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Exploring Effective Methods for Identifying Gifted and Talented Students

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Identifying gifted and talented students is one of the biggest challenges that face those working with them. As a result, the purpose of this research was to investigate the most effective methods of identifying gifted and talented students. Furthermore, the study employed both quantitative and qualitative methods. The study's sample size was 465 teachers and administrators, and the results revealed that the level of effective identification methods for gifted and talented students from the teachers' and administrators' point of view who work with them was moderate. As well, the findings showed statistically significant differences due to the gender variable in favor of males and due to the experience variable in favor of those with more than 10 years of experience. Furthermore, the study recommended using new technologies to identify gifted and talented students, as well as rehabilitating and training teachers and administrators on methods of identifying gifted and talented students, whether before or during their service, and providing them with all the necessary knowledge and practical experiences.

Keywords: exploring, identification methods, gifted, talented, gifted schools

INTRODUCTION

Taking care of the creative and talented is a crucial step in the advancement of civilizations since they are a true resource capable of fostering growth, prosperity, and well-being in their communities at all times and in all locations. Unquestionably, nurturing brilliant and talented individuals has grown to be essential to every society's growth and revival (Farizi, Umamah, & Soepeno, 2023). In other words, it has emerged as a significant turning point for the nations. Additionally, civilizations who are unable to recognize their bright and creative offspring and who are unable to offer caring and incubating conditions for its talented and creative individuals will not succeed in the present or in the future on the road of civilization (Lee et al., 2022; Kizildağ & Tuncer, 2022; Tortop, 2021; Al-Kandari, 2020; Ewies et al., 2021). Further, numerous studies

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have revealed the importance of nurturing creative and talented individuals in society in recent years. Since fostering creative and talented individuals plays an essential role in improving society, it becomes imperative to identify these individuals and provide them with the necessary support. And with the shift towards focusing on gifted and talented individuals, more targeted and efficient programs can be developed to meet the unique needs of these individuals.

Therefore, the process of identifying the gifted and talented is the mainstay of programs for gifted and talented care (Mozyrska & Pawluszewicz, 2023; Al-Qahtani, 2020). Furthermore, the success of gifted care programs in achieving their goals depends pivotally on the accuracy of the identification methods used. What is more, in recent years, the field of identifying talented and creative people has witnessed a great deal of global development. On the Arab level, we can witness a clear progress in the process of identifying gifted and talented people by employing international standards, tests, and diagnostic tools (Farhan, 2020). Additionally, new technologies have been employed to identify talented and creative individuals through the development of tools for evaluating and identifying them (Mahlangu, 2022; Dau, 2022; Al-Saidi & Al-Mutairi, 2019; Haneefa, 2023; Ewies et al., 2021; Ali & Alrayes, 2019; Wang & Zhang, 2014). For example, data mining systems are employed to recognize outstanding students by analyzing their activities and abilities (Mozyrska & Pawluszewicz, 2023). As well, machine learning approaches are being utilized to predict students' educational performance due to the fact that right evaluation of talented students can assist the teacher in assessing the student so they can perform at their best (Mallikarjun Rao & Ramana Murthy, 2020). Even with advances in technology and research, finding gifted and talented individuals can be a challenging endeavor. In order to improve this process, a variety of methods should be employed.

The process of identifying gifted and talented individuals is an organized one, but it is extremely complex and difficult because it requires the use of more than one measuring tool and a diagnostic method to determine the different abilities of the gifted and talented. Moreover, there is a need to have a scientifically qualified team whose members have practical experience. What is more, among the most important aspects and capabilities that the identification process seeks to identify are the following: general mental excellence, the ability to create, academic excellence, and different behavioural traits, etc. (Al-Fartousi & Al-Maidani, 2022).

The process of identifying gifted and talented students in their various fields is of great importance, as it occupies a prominent position in the literature of gifted and talented practice and research. One of the most important topics covered was the exploration of effective methods for identifying gifted and talented students among schools. Below, the researchers reviewed the most important ones (Schroth & Helfer, 2008; Farah, 2008; Nasser, 2010; Ayasrah & Aiziz, 2012; Mohamed, 2013; Alshks, 2015; Almeida et al., 2016; Abboud & Abunaser, 2019; Alaswad & Lazar, 2019; Farhan, 2020; Gubbins et al., 2021; Abdeen, 2021).

