INVESTIGATION OF COMMUNICATION SKILLS OF GIFTED STUDENTS IN TERMS OF VARIOUS VARIABLES

Prof. Dr. Ahmet ESKİCUMALI
Sakarya University, Communication Faculty
Department of Communication Design and Media
ecumali@sakarya.edu.tr

PhD Candidate Naif KARA
Sakarya University, Social Sciences Institute
Department of Communication Sciences
naif.kara@ogr.sakarya.edu.tr

Associate Professor Serhat ARSLAN
Sakarya University, Education Faculty
Department of Educational Sciences
serhatarslan@sakarya.edu.tr

Dr. Kadriye UZUN
Sakarya University, Communication Faculty
Department of Communication Design and Media
kadriyeuzun@sakarya.edu.tr

ABSTRACT
The aim of this study is to examine the communication skills of gifted students in terms of various variables in order to form a program model to support their interpersonal communication skills. After determining the interpersonal communication skills of the students in Science and Art Center (BİLSEM), it is aimed to improve the communication skills of these gifted students by applying programs that support the communication skills. The quantitative part of the study was applied to a total of 338 gifted students aged between 13 and 18 years through a scale adaptation to determine communication skills. The 23-item 6-dimensional model was found to be consistent in confirmatory factor analysis. As a result of the study, the scale was found to be reliable and valid. According to the findings, a significant difference was found in communication skills of gifted students according to gender and school type. There was no significant difference according to grade level.
Keywords: gifted student, scale, communication skills

Introduction

Gifted students, who experience communication deficiencies and problems, prefer to use three ways in the context of unacceptable environments. The first is that they isolate themselves from the environment. When they are perceived as unwarranted by others, they prefer to display extreme behaviors as the second way and in the third they try to show the same behaviors as their peers. This leads to the lack of potential for them (Clark, 1997). Although the communication skills of gifted individuals are generally high, they may have communication problems due to reasons such as avoiding mistakes, high self-confidence, self-centeredness, seeing oneself different and superior, not being understood by their peers. Because of their advanced mental development, they tend to communicate with individuals who are older than them in general (MEB, 2017).

Gifted individuals in adolescence prefer to stay away from their peers (Buescher, 1985). It is suggested that such problems in peer relations stem from the lack of social skills (Kennedy, 1988). They prefer not to stay away from their normal peers but also from each other during adolescence (Silverman, 1988).

In a study, a number of disorders affecting interpersonal communication were identified due to attention deficit based on hyperactivity, developing opposing attitudes and behavioral problems (Webb, 2000). When such problems are not taken under control, failure may occur and children may have more severe consequences regarding the sensitivity caused by the special ability and inconsistencies are observed between the age of intelligence and chronological age of these children (Silverman, 1993). Gifted children do not have the same development as their peers and also have problems communicatively because their emotional and social developments are different (Coleman & Cross, 1998).

It has been understood that as the age of the students receiving special education grows, their communication problems increase along with their adolescent development. When the literature is examined and the researches

are taken into consideration, the problem of this research is related to the determination of the level of interpersonal communication skills among the gifted students in terms of various variables.

The aim of this study is to examine the communication skills of gifted students in terms of various variables by adapting the Communication Scale developed in 2002 by Susan Barkman and Krisanna Machtmes into Turkish.

Findings

Study Group

The adaptation of the scale was performed on 338 gifted students aged between 13 and 18 years. Within the scope of the research, 161 (47.6%) of the sample were female and 177 (52.4%) were male. The students in the sample; 163 (48.2%) of them were in private schools; 175 (51.8%) were in public schools. 294 people were at the level of 7-9 (87%); 44 people are in the class level of 10-12 (13%).

