The Intelligence's Level of Gifted and Ordinary Students in Seventh and Eighth Grades, in Accordance with the Raven's Advanced Matrices Test in Irbid Governorate in Relation to Some Variables (Sex, Mothers' Qualification)

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Abstract

This study aimed at identifying the intelligence's level of gifted and ordinary students in the seventh and eighth grades in accordance with Raven's matrices test in the governorate of Irbid. In addition, it aimed to investigate the differences regarded to the variables of study (sex, mothers' academic qualification) on the intelligence's levels among gifted and average students within classes allocated in Irbid governorate.

The study sample consisted of 80 students from the seventh and eighth grades, 40 males and 40 females, who were enrolled in King Abdullah II Schools for Excellence and two schools affiliated with the Ministry of Education and located in Irbid governorate during the academic year 2011/2012.

Raven's Matrices Test was developed especially for the Environment of Jordan and then applied on the sample pointed out to in order to identify the intelligence's level among the students. Arithmetic means, standard deviations, T-Test were calculated. In order to examine the study questions, an analysis of variance (One Way-ANOVA) was used, while Scheffe test was used to find out Post Hoc comparisons. The Study findings revealed that the intelligence's level of gifted students was "high" and "very high" while the intelligence's level of ordinary students was "above average", "average", and "low".

Furthermore, the findings suggest that no statistically significant differences were found regarded to sex variable on the intelligence's level among gifted and ordinary students as well as it indicated the presence of statistically significant differences regarded to the variable of mothers' qualification were it was in favor of the category of mothers who hold academic degrees (high studies, bachelor, diploma) over mothers who hold lower education (General Secondary Certificate and below).

Introduction

The term intelligence is regarded to be one of the most common terms used by specialists and non-specialists in this field. At the same time, it is considered to be a hypothetical concept which indicates a human phenomenon that can be hardly measured and observed. But so far, Scientists neither agreed on a definition for this phenomenon nor set attributes or traits that define the concept of human intelligence. In spite of the oldness of relationship between intelligence, psychological and educational measurement; and the quantitative and qualitative methods used to measure intelligence, the common traits between these old and new measures consider intelligence as a mental ability subjected to the principles of individual differences among individuals.

Currently, tens of thousands of gifted and talented students are sitting in their seats within schools and classrooms without realizing their remarkable talents by any one, or meeting their urgent needs. Many of those talented feel boredom and tedium, bear the suffering and patience, and wait for their classmates within the regular classroom to learn skills and concepts they had already mastered two years ago rather than their normal peers (Ross, 1997, 1993).

Therefore, Csikszentmihalyi and csikszeutmihalyi (1993) ken that there is a strong relationship between the school and family's environment, and the gifted and talented child; and that the provision of support and stimulation contributes to develop their skills and work in reducing the challenges they encounter.

This idea was confirmed by Piaget (1980) since he pointed out that the individual realizes what is existed within the environment and seeks to organize it. Also individual's intelligence grows and develops through the interaction with environmental conditions that he faces. The environment, for Piaget, is regarded as school and family's environment (Qutamy, 2005).

For this purpose, measures of intelligence and its tests scores were adopted as a criterion for students' admission in gifted programs in the light of intelligence's standard. Then, selecting those who score significantly on the intelligence measure, or choosing 3-5% of students regardless the degree of intelligence, provided that they represent the top of classroom students or the group of first students with achieving efficiency or with outstanding high ability.

Relying on their viewpoint, the educators Cassidy and Johnson (1986), as cited in Davis and Rimm, considered that talent is defined within a specific framework which represents 3% of individuals or students who come under the top in their mental abilities while some American States make a perquisite for student to score an IQ amount to 120 or higher to be considered as a talented or to be incorporated with gifted students (Davis & Rimm, 1998).

Study Problem and its Importance

The last decade of the present century witnessed a broad movement calling for increasing the nurturing of gifted and talented students, and seeking after developing their thinking as early as possible, especially at the early primary grades. Scholars made account of scales for identifying giftedness and methods for diagnosing it with paying attention to implementing tests such as Torrance tests, Renzulli tests; and Intelligence tests, such as Binet test, Wechsler test, and Raven matrices for measuring general mental ability which is characterized by measuring the higher and lower mental abilities within broad age range among individuals in addition for being featured as Culture free in comparison with other tests (Raven and cour 1995).

