in terms of gender and grade levels of the Sense of Belonging to School Scale. It can also be stated that the values of CFI (0.94), NNFI (0.94) and RMSEA (0.089) in terms of gender and the values of CFI (0.91), NNFI (0.92) and RMSEA (0.097) in terms of grade level are approximate to the targeted limit and satisfactory results have been obtained. All of these results indicate that the items that were created to measure "belongingness to school" belong together (Bentler, 1990; Bentler & Bonett, 1980; Kline, 1998). Based on the items that were grouped together, the factors were labeled as "Contentment in School and Obedience of School Rules".

Criteria-Related Validity

Results indicate high correlation between SEBES and subscales of SEBES. On the other hand, UCLA was highly related with the score of SEBES. There is high and positive correlation between Social Support Appraisals Scale for Children's classroom and teacher subscales and SEBES (Table 7). In accordance with the results, SEBES can be considered as a valid and reliable tool for measuring students' belongingness to school in primary schools.

Table 4

Correlational Analyses for Criteria-Related Validity (N=168)

	Total Score of The Sense of Belonging to School Scale	Contentment in School Sub-Scale	Obedience of School Rules Sub-Scale	UCLA Loneliness Scale	Social Support Appraisals Scale for Children - Classroom Dimension
Contentment in School Sub-Scale	.83*	1			
Obedience of School Rules Sub-Scale	.84*	.41*	1		
UCLA Loneliness Scale	-.38*	-.41*	-.23 *	1	
Social Support Appraisals Scale for Children -Classroom Dimension	.38*	.37*	.27*	-.65*	1
Social Support Appraisals Scale for Children -Teacher Dimension	.38*	.38*	.26*	-.56*	.55*

Correlation is significant at the 0.01 level (2-tailed).

Discussion and Conclusion

The purpose of this study was to develop a scale that measured primary school students' sense of belonging to school in a Turkish context. The research yielded a 10-item measure with two sub-scales, and the results provided evidence for the scale's validity and reliability. Validity was established through two methods. First, a confirmatory factor analysis supported a 2-factor model with a total of 10 items. These two components were labeled as Contentment in School and Disobedience of School Rules. Second, an expert in the field reviewed items to attest to the scale's construct and criterion-related validity. An internal consistency analysis was utilized to test the scale's internal reliability. Cronbach's alpha was .85 for the total scale, .86 for the contentment in school subscale, .79 for the obedience of school rules subscale. It can be said that Cronbach alpha results prove the reliability of SEBES.

Goodenow (1993) emphasizes that social factors such as a student's sense of belonging to school and accommodating to school are significant in each level from primary school to university; however these factors may become problematic issues especially during adolescence. In that case, it is possible to state that the age range (10-15), which is also the subject of this study, is of great importance in terms of sense of belonging to school. On the other hand, performed studies imply that the students whose level of sense of belonging to school is high are more successful academically, their rate of school attendance is higher, and their destructive behaviors are low (Burnett & Valz, 1994; Battistich & Hom, 1997; Omizo, Omizo & Honda, 1997; Ma, 2003; etc.). For this reason, there is a certain need for tools that can measure the sense of belonging to school of adolescent students. In addition to these, the developed instrument is also aimed towards leading the teachers in terms of designing learning circles, which can improve students' sense of belonging to school. With the comprehensive study he carried out, Capps (2003) determined that teachers do not have the necessary awareness for improving students' sense of belonging to school. In their study performed on 289 primary school students, Murray and Greenberg (2000) found a positive correlation between belonging to school and perceived positive support from teachers. In another study, Murray and Greenberg (2001) revealed that non-disabled primary school students had higher school-belonging levels and perceived positive support from their teachers than disabled students. Hagerty and Williams (1999) examined the effects of the interpersonal phenomena of sense of belonging, social support, loneliness, and conflict on depression. They also described the predictive value of sense of belonging for depression in the context of other interpersonal phenomenon in their research. Results showed significant direct paths as postulated, with 64% of the variance of depression explained by the variables in the model-based path analysis. Research revealed that social support had only an indirect effect on depression. Sense of belonging was a better predictor of depression in accordance with results.