Communication Scale

The Communication Scale (Barkman & Macthmes, 2002), which consists of 23 items and 6 sub-dimensions, is graded over a 5-point likert. The sub-dimensions of the scale were:

- Awareness of one's own styles of communication
- Understanding and valuing different styles of communication
- Practicing empathy
- Adjusting one's own styles of communication to match others' styles. (Communicative adaptability)
- Communication of essential information
- Interaction management

The scale consists of 23 items and the score values vary between 23 and 115. The higher the scores are, the higher the communication skills are determined. When the literature on communication skills was examined, it was found that reliability coefficients were acceptable in the researches using the communication scale and that it was seen as the most appropriate measurement tool according to the age level to measure the communication skills of young people (Duerden et al., 2010). Validity varies according to the degree to which the scale wants to measure. In the original scale, it was found that the internal consistency of both factors was high. As a result of the study applied to 338 gifted students, the reliability of the communication scale was found to be .90.

Translation of Communication Scale into Turkish

During the adaptation phase, Krisanna Machtmes was contacted in digital form. Necessary permits have been obtained for adapting the communication scale to measure the communication skills of gifted students between the ages of 13-18 in Turkish. The original language of the scale was translated into Turkish by independent translators so that it can be used in the participants whose native language is Turkish. Four different translations were applied by the translators. They work as two experts in the field of special education in the Science and Art Center and two teaching staff in the Communication Sciences.

In the next stage, the Turkish version of the scale was translated into English by five English teachers. The items of the scale were compared by translating from Turkish to English and from English to Turkish. In the next stage, the scale was piloted to 102 gifted students studying at Science and Art Center in order to test the comprehensibility of the items. The questions were reorganized in a comprehensible way when the students could not understand. In the last stage, the reliability and validity study of the scale was made.

Item Analysis and Reliability

As a result of the analysis conducted to determine item discrimination, the corrected correlation coefficients were found to vary between .37 and .60. Table 1 shows the result of the analysis.

Table 1. Correlation Scores of Communication Scale Items

Number	*rjx*	Number	*rjx*	Number	*rjx*
1	.49	9	.40	17	.53
2	.52	10	.49	18	.53
3	.58	11	.51	19	.37
4	.54	12	.60	20	.50
5	.59	13	.58	21	.53
6	.60	14	.59	22	.45
7	.42	15	.54	23	.54
8	.44	16	.41		

Cronbach's (α) coefficient for the whole scale was found to be .90.

Table 2. Scale Statistics

Mean	Variance	Std. Deviation	N of Items
90,2071	199,993	14,14187	23

According to Table 2, the mean communication scale of 23 items was .90, variance was .199 and standard deviation was .14.

Table 3. T test for gender

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	,722	,396	2,260	336	,024	3,45931	1,53086	,44803	6,47059
Equal variances not assumed			2,268	335,851	,024	3,45931	1,52550	,45856	6,46006

Since α value (α: 0,024 <α: 0,05) calculated according to Table 3 is less than 0.05, there is a significant difference in the communication skills of gifted students according to gender.

Table 4. Communication skills for gender

	gender	N	Mean	Std. Deviation	Std. Error Mean
	female	161	92,0186	13,50392	1,06426
	male	177	88,5593	14,54062	1,09294

Table 4 shows that communication skills of female students are higher than male students.

Table 5. T test for grade level

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	1,269	,261	,950	336	,343	2,17161	2,28627	-2,32560	6,66883
Equal variances not assumed			,944	56,422	,349	2,17161	2,29973	-2,43454	6,77776

As the α value calculated according to Table 5 (α: 0.34> α: 0.05) is higher than 0.05, there is no significant difference in communication skills according to grade level of gifted students.

Table 6. T test for school type

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	,429	,513	-2,535	336	,012	-3,87183	1,52715	-6,87582	-,86784
Equal variances not assumed			-2,524	323,591	,012	-3,87183	1,53398	-6,88966	-,85400

Since α value (α: 0,012 <α: 0,05) calculated according to Table 6 is less than 0.05, there is a significant difference in the communication skills of gifted students according to the type of school.