It was also found that the following studies intersect to some extent with the aims of this study, such as the study of Jedouali and Bouzweika (2021), which revealed that it is very

important to focus on the characteristics and attributes associated with talents, the stages of identification of talented children, and the importance of caring for gifted people. The study of Al-Kandari (2020) aimed to identify the methods of identification and nurturing talented people in Kuwait, clarifying the stages of the identification process and the most important means and methods used in the identification process. As well, a study by Yassina et al. (2012) aimed to demonstrate the methods of identifying gifted and talented students at PERMAT Apintar Secondary School in University Kebangsaan Malaysia (UKM), which established a system of identification and selection of the gifted that can be applied in the school and recommended the importance of developing and improving such identification systems.

Jordan is considered one of the pioneering Arab countries in its care and attention to gifted and talented people, providing them with special educational programs and activities to help them reach their full potential. As part of these programs, gifted students are encouraged to develop their skills and pursue their passions, while also receiving guidance and support to assist them in reaching their full potential, as it worked on the creation of the "Jubilee School" in 1993, which was the first school that specialized in educating outstanding students in the Arab region. As well, it has been an independent and non-profit boarding co-educational secondary school that has offered an integrated and balanced educational program for academically outstanding students for four academic years (from grades 9–12). It also brings students from all over the Kingdom, other Arab countries, and diverse social, economic, and cultural environments where students are accepted based on scholarships. (The Jubilee School, http://www.jubilee.edu.jo)

The Directorate of Excellence and Talented Programs, a division of the Education Department, was established with assistance from the Jordanian Ministry of Education. Further, the department of excellence programs and the department of talent programs make up the directorate. The main goal of this directorate is to plan, prepare, and carry out educational programs for gifted and exceptional students while also providing all necessary financial, technical, and administrative facilities for these programs to meet the needs of the gifted students and enhance their abilities.

Among the most important programs supervised by the Directorate of Excellence and Talented Programs is the "King Abdullah II Schools for Excellence." These schools were established to provide an enriching educational environment that takes into account the talents and potentials of creative students, which opens the way for them and creates the conditions for innovation and creativity within an appropriate educational environment. The first school of the King Abdullah II Schools for Excellence was built in Zarqa Governorate and opened at the beginning of the academic year (2001/2002). Later on, the rest of the schools were opened until they covered all the governorates of the Kingdom, namely; Amman, Irbid, Salt, Aqaba, Jerash, Karak, Ajloun, Madaba, Mafraq, Tafileh, and Ma'an.

The King Abdullah II Schools for Excellence accept nominations from children who have completed the sixth grade of primary school, with the total number of sixth grade nominees in the school as a whole having the greatest percentage of academic success

(5%) overall. Within the nomination criterion, it also accepts the standards for nominating parents and instructors. The Directorate of Excellence and Talented Programs in the Ministry also develops and administers a mental and cognitive abilities exam to pupils who match the nomination requirements. Finally, according to the school's capacity, pupils who score the highest on the test are admitted. (Retrieved from the Jordanian Ministry of Education, Department of Education, on March 31, 2022).

The King Abdullah II Schools for Excellence is one of the most important and largest programs that aims to care for the gifted and talented in Jordan, as it targets the gifted and talented in various regions of Jordan. Moreover, the importance of identifying and discovering gifted and talented students is a key factor in the success of their sponsorship programs. Because there are no studies in Jordan that evaluate and investigate effective methods for identifying gifted and talented students, the purpose of this study was to investigate effective methods for identifying gifted and talented students. What is more, through this study, the researchers seek to answer the following questions:

- What level of methods of identifying gifted and talented students are applied in King Abdullah II Schools for Excellence from the point of view of the teachers and administrators who work in them?
- How effective are the methods of identifying gifted and talented students that are applied in King Abdullah II Schools for Excellence from the viewpoint of their employees, according to the variables (gender, experience, qualification, and job title)?
- Is there any relationship between the methods of identifying gifted and talented students that are applied in King Abdullah II Schools for Excellence and the general academic achievement of students that enrol in them?
- What are the other methods of identifying gifted and talented students that will help teachers and administrators recognize the importance of adding to the methods applied in King Abdullah II Schools for Excellence?

