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The scale for rating the behavioral characteristics of gifted and talented students: study of factor structure, reliability and validity[1]

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Abstract

This study aims to develop a nomination scale that helps primary class teachers assess the possible gifted and talented students in their classes with their behavioral characteristics. Within this scope, validity check and reliability analysis studies were done.
The study was fulfilled based on descriptive survey model. As a result of the validity check of the Scale for Rating the Behavioral Characteristics of the Gifted and Talented Students (SRBCGTS), it was realized that the gifted and talented individual perception of the primary teachers had four factors: creativity, leadership, general cognitive characteristics and arts. It was also stated that the scale could explain 50.54 %of the total variance. As a result of the reliability analysis, it was found out that the general scale with the creativity and leadership sub-dimensions were highly reliable, and with academic characteristics and arts sub-dimensions were quite reliable.
When the validity and reliability results of the scale are evaluated together, it can be said that psychometric qualities are quite sufficient for meeting the necessary criteria so that the developed scale can be used in the identification process as a supportive instrument and that classroom teachers can reach an opinion about the potential gifted students in their classes by means of using this instrument.

Keywords: Talented, gifted, teacher rating scales, nomination process, identification, primary school teachers.

Üstün yetenekli öğrencilerin davranışsal özellikleri için ölçek: faktör yapısı, güvenilirlik ve geçerlilik çalışması

Özet

Bu çalışmada, ilköğretim öğretmenlerinin, sınıflarında bulunan olası üstün yetenekli öğrencileri davranışsal özelliklerine göre değerlendirebileceği bir aday gösterme aracı geliştirilmesi amaçlanmıştır. Bu kapsamda geçerlik ve güvenilirlik çalışmaları yapılmıştır.

1 A part of this study is a revised version of the reseacher's doctoral thesis that he completed in 2012.

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ÜYÖDÖ'nin geçerlilik analizi sonucunda; sınıf öğretmenlerinin üstün yetenekli öğrenci algısının yaratıcılık, liderlik, akademik özellikler ve sanat olarak adlandırılan dört faktörlü bir yapıda olduğu belirlenmiştir. Ölçek toplam varyansın %50.54'ünü açıklayabilmektedir. ÜYÖDÖ'nin güvenilirlik analizleri sonucunda Cronbach α içgeçerlilik katsayısı yaratıcılık için .82, liderlik özelliği için .85, akademik özellikler için .71 ve sanat için .69'dur. Ölçek geneli ise .82 olarak belirlenmiştir. Güvenilirlik analizi sonucuna göre yaratıcılık, liderlik alt boyutları ile ölçek genelinin oldukça yüksek derecede güvenilir olduğu; sanat ve genel zihinsel özellikler alt boyutlarının oldukça güvenilir olduğu sonucuna ulaşılmıştır.

Ölçeğin geçerlik ve güvenilirlik sonuçlarının her ikisi birlikte değerlendirildiğinde; geliştirilen ölçeğin tanılama sürecinde destekleyici bir ölçme aracı olarak kullanılabilmesi için psikometrik özelliklerinin gerekli ölçütleri karşılamada oldukça yeterli olduğu ve bu aracın kullanılmasıyla sınıf öğretmenlerinin sınıflarında bulunan olası üstün yetenekli öğrenciler ile ilgili bir kanıya ulaşabilecekleri söylenebilir.

Anahtar kelimeler: Üstün yetenek, üstün zekâ, öğretmen dereceleme ölçeği, aday gösterme süreci, tanılama, ilkokul öğretmenleri.

Introduction

Early and accurate identification is the first step to provide the gifted and talented students with the education environment where they can improve their talents and potentials (Darga, 2010). Nomination/ application/ surveillance, testing and decision-making stages are followed in this process. Following this alignment enables to get more preliminary information about more students in a shorter time.