Table 7. Communication skills for type of school

	school	N	Mean	Std. Deviation	Std. Error Mean
	private	163	88,2025	14,91505	1,16824
	public	175	92,0743	13,15121	,99414

When Table 7 is examined, it is seen that the communication skills of gifted students at public school are more than the gifted students at private school.

Conclusion and Discussion

The aim of this study was to adapt the Communication Scale developed in 2002 to Turkish and to get the opinions of gifted students to express their communication skills within the scope of quantitative questions prepared on the basis of scale items.

When the literature is examined, it is understood that gifted students would enter into a more successful education process by going into a continuous research and overcoming communication-based problems during their education process (Lang, et al., 1999). Gifted students experience an ongoing inquiry process. An inquisitive approach reflects the spirit of inquiry and inquiry of accepted truths in education (Eskicumalı, 2001).

According to a research, it has been found that there is a relationship between the scores of lifelong learning tendencies of the gifted students and the problem solving styles scale. Accordingly, it is thought that the fact that they receive more education about lifelong learning tendencies may contribute to problem solving styles in general (Dervişoğulları, 2019). Therefore, communication based trainings are one of them. It is obvious that these students can be successful in their professional lives in the future with the right education.

It has been stated that gifted students can be successful in their chosen professional fields with the right guidance (Kara, 2019). When the researches are examined, it is stated that the success of these students in different fields can be realized by gaining the right communication skills. Thanks to their communication skills, they exchange information, make friends, receive emotional support and get to know each other better. However, with the increasing dependence on mobile phones, traditional face-to-face communication has become quite difficult and bizarre for new generation students (Liu, 2019: 28).

It is easier for gifted students to overcome this situation. In fact, these students can use the new media efficiently in line with their needs (İşman & Kara, 2017). However, the effects of the learning environment and teacher roles on the learning process cannot be denied (Çelik, 2017). Therefore, it is considered necessary to prepare a supportive training program for the communication skills of gifted students.

In this study, communication scale adaptation developed by Barkman and Machtmes (2002) was applied to gifted students. Barkman and Machtmes tried to measure the communication skills of adolescents between the ages of 12-18. Reliability coefficient was found as .8. However, the standards range from .5 to .9 depending on the intended use and content for the scale. The internal consistency number was .79. As a result of the adaptation of the communication scale in our study, the reliability coefficient was found to be .90, which indicates that the measurement tool is suitable for measuring the communication skills of gifted students.

References

Barkman, S., & Machtmes, K. (2002). Four-fold: A research model for designing and evaluating the impact of youth development programs. *News and Views*, *4*(4), 4-6.

MEB. (2017). Beni anlayın özel yetenekli çocuğum var, *Özel Eğitim ve Rehberlik Hizmetleri Genel Müdürlüğü*: Ankara.

Buescher, T. M. (1985). A framework for understanding the social and emotional development of gifted adolescents. Roeper Review, 8. 10-15.

Clark, B. (1997). *Growing up gifted* (5. Ed.). Upper Saddle River, New Jersey, Columbus, Ohio: Merrill.

Coleman, L. J. & Cross, T. L. (1988). Is being gifted a social handicap? *Journal for the Education of the Gifted*, 11, 41-56.

Çelik, K. (2017). Üstün yetenekli öğrencilerde yaratıcı biliş ve özerk öğrenme becerileri arasındaki ilişkinin incelenmesi, Sakarya Üniversitesi Eğitim Bilimleri Anabilim Dalı, Yüksek Lisans Tezi.

Dervişoğulları, M. (2019). Özel yetenekli öğrencilerin problem çözme ve yaşamboyu öğrenme becerileri arasındaki ilişki, Sakarya Üniversitesi Eğitim Bilimleri Anabilim Dalı, Yüksek Lisans Tezi.

Eskicumalı, A. (2001). Eğitim ve sosyal değişme: Türkiye'nin değişim sürecinde eğitimin rolü, *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, 1, 109-128.