Jordan, similar to other countries in the world, was affected by many of scientific developments. Hence, a race took place with the surrounding Arab countries in seeking after the topics of psychometrics and educational measurement, and the methods of identifying gifted and talented students. Yet, an interest has begun in developing and revising Simon-Binet test within Jordan University since 1978. Thereupon, many tests and identifying methods were developed concerning with assessing the general mental ability or abilities related to giftedness and creativity. Furthermore, an interest began in the movement of nurturing Gifted and Talented with the opening of the first pioneer centre located in Al Salt city in 1982. The number of these pioneer centers grown rapidly till it reached to 17 centers all over the governorates of the kingdom (MOE, 2007).

With the increasing of these centers, the interest increased regarding the identifying methods of gifted students. The importance of these methods lies in discovering the strengths and weaknesses within the level of thinking among gifted students and its relationship with the level of general mental abilities. Given the importance of gifted or talented student's feeling for the necessity of assessing his mental abilities and to what extent it relates positively to his own level of achievement, giftedness, and creativity. Accordingly, the problem of the current study is defined by answering the following questions:

1. What is the intelligence's level of gifted students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid?

2. What is the intelligence's level of ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid?

3. Does the intelligence's level of gifted students differ from ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid, regarding student's sex?

4. Does the intelligence's level of gifted students differ from ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid, regarding Qualification of mothers?

Purposes of the Study

The current study aims to identify the intelligence's level of gifted students in Irbid Governorate, as well as to identify the intelligence's level of ordinary students enrolled in public schools located in the same Governorate. Furthermore, this study aims to find out the differences in intelligence's levels between the gifted and ordinary student, and to state that the screening and admission of students into the gifted programs was accurate and based on their high mental abilities. Also it aims to recognize whether the differences in the intelligence's level may be regarded to factors such as sex and Qualification of educated and scientifically achievers' mothers, and whether the educated mother can qualify her children and raises the levels of their abilities and thinking more than other less educated mothers.

Terms and Concepts of the Study

Gifted students: the students who have been diagnosed officially by the Ministry of Education in Jordan as gifted based on measurements of mental abilities, or achievement abilities, or Torrance tests and behavioral characteristics, and who have been enrolled and participated in Jubilee Schools for the gifted or King Abdullah II Schools for Excellence.

Intelligence's level: the intelligence's score (IQ) being obtained by a subject as a result for his response on Raven Advanced Progressive Matrices Scale which had been converted from raw score to comparable age-equivalent scores and IQ.

Ordinary students: students who were officially enrolled and participated in regular classes affiliated with the Ministry of Education at intermediate stage (seventh and eighth grades).

Study Limitations

1. The study was confined to students of King Abdullah II Schools for Excellence, Merhaba High School for Boys, and Merhaba Elementary Mixed School for Girls in the seventh and eighth grades (male and female) in Irbid Governorate for the academic year 2011/2012.

2. The scale of intelligence's level was confined to Raven's advanced matrices Test and then converting row scores to a comparable age-equivalent scores and percentiles.

Previous studies

In reviewing the literature related to this topic, especially topics that address the general intelligence's level, or assessing the mental abilities or the level of emotional intelligence among gifted or ordinary students; we would found it abundant and plentiful. While we will find that any study in any field differs in terms of the study sample, the population, and time variation (i.e., recentness) and add new segment of knowledge. For this purpose, some previous studies related to the intelligence's level among gifted and ordinary students within schools or pioneer centers.

Saccuzzo, et al. (1994) conducted a study aimed to verify the efficiency of using Raven's Scales in testing gifted and intellectually able students, from culturally diverse minority groups. The researchers selected a vast number sample amounted to 16985 students (male and female) of whom 22.7% Latinos, 37% white, 14% of African Americans, 2.8% Asians, 8.4% Philippians, and 5.6% Indians Chinese and other ethnicities. The study findings revealed that Raven progressive matrices are valid to identify gifted students in minorities and different races.