During the identification process, class teachers have an important role, and they nominate the gifted and talented students in their classes. In the phase of nominating, one of the most frequently used instruments is the teacher grading scale. While developing these scales, it is assumed that gifted and talented students have different behavioral characteristics from their peers with respect to their cognitive, physical, socio-emotional and personal aspects.

Teacher rating scales were the first took part in literature with the studies of Jefferson (1787) and Goddard's (1928) studies were amongst the first to put forward teacher rating scales (Hunsaker, Finley & Frank, 1997). These scales are quite usable while identifying the gifted and talented individuals who cannot be recognized with IQ test or other standardized tests by many educators (Chan, 2000). The information about the general talent areas of gifted and talented students such as cognition, academic, creativity, leadership and arts (Kitano & Kirby, 1986) and about a particular academic proficiency such as mathematics, languages and technology (Renzulli, Siegle, Reis, Gavin & Reed, 2009) can be gathered.

Out of 31 teachers' grading scales which encompass the 3rd and 14th editions of Mental Measurements Yearbook of Jarosewich, Pfeiffer and Morris (2002), the available ones and those being able to give the teacher information were determined. It was discovered that Gifted and Talented Evaluation Scales, Gifted Evaluation Scales-II, Scales For Rating The Behavioral Characteristics of Superior Students match these criteria. As a result of the analyses, it was expressed that three scales were sufficient in terms of technical aspects and that they can be used for

the programs for gifted students prepared by teachers in the process of nominating. Pfeiffer, Kumtepe and Rosado (2006) tested the validity and reliability of Gifted Rating Scale. As a result, it was found that the test protected the validity of its five sub-factor structure and that its reliability was 90.

Teacher rating scales have both strengths and weaknesses like all other evaluation instruments. According to the studies that define the strengths of the mentioned forms, it was determined that there was a relationship between standardized instruments and these forms (Mayfield, 1979; Gagne, 1994). In some other studies, positive results about their effectiveness and efficiency were seen. Especially, it was found out that the class teachers who were educated on this subject could identify the cognitively gifted and talented students in their classes more incisively (56 %[Gagne, 1994], 80%[Gear, 1978], 83%[Şahin & Çetinkaya, 2013]). Besides, when teachers are provided with the characteristics lists that enable the gifted and talented students to be nominated, the reliability of the teacher impressions was reported to be higher (Jost, 2006).

On the other hand, the restricted parts of the nomination forms were studied in some studies, the limited aspects of nominating forms were discussed. In these studies, it was found out that teachers can take sides according to ethnical identity of the student (Elhoweris, Mutua, Alsheikh & Halloway, 2005; Guskin, Peng & Simon, 1992), the gender (Endepohls-Ulpe & Ruf, 2005; Guskin et al., 1992; Siegle & Powell, 2005), and the socio-cultural level of them (Enç, 2005; Gökdere, 2004; Guskin, et al., 1992). It was also stated that the inexperienced teachers tended to nominate less students (Guskin et al., 1992), and the underachieving and low-motivated students might be less nominated (Endepohls-Ulpe & Ruf, 2005). Additionally, it was found that students who have reading difficulties, shy students, students who have developmental problems (lacking listening skills, having difficulties in acting independently, having long-term care problems, resistant to obey the classroom rules), who have family problems (Rohrer, 1995), and highly social and kinesthetic students (Guskin et al., 1992) were not nominated.

When the Turkish literature on teacher rating scale is scanned, a study of the validity and reliability that focuses on primary school teachers has not been found. Considering the need for such a study and the previous research findings, this study aims to develop a nomination form which primary school teachers, evaluate the gifted and talented students in their classes according to their behavioral characteristics.The main aim of this study is to perform a validity and reliability analysis of the aforementioned instrument.Valid and reliable evaluation instruments can be used in the identification process by classroom teachers. Also, it will provide scientists who conduct inter-cultural studies with clues with respect to determining classroom teachers' identification of gifted students in Turkish culture.