İşman, A. & Kara, N. (2017). Türiye'deki üstün zekalı öğrencilerin yeni medyaya karşı tutumları ve yeni medyayı kullanım düzeyleri, International Conference on New Horizons in Education Conference, 3, 1104-1134.

Kara, N. (2019). Impact of digital media on gifted students' career choices. *Journal for the Education of Gifted Young Scientists, 7*(2), 99-112.

doi: http://dx.doi.org/10.17478/jegys.555339

Kennedy, J. H. (1988). Issues in the education of socially incompetent children. School Psychology Review. 17. 276-288.

Lang, J. D., Cruse, S., McVey, F. D. & McMasters, J. (1999). Industry expectations of new engineers: A survey to assist curriculum designers. *Journal of Engineering Education, 88* (1), 43–51. doi:10.1002/j.2168-9830.1999.tb00410.x

Silverman, L.K. (1993). Counseling the gifted and talented. Denver, CO: Love Publishing Co.

Silverman, L. K. (1998). Developmental stages of giftedness: Infancy through adulthood. In J. VanTassel-Baska (Ed.), Excellence in educating gifted and talented learners (3rd, ed.); CO: Love, 145-166.

Webb, J. T. (2000). Mis-Diagnosis and Dual Diagnosis of Gifted Children: Gifted and LD, ADHD, OCD, Oppositional Defiant Disorder. Paper presented at the American Psychological Association Annual Convention, Washington, DC.

Communication Scale

1.	Herhangi bir kişi ile konuşurken göz teması kurmaya çalışırım.
2.	Söylemeye çalıştığım şeyi beden dilim ile ifade ederim.
3.	Söylemek istediğim şeyi pekiştirmek için beden dilimi kullanırım.
4.	Söylemeye çalıştıkları şeyi pekiştirmek için insanların ellerini kullandıklarını fark ederim.
5.	Ne söylemeye çalıştığımı göstermek için ellerimi kullanırım.
6.	Ne söylemeye çalıştıklarını anlamama yardımcı olması için insanların vücut dilini izlemeye çalışırım.
7.	Kendi söyleyeceğimi düşünmeye başlamadan önce karşımdakinin sözünü bitirmesini beklerim.
8.	Diğer insanların sözlerini kesmeden onları dinlerim.
9.	Bir insanın beni sadece dinlediği fakat söylediklerimi anlamak için kulak vermediği zamanı bilirim.
10.	Cevap vermeden önce kişinin ne söylediğini anladığımdan emin olurum.
11.	Başkalarının ne söylediğini anladığımdan emin olmak için onların söylediklerini yeniden ifade ederim.
12.	Arkadaşlarımın neler yaşadıklarını anladığımı bilmeleri için kendi tecrübelerimi kullanırım.
13.	Birini dinlerken ne hissettiğini anlamaya çalışırım.
14.	Başkalarının bakış açısını anlamaya çalışırım.
15.	İki kişi aynı şeyi farklı şekillerde söylemeye çalıştıkları zaman bunu fark ederim.
16.	Konuşma tarzımı iletişim kurduğum kişiye göre ayarlarım (arkadaş, ebeveyn, öğretmen vb.)

17.	Beni anlamasına yardımcı olmak için karşımdakinin benimle nasıl konuştuğuna bağlı olarak konuşma biçimimi değiştiririm.
18.	Söylemeye çalıştığım şeyi pekiştirmek için ses tonumu kullanırım.
19.	Derdimi anlatmak benim için kolaydır.
20.	İnsanlar hiç durmadan konuştuklarında sohbeti yeniden yönlendirmenin yollarını bulurum.
21.	Sadece ses tonuna tepki vermek yerine karşımdakinin söylediklerine cevap vermeye çalışırım.
22.	Konuşmadan önce kafamda birtakım düşünceler kurarım.
23.	Birisi sinirlendiğinde sakinleşmesine yardımcı olmak için ses tonumu değiştiririm.