There has been constant debate over the science of identifying gifted students since there are so many definitions of the term "giftedness" from various points of view, and so many strategies for identifying gifted students (Yassin, Ishak, Yunus, & Abd Majid, 2012). Furthermore, researchers have been divided on how to identify gifted students. As well, to identify a gifted student, there are some questions that can be asked, such as what to identify, when to identify, and how to identify a gifted student. Hence, such processes have no standard norms (Hodges, Tay, Maeda, & Gentry, 2018). Therefore, a challenge has been raised concerning choosing the best combination of instruments to identify gifted students. Accordingly, there is a need to conduct more studies that synthesize quantitative and qualitative methods in order to identify gifted individuals in a well-mannered way. So, this study employed both methods in order to address the study's questions and strengthen the study's result (Acar, Sen, & Cayirdag, 2016).

METHOD

The researchers utilized both quantitative and qualitative methods to answer the questions of the study. The quantitative approach was employed to address the first and second questions of the study. Furthermore, the third question was answered by comparing students' achievements before and after their acceptance into King Abdullah II Schools for Excellence. And in order to answer the fourth question of the study, which involves identifying the most important other methods that teachers and administrators perceive as valuable to be implemented in King Abdullah II Schools for Excellence, NVivo 11 software was utilized for data analysis to extract the word frequencies.

Research Sample

To achieve the objectives of the study, all members of the community were targeted, including teachers and administrators working in King Abdullah II Schools for Excellence for the academic year (2021/2022), who are numbered 609. Furthermore, as shown in Table 1, the study's sample size is 465 teachers and administrators working in King Abdullah II Schools for Excellence in 2021-2022.

Table 1
The study sample according to its demographic variables

Gender	N	Percentage
Male	180	39%
Female	285	61%
Total	465	100%
Job title	N	Percentage
Teacher	351	75%
Administrator	114	25%
Total	465	100%
Scientific qualification	N	Percentage
Bachelor	72	15%
Master	258	55%
PHD	135	29%
Total	465	100%
Experience	N	Percentage
Less than 5 years	178	38%
5 to 10	175	38%
Above than 10	112	24%
Total	465	100%

And to address the relationship between the methods of identifying gifted and talented students in King Abdullah II Schools for Excellence and their general academic achievement. The grade point average (GPAs) for the last two semesters of seventh and eighth grades were obtained for all members of the target study sample. The number of students enrolled in King Abdullah II Schools for Excellence in the year (2020/2021) (892) students for the seventh grade and (801) students for the eighth grade.

Constructing and Implementing the Study instrument

The study instrument was built by investigating numerous prior studies that intersect with the goals and objectives of the study such as (Jedouali & Bouzweika, 2021; Al-Kandari, 2020; Yassina et al., 2012; Gubbins et al., 2021; Farah, 2008). The questionnaire used in this study consisted of three main dimensions: the first dimension contained demographic data such as gender and academic qualification. The second dimension included one main variable, namely the methods of identifying gifted and talented students who applied in King Abdullah II Schools for Excellence. This dimension consists of thirty-five statements. The following statements are a sample of it:

- The tests used to identify and detect gifted and talented students who applied to King Abdullah II Schools for Excellence demonstrate objectivity and precision in measuring results.
- There is a specialized department in the organizational structure of the Jordanian Ministry of Education that deals with programs and methods for the identification of gifted and talented students.
- There are awareness and guidance programs for gifted and talented students and their families about the examination programs and methods that are applied in King Abdullah Schools for Excellence.
- The Ministry of Education has an annual plan concerned with programs to detect gifted and talented students who will enroll in King Abdullah II Schools for Excellence, which is reviewed and evaluated from time to time.
- The programs and methods for the identification of gifted and talented students that are followed and applied in King Abdullah II Schools of Excellence are sufficient to detect and identify gifted and talented students.
- Parents' nominations were approved and accepted as a primary and basic method for identification of gifted and talented students who will enroll in King Abdullah II Schools for Excellence.

As for the third dimension, it was an open question with the aim of clarifying the most important other methods that teachers and administrators perceive as valuable to be applied in King Abdullah II Schools for Excellence.