In summary, it is believed that Sense of Belonging to School Scale developed for the students at the second grade of primary education can be helpful for handling problems such as violence at school, school gangs, and destructive behaviors towards the school, low academic success, and truancy. It is certainly important that the

learner has a positive attitude towards the school in the implementation of the curriculum in an efficient way. For this reason, alienation of the student from the school and his/her not having the sense of belonging to school may prevent the curriculum from being successful. Thus, it is believed that the developed scale is competent enough to measure the sense of belonging to school of the second grade primary school students and to provide the implementers (school administrator, teacher, psychological counselor of the school) with guidance.

Results indicate high correlation between SEBES and its subscales. On the other hand, UCLA was highly related with the score of SEBES. There were high and positive correlations between *Social Support Appraisals Scale for Children's* classroom and teacher subscales and SEBES (Table 7). In accordance with results, SEBES can be considered a valid and reliable tool for measuring students' belongingness to school in primary schools. Future research should be conducted to explore students' sense of belonging to school based on this 2-factor model across different cultures.

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Okula Aidiyet Duygusu Ölçeğinin Geliştirilmesi

Atf:

Akar-Vural, R., Yılmaz-Özelçi, S., Çengel, M. & Gömleksiz, M. (2013). The development of the "Sense of Belonging to School" Scale. *Eğitim Araştırmaları-Eurasian Journal of Educational Research*. 53, 215-230.

Özet

Problem Durumu: Son günlerde medyada okul kavramının, şiddet, okul çeteleri ve zorbalık gibi kavramlarla birlikte karşımıza çıktığını görmekteyiz. Bu durum pek çok ülkede eğitim programlarının gözden geçirilmesini gündeme getirmiş ve toplumlararası kültürel farklılıklar da göz önünde bulundurularak çeşitli önlemlerin alınması söz konusu olmuştur. Kuşkusuz okul bir toplum olarak kabul edildiğinde, topluma ait tüm kavramların okul için de tartışılması ve araştırılması önemlidir. Nasıl ki bireyin içinde bulunduğu sosyal gruplara ve topluma ait olduğunu hissetmesi, bu yapıyı koruma ve geliştirme duygusunu da beraberinde getiriyorsa, öğrencinin de bulunduğu okulda kendisini okulun önemli bir parçası olarak hissetmesi okulu koruması ve geliştirmesi açısından önemlidir. Okula aidiyet duygusu, öğrencilerin okulun sosyal çevresi içinde birer birey olarak kabul görmesi, varlığına saygı duyulması ve destek görmesi biçiminde tanımlanmaktadır. Okula aidiyet duygusu yüksek olan öğrencilerin kendilerini değerli hissettikleri, özgüvenlerinin de yüksek olduğu ve bu duygunun okulu bırakma davranışı üzerinde etkili olduğu düşünülmektedir. Ayrıca okula bağlılık duygusu yüksek olan öğrencilerin okul ve sınıf kurallarına uyum düzeyi daha yüksek olabilmektedir. Okula aidiyet duygusunun ilişkili olduğu bir diğer değişken de akademik başarıdır. Bunun yanında yine pek çok araştırmada okula aidiyet duygusu ile derslere devam, okula hazırlık, verilen ödevleri tamamlama, okuldaki sosyal ve sportif faaliyetlere aktif katılım arasında doğrudan bir ilişki olduğu ortaya konmuştur. Eğitim programlarının başarıyla uygulanabilmesi için öğrencilerin buldukları okulda varlıklarını anlamlı ve kendilerini okula ait hissetmesi oldukça önemlidir. Tüm bu gerekçelerden dolayı da ilköğretim II. kademe (10-15 yaş) öğrencilerinin okula aidiyet duygusunun belirlenmesi amacıyla kullanılacak geçerli ve güvenilir ölçme araçlarına gereksinim duyulmaktadır. Bu türden ölçme araçlarının geliştirilmesi ve farklı kültürlerde de geçerlik-güvenirlilik çalışmalarının yapılması eğitim alanında kültürlerarası karşılaştırmaların yapılabilmesi ve ortak önlemlerin alınabilmesi açısından da oldukça önemli bir gereksinimdir.