In their general overview, Raven and Cour (1995) reported that Parkin and Powers (1956) conducted a study aimed to recognize to what extent Raven's Progressive Matrices Test is capable to predict student achievement. The sample consisted of 426 students, of them 212 in the level of sixth grade and 214 in the level of seventh grade. The researchers used cognitive abilities achievement test (CAT) as criterion.

The study findings revealed that the correlation coefficients between achievement scores and Raven's matrices test scores ranged between 61% - 62% where these ratios of correlation coefficients are considered to be statistically significant to detect the positive correlation between achievement and Raven's test score. This result was consistent with most studies that pointed out to the positive relationship between the intelligence's level and higher achievement scores among students. The study of Zaini, et al. (2005) was concerned with identifying the relationship between parents' education, particularly mother's level, and the academic achievement for the child. The study findings indicated that improving the mother's educational level contributed in improving the level of academic achievement for her child.

In another form of studying the relationship between parents education and nurturing the gifted children, Qamra (2009) examined the role of families in nurturing their gifted children in KSA and its relationship with some variables. The study sample consisted of 100 families involved gifted children. The percentage of mothers who holds university degrees amounted to 27.7% while the percentage of university education among their sons amounted to 41.8%. The study findings concluded that the educational level among mothers of gifted children had the greatest effect in nurturing, identifying, and developing the gifted child. A major review of assessing Raven's Progressive Matrices Test among age group ranging between 16-18 years in Saudi environment was conducted by Atawi (2006). He conducted the study in Tabouk region on a sample consisted of 1339 students (males and females). The findings indicated that there was no statistically significant differences, at the level $\alpha = 0.05$, regarded to the sex and age (grade) variables on the performance of the study sample members according to Raven's Test.

As reported by Raven and Cour (1995), Jaworska and Zustrowa (1993) conducted a study aimed at standardizing the regular Raven Progressive Matrices Test on the Polish society. The test was standardized on a sample of children aged between 5-15 years where the sample reached 4006 children (boys and girls). The findings showed that the test's reliability coefficients ranged between 0.80-0.90. Furthermore, the study findings revealed the presence of statistically significant differences, at the level $\alpha = 0.05$, between males and females in favor of males. In another related study, Olyan and Smadi (1989) undertook standardizing Raven Advanced Matrices Test (APM) where it has been applied on a sample of Jordanian society amounted to 2542 students (males and females), with an age groups ranging between 12-14 years. They calculated the reliability coefficients in terms of internal consistency using Kuder-Richardson equation (KR -20). The overall value reached 0.89 which was acceptable and indicates the test's ability in detecting the mental abilities among students.

In another form of standardizing Raven's Test, Al Jalahma (1999) conducted a study in UAE University that aimed at standardizing Raven's Colored progressive Matrices Test on a sample from UAE society. The sample consisted of 5403 students, of whom 2619 were males and 2784 were females. The test's reliability coefficients were calculated where it ranged between 0.60-0.89. Also the indicators of concurrent validity were extracted based on correlation coefficients between test scores and academic achievement scores which were statistically significant. Furthermore, the study indicated that no statistically significant differences were found between the performance's averages among males and females on the test.

Study Methodology

Population

The study population consisted of all seventh and eighth graders (males and females) enrolled in King Abdullah II Schools for Excellence in Irbid who reached 79 students, as well as of all seventh and eighth graders enrolled in Merhaba Secondary School for boys and Merhaba Elementary Mixed School for girls Affiliated with the Ministry of Education, which are geographically and administratively close from King Abdullah II Schools for Excellence located in Irbid, who reached 106 students (males and females) during the academic year 2011/2012.

Sample

The sample was selected who comprised 80 students of whom 40 students (males and females) from seventh and eighth grades enrolled in King Abdullah II Schools for Excellence located in Irbid. After that, 40 students (males and females) from the seventh and eighth grades were selected who were enrolled in Merhaba Secondary School for boys and Merhaba Elementary Mixed School for girls located in Irbid.

The sample was selected in all cases relying on random stratified method where Table (1) indicates the distribution of study sample according to the study variables.