Conceptual and theoretical perspectives

There are not only one definition of being gifted and talented. If one considers talented to be the product of interaction between genetic and environmental factors, different types of talented are to be expected (Heller, 2007; Heller & Perleth, 2008). Giftedness models developed in the 1980s and 1990s are characterized, almost without exception, by multidimensional or typological ability constructs (Gagne, 1993; Gardner, 1993; Heller, Perleth & Lim, 2005; Sternberg, 2003).

As for, Gardner (1983), proposed seven types of talented which include spatial, logical/mathematical, bodily/kinesthetic, musical, interpersonal and intrapersonal, as well as the recently added naturalist intelligence. Pioneer researcher Renzulli (1978) announced two types talented called high-achieving-schoolhouse giftedness and creative-productive giftedness, too (Renzulli & Reis, 2008). Another example, Munich Model of Giftedness is based on a psychometric classification approach with several types of giftedness or talent factors. This multidimensional model consist of seven relatively independent ability factors groups called intellectual abilities, creative abilities, social competence, practical intelligence, artistic abilities, musicality and psycho-motor skills (Heller, 2007; Heller, Perleth & Lim, 2005). In this study, multi-dimensional theory and models of giftedness and talent exemplified above were utilized in the scale development phase.

Method

Research model

The research is in descriptive survey model. In these types of research, it is aimed to identify a given situation completely and carefully (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2008). There is no manipulation of the researcher on the data. The research was conducted two phases which consists of the pilot part and the actual part.

Participants

This study was conducted in the province of Tekirdağ. Tekirdağ has high immigration rates and among the cities which are in Europe. It is a culturally and economically cosmopolitan city.

Pilot study of research was implemented for 54 teacher (30 females, 24 males) from 8 school. Their ages' was 28 to 46 (M= 33.28, SD= 3.86), educational level was bachelor and master's degree (51 bachelor's degree, 3 master's degree). Their occupational experience changes between 5 and 24 years (M= 15.42, SD= 2.26). Thirty of the participants (5.55 %) expressed that they had education on the subject, and 51 of them (94.45 %) said that they didn't have education on the subject.

In the phase of actual implementation, 59 schools in Tekirdağ city center and 8 districts were received. Data were obtained from teachers in 2011-2012 teaching term. Out of the scales coming from teachers which were answered suitably, 405 (238 females, 167 males) were included in the research. Teachers ages' was 27 to 52 (M= 35.14, SD= 4.49), educational level was bachelor and master's and the other degrees (361 bachelor's degree, 7 master's degree, 35 village institute or assosiate degree). Their occupational experience changes between 3 and 30 years (M= 13.27, SD=4.34). Thirty of the participants (7.40 %) expressed that they had education on the subject, and 371 of them (91.60 %) said that they didn't have education on the subject, and 4 of them (1.00 %) didn't answer this question.

Instrument development: scale for rating the behavioral characteristics of the gifted and talented students (SRBCGTS)

In this study, the SRBCGTS which was developed by the researcher was used in order to find out the level of knowledge of the primary school teachers regarding the behavioral characteristics of the gifted and talented primary school students.

In the first grade of the research, models / theories related to superior ability were examined in order to design the theoretical structure of the research. Within this scope, multidimensional giftedness approach was inspired. After, the items to evaluate these defined sub-dimensions were written and a draft form was created.

The literature was used while forming the item pool for the draft form (Busse, Dahme, Wagner & Wieczerkowski, 1986; Endepohls-Ulpe & Ruf, 2005; Heller, 2004; Guskin, Peng & Majd-Jabbari, 1988; İnan, Bayındır & Demir, 2009; MEB, 2007; Jarosewich, Pfeiffer & Morris, 2002; Pfeiffer, Kumtepe & Rosado, 2006; Renzulli, Smith, White, Callahan & Hartman, 2002; Renzulli *et al*., 2009). Next, the draft form was broached to the 7 experts (3 experts who study the superior ability, 1 expert who studies the special education, 1 assessment and evaluation expert, 1 statistics expert, and 1 linguistics expert). The evaluators were required to evaluate the prepared form in terms of the language used, the expediency of the format and expressions. The items were revised according tothe opinions and suggestions of the experts. Thus, the draft form which consists 93 items was preapred to perform the validity and reliability analysis.