Araştırmanın Amacı: Araştırmanın temel amacı ilköğretim II. kademe (10-15 yaş) öğrencilerinin okula aidiyet duygusunun belirlenmesi amacıyla kullanılacak geçerli ve güvenilir ölçme aracı geliştirmektir.

Araştırmanın Yöntemi: Araştırma tarama modelinde betimsel bir çalışmadır. Çalışmanın örneklemini, Aydın İli Merkezinde bulunan ve İl Milli Eğitim Müdürlüğünden alınan listeye göre orta sosyo-ekonomik düzeyde olduğu belirlenen bir(dört okul) ilköğretim okulunun 6. 7. ve 8. sınıflarında öğrenim görmekte olan 781 öğrenci oluşturmaktadır. Örneklem tesadüfi iki yarıya ayrılmış ve ilk yarısında (N=387) açıklayıcı

faktör analizi, ikinci yarısında (N=394) doğrulayıcı faktör analizi gerçekleştirilmiştir. Araştırmada bir grup araştırmacı tarafından yürütülen literatür taraması ışığında, 25 madde oluşturulmuştur. Bu maddelere, Sanberk (2003) tarafından geliştirilen ölçeğin 9 maddesi eklenmiştir. Bu araç ile birlikte, öğrencilere ilişkin cinsiyet, yaş ve devam ettikleri sınıfa ilişkin bilgi toplamak üzere, "Kişisel Bilgiler Formu" da uygulanmıştır.

Araştırmanın Bulguları: "Okula Aidiyet Ölçeği"nin psikometrik özelliklerinin incelenmesi sırasında bir dizi adım izlenmiştir. Öncelikle, 34 maddenin ortalamaları, standart sapmaları, anti imaj korelasyon katsayıları incelenmiştir. Toplam 781 kişilik örneklemin SPSS programında tesadüfi iki yarıya ayrılması ile oluşan ilk 387 kişilik örneklem üzerinde Açıklayıcı faktör analizi, ikinci yarısında (N:391) doğrulayıcı faktör analizi gerçekleştirilmiştir. İlk yarıyı oluşturan 387 kişilik gruptan elde edilen verilerin faktör çözümlemesine uygunluğu Kaiser-Meyer-Olkin (KMO) ve Bartlett Testi ile sınanmıştır. Örneklem uygunluğu için hesaplanan KMO değeri, .89 bulunmuştur. Diğer taraftan, Bartlett testi ile elde edilen Ki-Kare değeri ($\chi^2=.2043.25$, $df= 55$, $p=0.00$) anlamlı bulunmuştur. Açıklayıcı faktör analizinde özdeğerleri 4.2 ve 1.9 olan iki farklı faktör ortaya çıkmıştır. Bu iki faktör toplam varyansın % 60.72'sini açıklamaktadır. Her bir faktörde yer alan maddelerin faktör yükleri .68 ile .86 arasında, madde-faktör korelasyon katsayıları da .57 ile .75 arasında değişmektedir. Açıklayıcı faktör analizinin ardından doğrulayıcı faktör analizi gerçekleştirilmiştir. Bu analiz ile elde edilen yapının verileri ile uygunluğu sınanmıştır. Analizde chi-square değeri anlamlı bulunmuştur ($\chi^2 = 80.93$; $df= 34$; $p= 0.00$). CFI (0.98), NNFI (0.97) ve RMSEA (0.059) değerleri de modelin veri seti ile uygunluğunu göstermiştir.

Araştırmanın Sonuçları ve Öneriler: Araştırma bulguları Okula Aidiyet Ölçeği'nin ilköğretim ikinci akdeme öğrencileri için geçerli ve güvenilir bir ölçek olduğunu göstermektedir. Ancak bu araştırmaydın ili örnekleminde gerçekleştirilmiştir. Benzer çalışma farklı kültürlerde ve daha büyük örneklemlerde gerçekleştirilebilir.

Anahtar Sözcükler: Okula aidiyet duygusu, yalnızlık, algılanan sosyal destek, ilköğretim.