Table (1)

Distribution of study sample according to the study variables

School		Sex	Grade	No.	Frequency	Percentage
King Abdullah II Schools for Excellence		Males	7^{th}	10	40	50.0
			8^{th}	10		
		Females	7^{th}	10		
			8^{th}	10		
Regular students' Schools		Males	7^{th}	10	40	50.0
			8^{th}	10		
		Females	7^{th}	10		
			8^{th}	10		
Mother's Qualification	G.S. Certificate and below				30	37.5
	Diploma				43	53.8
	High Studies				7	8.8
Total					80	100.0

Study Instrument

Raven's Advanced Progressive Matrices Test was applied which is considered one of non-verbal group intelligence tests. The scale was designed basically for measuring the General Factor of Intelligence according to the connotation of Spearman (Raven, 1977) and Abu Hatab (1979). The scale was used as an instrument for classifying the soldiers in the British Army during the World War II. Then, the efforts continued in developing and modifying it till 1970. Hence, Raven converted the test's raw scores to a comparable age-equivalent scores and percentiles.

The scale is consisted of two separated sets of items. The first group comprises 12 matrices designed for training on how to answer the test and work on it, while the second group comprises 36 matrices, each matrix represents a geometrical shapes lack one element, and this element that completes the shape were grouped within 8 elements at the bottom of the page that contains the incomplete shape. The subject had to select the adequate element that completes the shape, and then to write its number in the answering sheet. The subject's score on the test represents the total of the correct answers in completing the geometrical shapes in the second set. The matrices in the second set are gradually difficult. Although the matrices are graduated in difficulty, every shape is designed carefully to raise the motivation and increase the interest of the subject while he is answering the test. The current researchers have adopted Raven's Advanced Matrices to assess intelligence after developing it into its modified form by Olayan and Smadi (1988) to be adapted with the environment of Jordan. The Raven's Advanced Progressive scale is one of the culture free tests, that is, it is not biased to any society's culture. The main purpose of this type of tests is to provide equal opportunities for individuals from different cultures in answering the test (Anastasi & Urbian, 1997).

Test Scoring

The test scoring method for Raven's Advanced Test is so easy. This process based on the summation of scores within the second set and then computing the test scores related to age with what equal it of intelligence's level indicated by chronological age for each row score. For example, the row score of 15 is comparable with IQ of 126 at age 12 years, while it is comparable with IQ of 106 at age 24 years. Accordingly, this contributes in facilitating the scoring process and extracting IQ as interpreted by raw scores with the comparable ages and IQs for subjects.

Likewise, the same thing is done when converting row scores to standard scores with arithmetic mean amounted to100 and standard deviation of 15 similar to the distribution of IQ in Wechsler Test.
Test validity All the studies that used this scale indicated that it posses good indications of validity, where Olyan and Smadi (1988) extracted concurrent validity indicators for the scale. Also the study of Mcleod & Joseph indicated that the correlation coefficient of the performance aspect for the Wechsler Intelligence Scale for Adults with the score of advanced classes amounted to 0.75, as will as the findings of studies related to Raven's scale showed that the correlation coefficients for Raven's Advanced Matrices Test With Wechsler Intelligence Scale ranged between 0.50 to 0.85 where this represents a strong evidence that both scales share measuring common aspect coupled with measuring their own aspects (Olyan & Smadi, 1988).

Furthermore, the study of Olyan and Smadi (1988) has shown that the factor analysis for the results of Raven's Advanced Progressive Scale revealed a factor interprets nearly three-quarters (74.1%) of performance variation on the scale where this presents a strong evidence for test validity. Consequently, the current researchers have considered these values and indications as good and acceptable for the purposes of this study.

Reliability

However, the study of Olyan and Smadi (1988) was among the first studies that addressed the scale's reliability, where its findings showed that the value of reliability coefficient for the scale reached 0.89. Also the studies of Atawi (2006) and several studies indicated that most of reliability coefficients for the studies that were calculated relying on Test-Retest method ranged between 0.76 to 0.91. For this purpose, to verify the scale's reliability based on Test-Retest method, the current researchers administered the scale on a sample consisted of 20 students from outside the study sample, and then re-administered it after two weeks from the first administration. Then, the correlation coefficients were calculated between the first and second administrations coupled with calculating the internal consistency reliability coefficient that reached 0.79 where this value were acceptable for the purposes of this study.