The Likert scale was applied to measure the total score of the statements based on each dimension. It is a five-fold scale: always, often, sometimes, rarely, never. The weighted arithmetic mean of the scale was determined and presented in table 2. To judge the weighted arithmetic means of questionnaire statements, the scale was divided based on:

Table 2
The weighted arithmetic mean of the scale

Interval length = number of intervals/number of points = 4/3 = 1.33	
1- 2.33	Low
2.34 - 3.67	Moderate
3.68- 4	High

Reliability and validity study instrument

It refers to the judgment on the scale relating to its words' clarity and meaning regarding the second dimension of the study tool. This was carried out by a number of experts in the education of the gifted and talented, who indicated the appropriateness of the proposed study instrument for the test by revising some statements. Additionally, the test-retest method was carried out, where a sample was taken from the study population and subjected to the scale two times over four weeks period. Moreover, the value of the correlation coefficient was found to be 0.83, which is acceptable for the purposes of the study. The Cronbach-Alpha equation was applied to measure the stability of the study tool by extracting the stability of the scale used in the internal consistency method. The total value of reliability coefficients for all items was 0.86. This is supported by Sekaran (1984), who stated that if the Cronbach alpha exceeds 60%, the test will achieve the reliability requirements; hence, the scale will be valid, and the data will become reliable.

Statistical Analysis

To answer the study questions, the descriptive approach was adopted. Statistical analyses and tests were performed on the collected data such arithmetic means, standard deviations, and three-way ANOVA and regression.

FINDINGS AND DISCUSSION

The results of the study were as follows. First, "What level of methods of identifying gifted and talented students are applied in King Abdullah II Schools for Excellence from the point of view of the teachers and administrators who work in them?" To answer this question, the mean and standard deviation was extracted as in table 3 below.

Table 3
Means, SD of the methods of effectiveness of identification of gifted and talented from the teachers' point of view

	Item	Mean	Std. Deviation	rank	Level
21	Q21	3.87	1.05	1	High
1	Q1	3.85	1.30	2	High
2	Q2	3.85	1.09	3	High
3	Q3	3.77	1.23	4	High
11	Q11	3.75	.99	5	High
14	Q14	3.73	1.17	6	High
34	Q34	3.72	1.22	7	High
5	Q5	3.70	1.04	8	High
29	Q29	3.69	1.11	9	High
8	Q8	3.67	1.23	10	Moderate
35	Q35	3.66	1.34	11	Moderate
4	Q4	3.63	1.07	12	Moderate
13	Q13	3.63	1.12	13	Moderate
7	Q7	3.59	1.11	14	Moderate
15	Q15	3.59	1.21	15	Moderate
20	Q20	3.58	1.13	16	Moderate
10	Q10	3.57	1.06	17	Moderate
24	Q24	3.57	1.31	18	Moderate
18	Q18	3.54	1.28	19	Moderate
22	Q22	3.54	1.18	20	Moderate
30	Q30	3.54	1.18	21	Moderate
25	Q25	3.53	1.23	22	Moderate
23	Q23	3.51	1.23	23	Moderate
19	Q19	3.50	1.25	24	Moderate
12	Q12	3.49	1.10	25	Moderate
38	Q38	3.49	1.11	26	Moderate
16	Q16	3.44	1.23	27	Moderate
17	Q17	3.44	1.24	28	Moderate
37	Q37	3.44	1.20	29	Moderate
6	Q6	3.39	1.22	30	Moderate
32	Q32	3.36	1.23	31	Moderate
33	Q33	3.33	1.23	32	Moderate
27	Q27	3.31	1.28	33	Moderate
36	Q36	3.31	1.32	34	Moderate
28	Q28	3.29	1.22	35	Moderate
31	Q31	3.25	1.29	36	Moderate
26	Q26	3.23	1.34	37	Moderate
9	Q9	3.22	1.40	38	Moderate
	Total	3.54	0.67		Moderate

Based on Table 3 above, it is obvious that the level of effectiveness of the methods of identification of gifted and talented students who applied in King Abdullah II Schools for Excellence is moderate from the point of view of the teachers and administrators,

and the arithmetic mean of the scale as a whole is 3.45 with a standard deviation of 0.67. Furthermore, statement number 21, "The programs and methods for identification of the gifted and talented who applied in King Abdullah Schools for Excellence lack distinction from employing modern technology," came with the highest arithmetic mean, which reached 3.87 with a standard deviation of 1.05.