In the pilot process of the study, intelligibility of the questions/ instructions in the scale instruments, the language level's suitability for the user, the implementation process and the distribution of answers given to the items were regarded. In the investigations performed, it was determined that the items were intelligible, that the language used was organized in a way that the participants can understand and that the implementation period lasted for nearly 25-30 minutes. The actual study was maintained with the question form in which the plot study was performed.

The scale is a five point likert scale. The answers of the items in the scale were graded as "Always – 5", "Usually – 4", "Sometimes – 3", "Seldom – 2", "Never – 1". On the other hand, the opposite of the 3rd, 6th, 25th, 52nd, 55th, 65th and 83rd items were asked in the original scale in order to keep the research reliability high. The scale has two parts. In the first part, there are questions related the socio-demographic and educational situations of the participants, and in the second part, there are items about the characteristics of the gifted and talented students.

Procedure

During the data collection process of the research, the schools to collect data were first defined. Asıl uygulamada The scales were distributed to the participants to be filled in by the researcher, and the aim of the study was explained. While some of the participants filled in the scale on the same day, the others delivered the scale a few days later. The researcher went back to the school in order to get the scales which were not handed in on the same day on the decided date.

Data analysis

After the data was entered, validity and reliability analysis were performed. The data were analyzed by using SPSS software (18.00 version). The normality of the data was tested by Kolmogrov Smirnov normality test. Results indicated that data was normally distributed ($p>.05$).

Principle Component Analysis method was applied to enable the structure validity –bringing out the maximum variance in each component in the scale– of the instrument. To provide support for concurrent validity, correlations were examined by using four subscales and total scale. Cronbach α internal consistency coefficient were calculated during the reliability analysis of the SRBCGTS. The corrected item-total correlation determining the adequacy in distinguishing the scale items was calculated.

Results

Descriptive analysis

Tablo 1 shows the means and standart deviations for the total SRBCGTS and the four subscales. The means for the subscales were: creativity (M=39.73, SD=3.77), leadership (M=35.96, SD=5.26), academic characteristics (M=12.33, SD=4.01), and arts (M=15.11, SD=2.51). The mean for total SRBCGTS was (M=109.83, SD=10.38).

Validity analysis

During the analysis of the collected data, first, Kaiser–Meyer Olkin (KMO) value and Barlett's Test of Sphericity analysis were done in order to test the adequacy of sample size. KMO value is used as a criterion to decide whether the sample data chosen is suitable to deduct factors or not. If the KMO value is higher than .60, it means that factor analysis can continue. The KMO value of the data set used in this research was found .90. This value is said to be perfect (Akgül & Çevik, 2005; Kalaycı, 2008). The result of Barlett's Test of Sphericity was also found meaningful ($p<.5$), which indicates that the set of correlations in the correlation matrix were significantly different from zero and thus suitable for factor analysis.