Statistical Treatment

Frequencies and percentages were used for detecting the intelligence's level of gifted and ordinary students while arithmetic means, standard deviations, and t-test were used to identify the effect of sex on the intelligence's level among gifted and ordinary students in addition to using one way analysis of variance (ANOVA). In order to identify Post Hoc comparisons, Scheffe test was used to find out the effect of mothers' Qualification on the of intelligence's level among gifted and ordinary students.

Study Results

Findings

This section presents the study findings according to the study questions. With respect to the first question, that states:

The first question: "What is the intelligence's level of gifted students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid?" In order to answer this question, an extraction was made for frequencies and percentages of the intelligence's level of gifted students in seventh and eighth grade within King Abdullah II Schools for Excellence according to Raven's matrices Test as shown in the table below.

Table (2)

Frequencies and percentages for the intelligence's level of gifted students in seventh and eighth grades within King Abdullah II Schools for Excellence, according to Raven's Advanced Matrices Test

Field	Frequency	Percentage
101-115 (Above average)	1	2.5
116-130 (High)	8	20.0
131- above (Very high)	31	77.5
Total	**40**	**100.0**

Table (2) shows that 77.5% of gifted students had a very high intelligence's level, while 20% had high intelligence's level and only 2.5% had an intelligence's level above average. Results, as seen in Table 2, indicates that the percentage of gifted students who scored more than 131 (very high) according to Raven's test amounted to 77.5% with frequency of 31, while the percentage of gifted students who scored between 130-116 (high level) with frequency of 8 reached 20%, while the percentage of the latter category of gifted students who scored between101-115 (above average level) was 2.5% Only.

The second question:" What is the intelligence's level of ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid?"

In order to answer this question, frequencies and percentages were extracted for the intelligence's level of ordinary students in seventh and eighth grade within public schools according to Raven's matrices Test as shown in the table below.

Table (3)

Frequencies and percentages for the intelligence's level of ordinary students in seventh and eighth grades within public schools, according to Raven's Advanced Matrices Test

Field	**Frequency**	**Percentage**
70-85 (Very low)	5	12.5
86-100 (below average)	20	50.0
101-115 (Above average)	12	30.0
116-130 (Very high)	3	7.5
Total	**40**	**100.0**

It is apparent from Table 3 that the intelligence's level for 50% of ordinary students was below average, while 30% had intelligence's level above average, and only 12.5% of them had a very low intelligence's level, and finally 7.5% of them had a very high intelligence's level. The results, as seen in Table 3, indicates that the ordinary students from seventh and eighth grades enrolled in public schools who scored between 116-130 (very high level) had a frequency of 3 and percentage of 7.5 %, while the percentage of ordinary students who scored between 101-110 (above-average level) with frequency of 8 reached 20% reached 30%. Furthermore, the data in Table 3 indicates that ordinary students from the same grades who scored test scores ranging between 86-100 (below-average level) had the highest percentage that reached 50%. And finally, the percentage of ordinary students who scored the lowest test scores ranging between 70-85 (very-low level) reached 12.5%.

The third question:" Does the intelligence's level of gifted students differ from ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid, regarding student's sex?"

In order to answer this question, arithmetic means and standard deviations were extracted for the intelligence's level of gifted and ordinary students in seventh and eighth grades according to Raven's matrices Test regarding sex variable. However, to clarify the statistical differences between arithmetic means, T-test was used as indicated in the tables below.