Statement number 9 "There are awareness and orientation programs for gifted and talented students and their families about programs and methods for identifying gifted and talented students that have been implemented in the King Abdullah Schools for Excellence," obtained the lowest arithmetic mean, which is 3.22, and with a standard deviation of 1.40.

The study sample clearly recognizes that the level of identification methods and methods used to identify the gifted and talented in King Abdullah Schools for Excellence came to a moderate degree, implying that there is "moderate" relative satisfaction surrounding them. Additionally, their level of satisfaction is supposed to be high. As well, it is recognized that the process of identifying gifted and talented people is very important as it entails making decisions that may have dangerous effects in the future, especially when a student is classified as "gifted" while another student is classified as "not talented." On the other hand, we found that the success of any program for the gifted depends to a large extent on the level of effectiveness and accuracy of identification methods and on the safety of procedures followed in the selection process. Therefore, those in charge of gifted and talented programs must be keen to use and employ the best methods and means for the identification of gifted and talented people (Al-Kandari, 2020; Jarwan, 2013). Therefore, programs for gifted and talented care are primarily focused on identifying the gifted and talented which supported in several studies such as (Mozyrska & Pawluszewicz, 2023; Al-Qahtani, 2020). And by providing them with the necessary resources and support, these programs aim to help these individuals reach their full potential. Moreover, these programs can foster a sense of community and collaboration among gifted individuals.

To answer the second question, which states how effective are the methods of identification of gifted and talented students that are applied in King Abdullah II Schools for Excellence from the viewpoint of its employees according to the variables (gender, experience, qualification, and job title), the arithmetic mean and standard deviation were extracted as shown in Table 4.

Table 4
The arithmetic mean and SD of the effectiveness of the methods of identification of gifted and talented students from its employees point of view according to the variables

Gender	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	3.64	.084	3.478	3.808
Female	3.36	.084	3.192	3.522
Dependent Variable: total				
Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Less than 5 years	3.13	.113	2.903	3.349
5 to 10	2.95	.114	2.726	3.173
Above than 10	3.20	.118	2.970	3.436
Qualification	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Bachelor	3.31	.135	3.047	3.577
Master	3.79	.120	3.559	4.030
PHD	3.71	.129	3.457	3.962
Dependent Variable: total				
Job title	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Teacher	3.42	.068	3.285	3.554
Administrator	3.25	.071	3.107	3.388

From the perspective of the staff members who work at King Abdullah II Schools for Excellence, it is evident from Table 4 that there are disparities in the various methods of identifying gifted and talented applicants from the perspectives of gender, experience, qualification, and job title. The MANOVA test was run as described in Table 5 in order to determine whether or not these statistical differences are significant.

Table 5
The 3-way ANOVA test to determine the differences in the effectiveness of the methods of identification of gifted and talented students from the employees point of view according to the variable

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender	9.676	2	4.838	13.496	.000
Experience	8.296	3	2.765	7.714	.000
Qualification	12.986	3	4.329	12.074	.000
Job title	2.914	2	1.457	4.065	.018
Error	162.757	454	.358		
Total	6037.875	465			
Corrected Total	207.663	464			
a. R Squared = .216 (Adjusted R Squared = .199)					

According to Table 5, there are statistically significant differences at a level of 0.05 in the mean efficacy of the techniques for identifying gifted and talented applicants to King Abdullah II Schools for Excellence from the perspective of the staff (gender,

experience, qualification, job title). Returning to means, the discrepancies are further ascribed to male workers. Regarding the job title, Table 3 shows that instructors are responsible for the statistically significant discrepancies. However, the disparities were assigned to the Scheffe test, as indicated in Table 6 below, in order to determine what types of experience and qualification existed.

Table 6
The results of scheffee test to find the significant differences between the means of the effectiveness of the methods of identification of gifted and talented students from the employee's point of views

Experience	Arithmetic Mean	Less than 5 years	5 to 10 years	Above 10 years
Less than 5 years	3.13	-	0.13	-0.07
5 to 10	3.00	-	-	-*0.20
Above than 10	3.20	-	-	-
Qualification	Arithmetic Mean	Bach	Master	Phd
Bach	3.31	-	*-0.48	-*0.40
master	3.79	-	-	0.08
PHD	3.71	-	-	-

Based on Table 6, it is clear that the differences between the means are attributed to those with experience above 10 years and to the qualifications of a master's and PhD when compared to a bachelor's degree. As well, it is educationally recognized—as we explained earlier—that the methods of identification of gifted and talented students must be very effective because it is one of the most important pillars that lead to the success of gifted and talented student care programs as mentioned in a study by (Pfeiffer, 2002).