Tablo 1

Four Factored SRBCGTS Resulted According to Varimax Rotation Method

Items	**Factor Loading**			
S/he creates so many solutions to questions and problems.	75			
S/he enjoys playing mathematic games, jigsaws, and logical problems.	71			
S/he asks questions to learn the reasons, the clues, and the results of events.	70			
S/he creates unusual and smart answers to the questions and problems.	67			
S/he finds alternative ways to realize a goal.	67			
S/he is a careful and curious observer.	67			
S/he focuses well while S/he is solving a problem or performing a duty.	59			
S/he can relate the events and actions that seem irrelevant.	58	35		
S/he likes taking risk.	49			
S/he has great moral values.		74		
S/he is participative.		69		
S/he is responsible.		67		
S/he is loved by his/her friends.		66		
S/he is responsive to his/her friends' problems.		66		
S/he is emotionally in cheerful, controlled, and optimistic mental state.		64		
S/he leads his/her peers in activities and organizations S/he attends.		63		
S/he can control his/her emotions.		62		
S/he gives constructive criticism.		58		
S/he is better than his/her peers in reading activities.			82	
S/he learns faster than his/her peers.			80	
S/he has better vocabulary than his/her peers.			71	
S/he has better attention span than his/her peers.			54	
S/he is sensitive to music rhythms. (S/he keeps time to rhythm with his/her body.)				77
S/he can recognize musical tones easily (duration, resonance, rhythm, volume, etc.)				76
S/he has very good impersonation skills.				60
S/he tends to choose artistic topics in in-class and free-time activities.				51

Note: Factor loadings> .30 are in boldface

In order to find out the maximum variance of each component in the scale, Principle Component Analysis was done. Varimax Rotation Method was applied, and it was determined that the items grouped under four factors. As a result of the analysis, 93 items, the factorial loading values

of which were lower than .30, or which were under more than one factor and the factor loading value difference of which were lower than .10 were eliminated, and as a result of the repeated analysis, it was seen that the remaining 26 items grouped under four factors.

Four sub-factors of the scale were named as– in a row– "Creativity", "Leadership", "Academic characteristics" and "Arts". The characteristics which the sub-dimensions in the SRBCGTS were described as:

Creativity: In this dimension which has 9 items, there are skills such as presenting the possibilities about a real or imaginary/ action, being able to focus for a long time, making up unusual products, enjoying solving problems, having an advanced power of observation and taking risk when required.

Leadership: Under this dimension, there are some social characteristics such as being loved by friends, meeting his/ her responsibilities, having a stable personality, organizing people to realize a goal, and solving the group conflicts. It has 9 characteristics in total.

Academic characteristics: This dimension has 4 items and it includes areas such as learning, attention and memory that pertain to the cognitive skills which are prerequisite for being successful in academic life.

Arts: There are skills related to sensitiveness to do artistic activities. It has 4 items.

Four sub-factors in the scale make 50.54 %of the total variance. The first sub-factor which is conceptualized as *creativity* and has 9 items makes 25.35%of the variance. The second sub-factor which is conceptualized as *Leadership* and has 9 items makes 11.11%of the variance, the third sub-factor which is conceptualized as *Academic characteristics* and has 4 items makes 7.89%of the variance, and the fourth sub-factor which is conceptualized as *Arts* and has 4 items makes 6.19%of the variance.

Tablo 2

Factor Loading Values and Corrected Item Total Correlation of SRBCGTS

Item no	Original scale item no	Factor loading values	R(jx)	Items
1st Sub-factor: Creativity				
1	51	.75	.53	S/he creates so many solutions to questions and problems.
2	53	.71	.50	S/he enjoys playing mathematic games, jigsaws, and logical problems.
3	86	.70	.42	S/he asks questions to learn the reasons, the clues, and the results of events.
4	79	.67	.46	S/he creates unusual and smart answers to the questions and problems.
5	57	.67	.48	S/he finds alternative ways to realize a goal.
6	50	.67	.42	S/he is a careful and curious observer.
7	61	.59	.36	S/he focuses well while s/he is solving a problem or performing a duty.
8	54	.58	.60	S/he can relate the events and actions that seem irrelevant.
9	15	.49	.41	S/he likes taking risk.
2nd Sub-factor: Leadership				
10	37	.74	.49	S/he has great moral values.
11	26	.69	.45	S/he is participative.
12	89	.67	.40	S/he is responsible.
13	28	.66	.46	S/he is loved by his/her friends.
14	11	.66	.49	S/he is responsive to his/her friends' problems.
15	19	.64	.36	S/he is emotionally in cheerful, controlled, and optimistic mental state.
16	35	.63	.48	S/he leads his/her peers in activities and organizations S/he attends.
17	31	.62	48	S/he can control his/her emotions.
18	24	.58	45	S/he gives constructive criticism.
3rd Sub-factor: Academic characteristics				
19	83	.82	36	S/he is better than his/her peers in reading activities.
20	25	.80	36	S/he learns faster than his/her peers.
21	6	.71	32	S/he has better vocabulary than his/her peers.
22	55	.54	32	S/he has better attention span than his/her peers.
4th Sub-factor: Arts				
23	27	.77	37	S/he is sensitive to music rhythms. (S/he keeps time to rhythm with his/her body.)
24	39	.76	34	S/he can recognize musical tones easily (duration, resonance, rhythm, volume, etc.)
25	48	.60	30	S/he has very good impersonation skills.
26	43	.51	37	S/he tends to choose artistic topics in in-class and free-time activities.