Table (4)

Arithmetic means, standard deviations, and T-test for the effect of sex on the intelligence's level of the gifted and ordinary students in seventh and eighth grades according to Raven's Advanced Matrices Test

School	**Sex**	**No.**	**Arithmetic mean**	**Standard deviation**	**T value**	**Freedom degrees**	**Statistical significance**
King Abdullah II Schools	Male	40	120.08	23.454	0.519	78	0.605
Regular Schools	Female	40	117.23	25.647			

It is apparent from Table 4 that no statistical significant differences were found (α = 0.5) regarding sex variable. The data in table (4) indicates that gifted and ordinary males with a total number of 40 had an arithmetic mean of 120.08 with standard deviation of 23.454 where the value of T (at the significant level α = 0.5) amounted to 0.519. In addition, gifted and of ordinary females with a total number of 40 have received an arithmetic mean of 117.23, with a standard deviation of 25.647, and T value amounted to 0.519. By relying on these figures, no statistically significant differences (α = 0.5) were found regarding the effect of sex on the intelligence's level among gifted and ordinary students in seventh and eighth grades, according to Raven's Advanced matrices Test

The fourth question:" Does the intelligence's level of gifted students differ from ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid, regarding Qualification of mothers?"

In order to answer this question, arithmetic means and standard deviations were extracted for the intelligence's level of gifted and ordinary students in seventh and eighth grades according to Raven's matrices Test regarding the mothers' Qualification variable as shown in Table 5.

Table (5)

Arithmetic means and standard deviations for the intelligence's level of the Gifted and ordinary students in seventh and eighth grades according to Raven's Advanced Matrices Test regarding the Mothers' qualification variable

Categories	No.	Arithmetic mean	standard deviation
General Secondary Certificate and below	30	102.17	19.867
Diploma and Bachelor	43	127.58	21.772
High studies **(Master and Doctorate)**	7	134.43	20.775
Total	80	118.65	24.461

As shown in Table 5, an apparent variation exists among the arithmetic means and standard deviations for the intelligence's level of the gifted and ordinary students in seventh and eighth grades, according to Raven's Advanced matrices Test as consequence for the variation among the categories of mothers' educational qualification (General Secondary Certificate and below, Diploma and Bachelor, High studies; Master and Doctorate). In order to clarify the significance of Statistical differences between the arithmetic means, one way analysis of variance (ANOVA) was used as shown in Table 6.

Table (6)

Variance analysis for the effect of Mothers' qualification on the intelligence's level of gifted and ordinary students in seventh and eighth grades, according Raven's Advanced Matrices Test

Source	Sum of Squares	Freedom degrees	Squares average	F value	**Statistical significance**
Between groups	13323.854	2	6661.927	15.112	.000
Within groups	33944.346	77	440.836		
Total	47268.200	79			

It can be seen from the data in Table 6 that a statistically significant differences, at the level of significance □ = 0.05, are regarded for mothers' Qualification. Accordingly, in order to clarify the pair differences between the arithmetic means that are statistically significant, Post Hoc comparisons based on Scheffe's method was used where table 7 indicates that.

Table (7)

Post Hoc comparisons according to Scheffe's method for the effect of mothers' Qualification

	Arithmetic mean	General Secondary Certificate and below	Diploma and Bachelor	High studies **(Master and Doctorate)**
General Secondary Certificate and below	102.17			
Diploma and Bachelor	127.58	25.41*		
High studies **(Master and Doctorate)**	134.43	32.26*	6.85	

** significant at level □ = 0.05*

As shown in Table 7, statistically significant differences were found (at level □ = 0.05) between "General Secondary Certificate and below" from one hand and both "Diploma and Bachelor" and "High studies" on the other hand. The differences were in favor of both "Diploma and Bachelor, and High studies".

Results Discussion's Chapter

The current study aimed to identify the intelligence's level of gifted students compared with the intelligence's level of ordinary students in Jordan. Furthermore, this chapter addresses the discussion of the findings and the recommendations as follows:

Discussion of Results

First: discussion of the Findings related to the first question: "What is the intelligence's level of gifted students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid?"