Through the previous results, it is found that the males believed that the effectiveness of the identification methods used in identifying the gifted and talented students came to a moderate degree, and researchers can attribute this to the fact that they are closer to accepting reality in line with the available capabilities in the educational environment of King Abdullah II Schools for Excellence.

The findings of this study differ from those of Atallah (2008), who found that females are more effective and accepted in the processes of identifying gifted and talented students. What is more, the study showed that those with more than ten years of teaching experience and those who hold higher degrees (Masters and Ph.D.) believe that methods of identifying gifted and talented students are moderately effective. It can be attributed to their scientific knowledge and practical experience of working in gifted and talented schools. As well, their conviction is that it is difficult to bring about rapid change and development in the educational environment for the gifted and talented.

For many reasons, especially with regard to screening programs, the most important are the economic aspect, the centralization of decision-making, and the lack of programs for the care of gifted and talented people at the local level. Furthermore, the results also indicated that teachers believe that the methods of identification of gifted and talented students are moderately effective compared to administrators because they practice and deal with students more than administrators. As well, they are the ones who play a

pivotal role in the identification and nomination processes in many programs for identifying gifted and talented students at both the local and international level. The results of this part differ from the question to some extent, as what was mentioned in a study (Schroth & Helfer, 2008) showed that the administrators believed in the effectiveness of the identification methods to a higher degree than the teachers did.

The finding of the third question, "Is there a relationship between the methods of identifying gifted and talented students who applied to King Abdullah II Schools for Excellence and the general academic achievement of students who enrolled in them?" A simple linear regression was conducted in order to determine the predictive ability of the methods for identification of gifted and talented students who applied in King Abdullah II schools on the general academic achievement of students who enrolled in them, as shown in Table 7 below.

Table 7
Regression analysis to show the relationship of the methods of identifying gifted and talented students and the general academic achievement of students who enrolled there

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726a	.527	.526	18.26715

a. Predictors: (Constant), total

Based on Table 7 above, the R-value was 0.726, demonstrating a strong association between the means of the techniques used to identify gifted and talented applicants to King Abdullah II Schools for Excellence and the overall academic accomplishment of children who enrolled there. Further, The results of the ANOVA Tests of the Simple Linear Regression are shown in table 8 below.

Table 8
The results of the ANOVA tests of the simple linear regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	172336.076	1	172336.076	516.458	.000a
	Residual	154497.898	463	333.689		
	Total	326833.974	464			

a. Predictors: (Constant), total
b. Dependent Variable: academic achievement

Based on Table 8 above, the regression (F) value reached 516.458, which is significant at $\alpha \leq 0.05$. Moreover, the residual value reached 154497.898, which is less than the regression value which indicates the effectiveness of the model. Further, Table 9 below shows The Standardized and Unstandardized Regression Coefficients.

Table 9
The standardized and unstandardized regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-20.140-	4.568		-4.409-	.000
	total	28.808	1.268	0.726	22.726	.000

It can be noticed from Table 9 above that the value of (t) for the constant and the total were significant, and the standardized coefficient for the B reached 0.726. The t value reached 22.726, which was significant. Furthermore, the predicted model of this regression can be expressed as follows: Academic Achievement = 0.726 *Methods of identification of gifted and talented students = 20.140. Furthermore, the results of the analysis revealed a positive relationship between the methods of identifying gifted and talented students in King Abdullah II Schools for Excellence and the general academic achievement of students. And we can attribute this to the fact that one of the most important components and pillars of the identification program applied in King Abdullah II Schools for Excellence is the students' academic achievement for at least the last three grades of study, so that students are not allowed to be accepted for the school unless their academic achievement is 90% or higher. Thus, this was reflected in the positive relationship between the identification methods used and the distinguished academic achievements of students.

To answer the fourth question, "What are the other methods of identifying gifted and talented students that will enable teachers and administrators to see the importance of adding to the methods applied in King Abdullah II Schools for Excellence?". Well, the answers of teachers and administrators have been transcribed to the (open) study question, which includes other methods of identifying gifted and talented students that will enable teachers and administrators to see the importance of adding to the methods applied in King Abdullah II Schools for Excellence. This includes extracting the frequencies and their arithmetic averages, as stated in Table 10 below.