R(jx)= Corrected item total correlation for SRBCGTS

The factorial loading values of the items are in Table 2. Factorial loading values of the SRB-CGTS range between .75 and .49 for the first sub-factor .74 and .58 for the second sub-factor, .82 and .54 for the third sub-factor, and .77 and .51 for the fourth sub-factor.

Reliability analysis

Cronbach α internal consistency coefficient was calculated in order to find the reliability value of the scale and sub-scales. Cronbach-α consistency coefficient of the SRBCGTS are . 82 for creativity, .85 for leadership, .71 for academic characteristics and .69 for arts. Total scale was .82, in table 3.

Tablo 3

Bivariate Correlations Among Test-Sub-Tests, Means, Standart Deviations, Alpha Coefficients, Eingenvalue and Explained Variance (N= 405)

Variables	**1**	**2**	**3**	**4**	**Total scale**
Creativity	-	.44*	.06	.51*	.75*
Leadership		-	-.17*	.42*	.70*
Academics			-	-.04	.40*
Arts				-	.61*
Total scale					-
M	39.73	35.96	12.33	15.11	109.83
SD	3.77	5.26	4.01	2.51	10.38
Alpha coefficient (α)	.82	.85	.71	.69	.82
Eingenvalue	6.591	2.888	2.051	1.609	13.139
Explained variance %	25.35	11.11	7.89	6.19	50.54

**p<.01*

Another way that can be used for analyzing the internal consistency is to estimate the item-total correlation. It can see in table 2, When the answers to the scale were investigated, it was determined that there were no items the value of which was lower than .30. The correlation value of the items, which is also named as the parameter for item validity ranges between .30 and .60 in the scale.

Discussion

This study aimed to develop an evaluation instrument for the primary school teachers to nominate potentially gifted and talented students in their classes by observing their behavioral characteristics. Within this scope, validity and reliability analysis was performed by developing a scale.

The results of the factor analysis of the scale indicate that the scale has a four factors/dimensions: creativity, leadership, academic characteristics and arts. Different studies indicate different factors regarding giftedness/ talented. For instance, factors which are learning, mathematics and science, creativity, leadership and motivation were determined in a study conducted by Chan (2000).

The sub-factors which are learning, creativity, motivation, leadership, arts, music, drama, precision communication, expressiveness communication and planning were mentioned in a study of Renzulli and colleagues (2002). The factors determined in another study were conceptualized as analytical and social skills, creativity, arts, motor and verbal skills in Guskin, Peng and Majd-Jabbari's (1988) study.

