



# **The Characteristics of Superior Talented Students and Comparison of their General Ability and Wisc-R Tests' Results\***

Yusuf ESER<sup>12</sup>

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<sup>12</sup> Assist. Prof. Dr., Karabük University, Turkey, yeser@karabuk.edu.tr

## Abstract

*Bümen stated that Gardner defined 'intelligence' an intercultural fact and problem solving ability (2005: 5). The fact that individuals solve their problems by using their intelligence makes them happy when they satisfy their expectations but if it doesn't happen, it causes the unhappiness both for them and their society (Hökelekli and Gündüz, 2004: 142). In this study, in presentation process of individuals who are defined as having superior intelligence, the comparison has been made between the identifications of classroom teachers in line with the clause 9/2-c of Science and Art Centres Directive (BILSEM), general ability test and WISC-R test's points. Correlation analysis was used in the comparison. It has been seen that Primary and secondary school students have the majority of characteristics in observation form. In correlation account in test points, the relationship between variances was specified and meaningful relationship was recognized between students' intelligence points and verbal/performance points. However, no relationship was found between general ability/knowledge tests' points with verbal/performance points and WISC-R points.*

**Key Words:** The characteristics of superior talented, intelligence point, WISC-R

## Introduction

Human beings are born with some specific features and they gain a place in society by using these features. They perform some tasks put on by society and reach some particular gains. Highly talented individuals undertake different missions compared to ordinary talented individuals and they use different privileges in the scope of these missions. If these people are educated in suitable field and employed, they make contribution to social development. Otherwise, they blunt their abilities and they even may not prevent from using their qualifications to the detriment of the society.

To provide training for every individual in the frame of their abilities is among the basic education policy of almost every country. It is trying to implement different educational process separately for people with special educational needs, the ones with mental inability and the normal individuals. Superior talented individuals are supposed to be subjected to different education (Robinson and Clinkenbeard, 1998: 211-230). For that purpose, upon specifying the fields and the methods in early years for individuals, they can be prevented from wasting important times and it also prevents the governments from throwing away the resources.

It is apparent that people who develop the technology of this time and remain in the forefront of the society are superior talented ones. Therefore, it is the responsibility of the society to determine the superior talented individuals and train them in a way that they deserve. Societies struggle to fulfil this responsibility in different ways.

Highly intelligent and talented children are supposed to be subjected to special education because they are different from other children naturally (Clark, 1997, et al.: Davashgil, 2004: 16). There are even individuals whose abilities have been never discovered, who have been stranger in their society and led their life so, left the world and made no contribution to their community (Yanpar, 2007: 85-86). That's why it is just one of the responsibilities to train the educators who will educate these special individuals and make them beneficial to the society. If these students continue their education in standard schools and standard educational process, it is possible that the superior ability lose among normal students and superior talented individuals may be unhappy and make the others unhappy (Eser, 2011: 2). On the one hand, superior talented means a huge gain under suitable conditions but on the other hand they are even sources of danger unless they are taken

seriously (Hökelekli and Gündüz, 2004: 142). As Yücel stated “ there is no person deserving to be appreciated in the societies where people are not appreciated” (1998: 267). As highly intelligent and talented children are the leaders, scientists and artists of the future, it is necessary not to lose such a national wealth (MEGEP, 2007: 38).

In activities carried out in order to identify superior talented individuals within the scope of their difference from other people, initially general ability test is applied and if they get the passing grade, advanced identification test (WISC-R ) is carried out in Turkey Science and Art Centers Directive (BILSEM). Educational institutions have been opened under different names such as BILSEM connected with The Ministry of National Education and activities were aimed to increase the levels of superior talented students’ abilities and make them do beneficial actions for the society. Karabük University Gifted and Talented Education, Practice and Research Center (KUYEM) is one of these institutions. Due to the fact that BILSEM is not available in the city, it has taken it as a goal to determine the superior talented students and prepare both they and the country for the future. General culture and general ability exam and then WISC-R test are implemented so as to specify these students. The ones who achieve over average go in for WISC-R test. The reason beyond the fact that just the ones who are above specific number are taken with the WISC-R test is to separate students with superior intelligence from their peers there. Some inclinations appear in many different fields such as music, art, literature, sciences, mathematics, human relations, athleticism. It is supposed that the ones who have such inclinations be specified in their special abilities by the test under the basic responsibilities of the schools, helped to develop their skills and directed into the appropriate specialty programs and occupations (Bloom, 1998: 250). Selecting the talented ones is easier than creating or developing talent (Bloom,1998: 251; Miller, 1990: 125).

WISC-R is implemented with the purpose of evaluation, direction and training for the students between 6-16 years old who need service and activities by the school but they need for developing intelligence, creativity, ability, who have lack of academic skills and need special education. The test is implemented to one person individually in one...

*The problem of the search:* It is to make a comparison between demographic specialties of superior talented students and general ability and WISC-R test.

*Sub-problems of the research:*

- 1- What are the demographics specials for superior talented students?
- 2- How much is the relationship between their general ability points and verbal and performance points?
- 3- How much is the relationship between their general ability points and general total points?
- 4- How much is the relationship between their verbal and performance points and general total points?