Table 10
The frequencies and the arithmetic mean for the other methods of identifying gifted and talented students that will enable teachers and administrators

No	Methods for identifying gifted and talented students	Frequencies	Arithmetical averages
1	Collective IQ Tests.	96	23%
2	Individual IQ Tests.	84	20%
3	Behavioural characteristic assessment method	76	18%
4	The Interview	59	14%
5	Creative Thinking Tests	51	12%
6	Achievement File	47	11%

It is clear from the results in Table 10 above that the method of "collective IQ tests" obtained the highest method of identification that teachers and administrators wish to introduce into the program in order to detect the gifted and talented students who applied in King Abdullah II Schools for Excellence, since the number of its instances was 96 with 23%. Following is the method of "Individual IQ Tests," with a frequency of 84 and a percentage of 20%. Next is "Behavioral characteristic assessment method," with a frequency of 76 and a percentage of 18%. Through these results, it is clear that the desire of teachers and administrators working in King Abdullah II schools is excellence.

Introducing "collective IQ tests" as one of the methods of identification of gifted and talented students shows the importance of identifying gifted and creative students. IQ

tests are almost one of the tenets and pillars of identifying gifted and talented students. As well, we would hardly have found a program to identify talented and creative students internationally without it. What is more, we can also point out that their choice of "collective IQ tests" was due to the ease of their application, the low financial cost involved in their implementation, as well as the speed of their implementation. This is related to the fact that the number of King Abdullah II Schools for Excellence is very small, and the number of students who wish to join them and who meet the conditions of candidacy is very large. Moreover, the teachers and administrators working in these schools tended to have the tendency and desire to introduce "collective IQ tests." And as one of the pillars of the program to identify gifted students, it is no secret to any of the educators about the importance of intelligence tests of all its kinds and forms in identifying the gifted, creative, and talented.

CONCLUSION AND RECOMMENDATIONS

Any program intended to unlock people's potential and talents must start with the process of identifying gifted and talented people. As a result, the investigation of efficient techniques for recognizing gifted and talented individuals is practically the most crucial phase of their educational and learning programs. But because the gifted and talented have varied skills, and because recognizing them needs a lot of resources, knowledge, and effort, it is seen to be an extremely difficult process. The extent of satisfaction among teachers and administrators working in King Abdullah II Schools for Excellence is moderate. Despite this, the authorities supervising programs to identify gifted and talented people must strive to make these programs ideal and obtain complete satisfaction around them, which necessitates working on a comprehensive review of all methods of identifying gifted and talented students who applied to gifted and talented schools in Jordan, as well as addressing all of their shortcomings through the use of technology and intelligence tests for both collective and individual purposes.

In addition, efforts must be made to expand the care programs and make them more comprehensive. Furthermore, it should serve different age groups and take into account all talented categories. As well, more efforts must also be made to rehabilitate and train teachers and administrators who work with the gifted and talented (Elton, 2023; Krishan & Al-rsa'i, 2023; LeBlanc & Borders, 2021; Pham & Akos, 2020) whether before or during service which will improve the identification process by connecting and providing care programs and locations, allowing them to achieve privacy, and removing them from the decision-making process. on the methods of identifying the gifted and talented and provide them with all knowledge and practical experiences needed. Such support will make the identifying process more effective and linked to care programs and places, and will help to achieve privacy for them and to depart them from the centralization of the decision. As well, conducting continuous evaluation studies for programs to identify gifted and talented people must be done to determine the extent of their effectiveness in achieving the goals and objectives of care programs as well as for continuous improvement and development.

Specifically, identifying gifted individuals efficiently is crucial to unlocking their potential and requires significant resources. Despite moderate levels of satisfaction in

the King Abdullah II Schools for Excellence, improvements are required. Identification methods should be reviewed, shortcomings should be addressed, and technology should be employed. As well, teachers and administrators need to be trained in enhancing care programs that cater to a variety of age groups and talents. As a result of this support, identification will be more effective, it will be connected to care programs, it will promote talents more efficiently. In order to ensure continuous improvement, ongoing evaluations of identification programs are necessary. By addressing these aspects, gifted and talented individuals will be able to obtain better methods and comprehensive care.

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