These three studies conducted in three different cultures yielded in different results. The research findings of Busse and colleagues (1986) accounts for the reasons of these differences. The researchers mentioned above conducted a study which compared the perception of the teachers regarding giftedness and talent in different cultures (German and American). In the end, it was determined that German teachers evaluated the students from a two-factor intelligence perspective in which they identified the students as logical problem solvers and verbally proficient. On the other hand, American teachers tended to evaluate the students with a method similar to Renzulli's Three Ring Conception of Giftedness, which encompasses inclination towards being intelligent, creative and achievement-oriented. When the results above are taken into consideration, the results indicate that giftedness/ talented perception may change from culture to culture.

The variance of an instrument between 40-60 %is acceptable in social sciences (Kaner, 2003). The fact that the factors in the SRBCGTS explain 50.54 %of the variance indicates that the factor structure of the scale is strong. In the study, the factor that was conceptualized as creativity traits of the students explains the 25.35%of total variance, while the others factors totally explains the 25.19%. That could mean that the most considered attitude cluster was creativeness while the classroom teachers were reaching an opinion about giftedness of the potential talented/ gifted students. The least considered attitude cluster was art.

According to Kalaycı (2008), if the reliability parameter value is between .80 and 1.00, it shows that the evaluation instrument is highly reliable, and if the reliability parameter value is between .60 and .80, the evaluation instrument is quite reliable. If the reliability parameter value is .60 or less, it shows that reliability is low or very low. When the values for the reliability of each sub-dimension and the total scale were examined according to the reference values that Kalaycı (2008) suggested, it was understood that creativity and leadership sub-scales and the scale total was highly reliable, and arts and academic characteristics sub-scales were quite reliable. It is also known that reliability values decrease if the item number decreases. When the item number decreased such as the arts sub-scale and academic characteristics sub-scale, reliability values were lower than the other factors which have more items.

The regression strength of the total point was analyzed according to the corrected item-total correlation of each item in the scale. It is required for the corrected item-total correlation to be over .30 while developing an instrument (Büyüköztürk, 2007; Kalaycı, 2008). It was determined that correlation values of the items ranged between .30 and .66 throughout the scale. Thus, the fact that the totaly of the items have high index values can be thought that scale items differentiate the individual with required characteristics from the ones without required characteristics (Büyüköztürk *et al*., 2008).

In conclusion, it can be said that the psychometric characteristics of the developed SRBCGTS is sufficient to meet the necessary criteria to be used research, and teachers can surmise about the potentially gifted and talented students in their classes when this instrument is used. As a result,

a scale consisting of four sub-dimensions was developed. The general overview of the scale or the scores taken from each sub-scale signifies the strong possibility of the student's being intelligent/gifted. In the scale, there was not any item scored to the contrary. The scale can be used as criteria-dependent in the identification process in the present.

In this study, clues on identifying of the comprehension of classroom teachers for giftedness in Turkish culture were presented. In a study, Sak (2011) examined the prevalence of misconceptions, dogmas and popular views about giftedness and intelligence in Turkish culture. The findings of this study and Sak's (2011) study carry significance in terms of providing basic data which researchers conducting intercultural studies need.

The research has some limitations. Firstly, the study relied on data obtained from 407 classroom teachers in the province of Tekirdağ between 2011 and 2012. A study with more participants is needed to produce generalizable results for Turkish teachers.

Another limitation is that the classroom teachers in the study concluded whether their students were gifted by considering the students' creativeness, leadership, academic characteristics and artistic qualities. The scale measures the areas that the factor structures reveal. On the other hand, this instrument does not include any vision for special talent areas such as sport or general and brass instruments.

Giftedness is a potential that doesn't necessarily turn directly into performance (Jost, 2006) as it can appear in any part of student life (Sak, 2011). Hence, the fact that this scale may have restrictions while the needs of underachieving students with motivational problems, the needs of students who are twice as exceptional, and deeply superior in an area should be taken into consideration. Also, researchers planning to conduct study regarding the subject – as in Renzuli and his colleagues' (2009) study- can develop instruments for measuring special talent areas such as mathematics, science and technology. Thus, the identification of individuals exhibiting superiority in depth can be supported more efficiently and effectively.

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