## **Method**

### *Universe and Sample*

This search was carried out in September of 2012-2013 academic year and implemented on 42 students from 3. and 4. grades who receive education in Karabük University because of their skills. No sample was chosen with the thought that there wouldn't be any trouble in researching on 42 students in total.

### *Data Collection Tools*

Data was collected from ‘Primary and Secondary School Student Observation Form’ filled in by classroom teacher and second evaluation exam used in different times by

Ministry of National Education and WISC-R tests practiced by the WISC-R specialists and students together.

### Data Analysis

Classroom teachers write down one of A, B, C and D choices indicated in Primary and Secondary School Student Observation Form' for each applicant student. The meanings of these letters;

“A” The mentioned behaviour is **always** seen in most activities.

“B” The mentioned behaviour is **often** seen in most activities.

“C” The mentioned behaviour is **sometimes** seen in most activities.

“D” The mentioned behaviour is **never** seen and frequency and percentage functions have been made upon the data collected from this form.

Besides data gathered from general ability and general culture exam and WISC-R test was transferred to SPSS for Windows 16 package. Pearson Product Moment Correlation Coefficient was chosen as analysis method. This is because this statistic is the one which can be used in situations when two variances are equally proportional and equally spaced.

### Findings

In the exams implemented for determining superior talented students, it is aimed to chose the most appropriate students and train them according to their area of interest and capacity. After the first phase (students' nomination by classroom teacher), general ability and general culture test is implemented in second phase. In the search the KUYEM students' demographic characteristics and general ability and general culture tests' suitabilities to determine the superior talented students were investigated. Frequency and percentages consisting of findings from teachers' answers are seen in Table 1.

Table 1: Primary and Secondary School Student Observation Form Results

No	Behaviour	A		B		C		D	
		f	%	f	%	f	%	f	%
1	To use information in daily life	38	90,5	4	9,5	-	-	-	-
2	To remember things heard, read and seen easily	39	92,9	3	7,1	-	-	-	-
3	To be knowledgeable in many areas as compared with peers	37	88,1	4	9,5	1	2,4	-	-
4	To read books which are above the level of class.	32	76,2	7	16,7	3	7,1	-	-
5	To ask questions to be knowledgeable profoundly	35	83,3	7	16,7	-	-	-	-
6	To distinguish important parts of subjects and events and to recognize the problems	36	85,7	6	14,3	-	-	-	-
7	To perceive the relationships between events, situations and information which are at the level that their peers cannot recognize	40	95,2	2	4,8	-	-	-	-
8	To make effort to learn the events' reasons, evidences and results	40	95,2	2	4,8	-	-	-	-
9	To comprehend subjects easily	42	100	-	-	-	-	-	-
10	To make interesting inferences by interpreting the information acquired in different times and	39	92,9	3	7,1	-	-	-	-

	different places								
11	To think of the best solution to reach the correct result	39	92,9	2	4,8	1	2,4	-	-
12	Not to be discouraged by obstacles ; on the contrary, to head for trying	39	92,9	3	7,1	-	-	-	-
13	To have new and original ideas, discoveries and works	38	90,5	4	9,5	-	-	-	-
14	To have fluency in speaking	29	69	13	31	-	-	-	-
15	To participate in discussions	40	95,2	2	4,8	-	-	-	-
16	To have better vocabulary knowledge than peers	35	83,3	5	11,9	2	4,8	-	-
17	To listen to opposite criticism	41	97,6	1	2,4	-	-	-	-
18	To take the individual and group responsibility	41	97,6	1	2,4	-	-	-	-
19	To be selected as leader in activities	35	83,3	7	16,7	-	-	-	-
20	To be consulted for advice by others	41	97,6	1	2,4	-	-	-	-
21	To like helping	38	90,5	4	9,5	-	-	-	-
22	To be sensitive to others' problems	37	88,1	5	11,9	-	-	-	-
23	To attend organizations in and out of school	41	97,6	1	2,4	-	-	-	-
24	To like humor and to produce original jokes	37	88,1	4	9,5	1	2,4	-	-
25	To show more reactions to rhythm and melody than other children	29	69	6	14,3	7	16,7	-	-
26	To be interested in various musical instruments and try to play them	27	64,3	5	11,9	8	19	2	4,8
27	To learn musical works in a short time	30	71,4	10	23,8	2	4,8	-	-
28	To be willing and struggle to create new and original musical works	26	61,9	3	7,1	9	21,4	4	9,5
29	To listen to music and to like attending musical organizations	29	69	7	16,7	3	7,1	3	7,1
30	To like complying with others when singing songs	31	73,8	4	9,5	7	16,7	-	-
31	To make collections about musicians, singers and musical tracks	18	42,9	5	11,9	13	31	6	14,3
32	To use musical instruments so as to express emotions and thoughts	22	52,4	5	11,9	9	21,4	6	14,3
33	To like painting and drawing in different subjects	27	64,3	7	16,7	8	19	-	-
34	To plan paintings and give them depth	25	59,5	9	21,4	5	11,9	3	7,1
35	To use appropriate proportions between parts	27	64,3	5	11,9	7	16,7	3	7,1
36	To spend long times in work of painting	23	54,8	9	21,4	7	16,7	3	7,1
37	To be interested in creating objects from soft appliances such as mud, soap, plastics	28	66,7	3	7,1	8	19	3	7,1
38	To be interested in other people's work of art and painting	23	54,8	10	23,8	9	21,4	-	-
39	To be willing to express emotions and thoughts via painting	23	54,8	8	19	7	16,7	4	9,5
40	To bring unique comments into various painting and drawing	27	64,3	9	21,4	6	14,3	-	-
41	To utilize painting successfully so as to express experiences and emotions	24	57,1	9	21,4	5	11,9	4	9,5
42	To make a drawing and painting distinctly from other children	28	66,7	5	11,9	6	14,3	3	7,1
43	To be energetic	34	81	7	16,7	1	2,4	-	-
44	To like attending race based games.	38	90,5	4	9,5	-	-	-	-
45	To show supremacy determinedly and constantly in race based games.	37	88,1	1	2,4	3	7,1	1	2,4
46	To be one of the best physical condition in the classroom	29	69	9	21,4	3	7,1	1	2,4
47	To like volleyball, basketball, football,	31	73,8	7	16,7	4	9,5	-	-