The findings related to this question showed: that the intelligence's level of gifted students in seventh and eighth grades in King Abdullah II Schools for Excellence according to Raven's Advanced Matrices Test was with varying levels ranging between "very high", "high", and "above average" where the percentage of gifted students who scored a very high intelligence's level reached 77.5%; while 20% had a high level of intelligence; and (2.5%) had an intelligence's level "above average". These findings was in line with the views reported by Csikszentmihalyi and Csikszentmihalyi (1993) who perceive that there is a relationship between the school and family's environment of the gifted students and that providing support and motivation contributes in developing their skills and intelligence. As well as the findings are consistent with the views related to the selection of students for admission in the gifted programs in light of intelligence standard and that the giftedness can be defined by selecting 3% of individuals or students who come under the top in their mental abilities. According to Davis & Rimm (1998), some American States make a perquisite for student to score an IQ amount to 120 or higher to be considered as a talented or to be incorporated with gifted students. These findings are consistent with the findings of Saccuzzo, et al (1994) study which indicated that Raven's Matrices are valid for identifying gifted students. Also as cited in Raven and Cour (1995) that Powers and Berken (1986) reported the positive relationship and correlation between achievement and intelligence's level among students.

The current researchers attribute this result to the distinction of gifted students from ordinary students with high levels of mental and creative abilities that differentiate them from ordinary students. With regard to the second question: "What is the intelligence's level of ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid?"

The findings related to answering this question showed that the intelligence's level of the ordinary varied between "below average", "above average", and "low", where the highest percentage of intelligent was for "below average" and "low" where the percentage reached 62.5% which indicates that the intelligence's level of ordinary students is much less than gifted students whom their percentage related to the highest levels of intelligence as appeared in the first question.

These findings are consistent with findings of Raven and Cour's study and the study of Csiksentmihlyi and Csiksentmihlyi (1993) in addition to all studies that indicated the presence of positive relationship between achievement and high mental abilities. With respect to the discussion of the third question, which states: "Does the intelligence's level of gifted students differ from ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid, regarding student's sex?"

The findings of the third question showed that there were no statistically significant differences regarded to sex variable on the intelligence's level among gifted and ordinary students. This result was consistent with the findings revealed by Atawi (2012) study and also agreed with the findings of al Jalahma (1999) study, where all their findings indicated that no statistically significant differences were found regarding sex variable on the intelligence's level according to Raven's Matrices Test. However, these findings were in contrast to the findings of Raven and Cour's (1995) study, which indicated the existence of statistically significant differences between males and females in favor of males.

The current researchers attribute this result to the equivalent methods of family upbringing between males and females in Jordanian society that does not discriminate in dealing with students, whether they are male or female. Thus, it was natural that the findings revealed no statistically significant differences regarded to sex variable on intelligence, according to Raven's Matrices Test.With regard to the discussion for the fourth question: which states: "Does the intelligence's level of gifted students differ from ordinary students in seventh and eighth grades, according to Raven's Advanced Matrices Test developed within the governorate of Irbid, regarding Qualification of mothers?"

The findings related to answering this question revealed the existence of apparent differences in arithmetic means and standard deviations for the intelligence's level of the gifted and ordinary students. In order to clarify the difference one way analysis of variance was used. The findings showed that there was a statistically significant differences regarded to mothers' qualification, especially between "General Secondary Certificate and below" from one hand and both "Diploma and Bachelor" and "High studies" on the other hand.

The differences were in favor of both "Diploma and Bachelor" and "High studies". These findings are consistent with the findings revealed from the study of Zaini et al. (2005), which indicated that the level of mothers' education helped in improving the level of academic achievement for the students. These findings support our certain knowledge related to the presence of positive relationship between achievement and intelligence among students. Also the findings were consistent with the findings revealed by Qamra's study (2009), that the educational level among mothers of gifted children had the greatest impact in nurturing and identifying the gifted child. The current researchers may attribute this result to the variation in intelligence's levels between the gifted and ordinary students according to Raven Matrices Test that provides a strong evidence for the test's capacity in classifying individuals according to their mental abilities, for its accuracy, and being culture free.

Recommendations

In light of the findings revealed from the current study, the researchers recommend the following:

1. Conducting further studies related to the intelligence's levels among the gifted and ordinary students in other Jordanian governorates.

2. Benefit from the findings revealed in this study, particularly for stakeholders of responsibility in the Ministry of Education in order to create plans and strategies for gifted students.

3. the Researchers recommend using Raven Matrices in identifying gifted students so as to incorporate them into gifted and creativity programs.

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