	scouting, swimming, tennis etc. and to attend some of them constantly.								
48	To desire to devote most of time to various physical activities	32	76,2	4	9,5	5	11,9	1	2,4
49	To like following sport races from newspaper, magazines and other media organs. To try out in this matter appropriately.	35	83,3	1	2,4	6	14,3	-	-
50	To show an interest in dramatic activities.	39	92,9	3	7,1	-	-	-	-
51	To make out roles which characterize animals, human beings and other objects.	29	69	12	28,6	1	2,4	-	-
52	To manage to make out facial expressions, gesture, posture and varied body movements	34	81	7	16,7	1	2,4	-	-
53	To like withdrawing the listeners' emotional reaction	35	83,3	5	11,9	2	4,8	-	-

In this test consisting of 53 items, all the teachers (%100) stated that the students had the characteristics in 9. item. They expressed that the mentioned behaviour was always observed in many activities by marking the item A. A and B letters, mostly A, were chosen and marked in the items numbered 1, 2, 5, 6, 7, 8, 10, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 44, 50. A, B and C letters were marked in the items numbered 3, 4, 11, 16, 24, 25, 27, 30, 33, 38, 40, 43, 47, 49, 51, 52 ve 53. The items numbered 26, 28, 29, 31, 32, 34, 35, 36, 37, 39, 41, 42, 45 ve 46 became the ones in which four letters were marked.

About the characteristics made teachers the comment "The mentioned behaviour is *always* seen in most activities". The exam made by KUYEM showed that determining the students with superior intelligence was carried out properly. In addition to this, teachers reached the precision about determining superior talented students in Primary and Secondary School Student Observation Form chosen by Ministry of National Education. The fact that the answers intensified in letter A and decreased towards letter D made the inference possible that the test's validity was high and teachers answered the items realistically.

Table 2: *Degrees of relationships between General Ability and General Culture test points with Verbal-Performance and General Total points*

	Verbal	Performance	General Total
General Ability-General Culture	0,120	0,240	0,279

As it can be understood from Table 2, the correlation rate was 0,12 between General Ability and General Culture Points and WISC-R test's verbal points. In the same vein, it was recognized that there was low relationship with 0,24 correlation rate between general ability and general culture points and performance points, 0,279 correlation rate between general ability and general culture. From this viewpoint it can be regarded there was positive but very low relationship between general culture and general ability test and WISC-R tests.

WISC-R consists of two sections and two different grading are implemented for students. These are verbal and performance points. By utilizing these points, a general total point is given to students and it corresponds to intelligence point. Correlation numbers between verbal points and performance points with general total points were presented in Table 3 in the study,

Table 3: *Degrees of relationships between verbal-performance points and general total points*

	<b>Total</b>
Verbal point	0,589
Performance point	0,687

In Table 3,  $r = 0,589$  correlation rate between students' verbal points and general total points and  $r = 0,687$  correlation rate between performance points and general total points were found. These results are meaningful in 0,01 level. This findings show that there is a highly relationship between verbal/performance points and general total points and verbal and performance points are more suitable for determining students than general ability and general culture points.

### **Conclusion**

In planning of determining and training superior talented students, it is possible that the students with superior intelligence or superior talent may be overlooked even if they indicate so. That situation means huge loss for the country. It will be a correct choice to make use of classroom teachers in that they have the opportunity to evaluate students among peers; however, it is necessary to train teachers to do this. If just general ability and general culture tests are applied, it may not present suitable results. It is possible for some students to be overlooked when they are selected in general culture and general ability tests and subjected to WISC-R test. For this purpose, it is supposed that every student nominated by teacher be subjected to WISC-R test and it is better to integrate them according to the results. The results have indicated that only general culture and general ability tests are not enough for determining superior talented students. If WISC-R tests are used along with general culture and general ability tests, it means that both students' intelligence level and general knowledge level have been determined. It will be easier to specify fields and methods after this determination.

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