

Journal for the Education of Gifted Young Scientists, 8(2), 919-934, June 2020 e-ISSN: 2149- 360X jegys.org





## **Research Article**

# The role of school principals in caring for gifted students

Alia Al-Oweidi1 & Ali Freihat2

Special Education Department, The World Islamic University, Jordan

| Article Info   | Abstract   |
|--|--|
| Received: 17 February 2020<br>Revised: 28 May 2020<br>Accepted: 6 June 2020<br>Available online: 15 June 2020                          | The current study aimed to identify the role of school principals in caring for gifted students in Ajloun governorate. The study sample consisted of (56) principals of public and private schools who were chosen by the survey method. A scale consisted of (27) items were distributed on three areas the role of the principal in providing the physical   |
| <i>Keywords:</i><br>Caring for the Gifted<br>Gifted Students<br>School Principals  | environment for gifted students consisted of (7) paragraphs. The role of the principal<br>in discovering gifted students consisted of (6) paragraphs. The role of the principal in<br>caring for gifted students and professional development for supervisors of gifted<br>students consisted of (14) paragraphs. After verifying the indications of validity and  |
| 2149-360X/ © 2020 The Authors.<br>Published by Young Wise Pub. Ltd.<br>This is an open access article under<br>the CC BY-NC-ND license | reliability of the scale, the researchers applied the scale to the study members during<br>the first semester of the academic year (2019/2020), and the results showed: The role<br>of school principals in Ajloun Governorate in caring for gifted students was moderate,<br>"and the absence of statistically significant differences due to the gender variable, the<br>experience variable, the school stage variable, and the educational qualification variable. |
| the CC BY-NC-ND license  | "and the absence of statistically significant differences due to the gender variable, the<br>experience variable, the school stage variable, and the educational qualification variable  |

## To cite this article:

BY NC ND

Al-Oweidi, A., & Freihat, S. (2020). The role of school principals in caring for gifted students. *Journal for the Education of Gifted Young Scientists*, 8(2), 919-934. DOI: http://dx.doi.org/10.17478/jegys.716274

#### Introduction

Caring for the gifted and talented and appreciating them in a way that suits their capabilities is an imperative and important strategic development in our Arab societies. As gifted persons are considered a major basic wealth that must be cared for in order to guide them to serve the community and its development (al-Saadi, 2008). The extent of the society's progress is defined by the amount of care of the talented and creative and the extent of providing the educational, psychological and social services necessary for them. The topic of the talented occupies an increasing interest in a large number of countries in the world, and a number of national and international scientific associations have been formed for it (Bailey, 2011). These associations have held a number of national, regional and international conferences, seminars and issued a large number of researches, literature and specialized scientific periodicals (Siegle, Moore, Mann & Wilson, 2010).

The interest in the gifted has started through the Ministry of Education since the beginning of the eighties, and it was in the form of following up some cases through the educational counseling section and educational counselors, and there were no indications about the role of the private sector in this category. Where the Salt Leadership Center for Outstanding Students was established in 1982 in cooperation with the University of Jordan and the Salt City Reconstruction Corporation (Al-Momani & Al-Oweidi, 2020).

This interest has become organized according to scientific foundations and standards after the first educational development conference that was held in 1987, Which was a comprehensive review of the educational process in all its dimensions, where it is recommended that education is a right for every individual, and it is necessary to diversify the patterns of education in educational institutions to care for the gifted, ordinary and those with difficulties and disabilities, each according to his capabilities and inclinations (Al-Srour & Al-Oweidi, 2013).

The recommendations of this conference have been translated into legislative texts included in the Education Law No. (3) of 1994, where the article (3/6) states that education is a social necessity, and it is a right for everyone, each

<sup>1</sup> Associate Prof, Special Education Department, The World Islamic University, Jordan. E-mail: alia.oweidi@wise.edu.jo ORCID:0000-0002-5204-5433

<sup>2</sup> Ministry of Education in Jordan. E-mail: alifreihat92@yahoo.com

according to his capabilities and self-abilities. As stated in Article (5) the expansion of education patterns in educational institutions to include special education programs for gifted and others with special needs (Massad, 2002).

Because of the school's role in the detection of talent, it is important to examine the role of the principal in caring for gifted students and working to provide the requirements they need. Out of my work as a school principal and my colleague (Clark, 2002; Jung & Worrell, 2017). A university teacher, we wanted in this research to study the role of principals in government schools and private schools in Ajloun governorate from both gender in caring for talented students in their schools (Cross, Anderson, Mammadov & Cross, 2017).

The development of educational, administrative and philosophical thought has changed the function of school administration and its scope in this century. The task of the school principal is no longer just a routine process that aims to run the school's affairs according to the rules and instructions issued by the Ministry of Education, following-up attendance, and maintenance of the school and its equipment. Rather, it went beyond that to discover and care for gifted students, as this is the core of his work (Colangelo & Assouline, 2000).

In fact, the interest in discovering and caring for gifted students in general is still weak to a large extent in all Arab education systems, and this care, if available, is still in its infancy and is not based on scientific studies and recent experiences in this field, and this in turn is due to the fact that countries still ignore the extent of their need for the talented and creative energies in practice, thus neglecting the issue of discovering them, identifying their needs and providing them with the necessary care (Al-Khatib, 2011).

The researchers realize the importance of the role of school principals in raising this interest, and what they have noticed through their practical experience of the lack of interest in this category (Al-Houry, 2015; Lewis, 2007; Tortop & Dincer, 2016). This study is an attempt to investigate the role of government school principals and private schools in Ajlun Governorate in caring for talented students in their schools, as the student spends a great time at school, and his actions are compared with his peers', in order to judge him if there is something that distinguishes him from his peers or not. Because the principal is a decision-maker at the school, he can provide all the services needed by gifted and ordinary students alike. For early detection of gifted students, the principal is the basis of the school and the main supporter to detect them.

The school administration carries out many roles and responsibilities related to managing the educational process in the school, such as following up the academic achievement of students and following their behavior and strengthening the relationship with parents and community institutions in the service of the educational process (Patterson & Kelleher, 2005; Lunenburg & Ornstein, 2004). This study will be limited to the role of school administration in caring for gifted students (Macdonald, 2014; Marzano & McNultry, 2005).

School administration should undertake to serve the gifted programs as follows: Planning, organizing, investment, coordinating, directing, evaluating, budgeting (McClain & Pfeifer, 2012; Kouzes & Posner, 2002).

The traditional definition of talent and excellence is a procedural psychometric definition based on the use of high IQ - as measured by individual IQ tests - to identify gifted and talented children (Robins, Coleman, Micko & Cross, 2015; Birlean & Shore, 2018). Terman was the first to lay the foundations for this trend in his well-known study in which the IQ took 140 cutoff points for talent, excellence and genius, And a number of researchers and educators followed this approach With the difference in the cut-off point they set as a boundary between the talented and the non-talented. In the American Encyclopedia, for example, we read the following definition of the gifted and the talented:

The definition of the gifted and the talented varies according to the degree of talent and excellence that is taken as the boundary between the talented and non-talented, superior and non- superior. And if the IQ is adopted as an arbitrator, the proposed cutoff points vary widely from one authority to another and extend between the IQ ratios from 115-180, but most of the actually used cut-off points lie between 125 and 135 " (Jarwan, 2013; Aslan & Yuksel, 2018). Reis and Housand (2007) defined gifted as people who are identified by professionally qualified persons through outstanding abilities and performance, and are provided with educational services and educational programs of their own in achieving achievements at the levels of the individual and society, and those who have a general mental abilities, special academic competence, creative thinking, leadership ability, performing visual arts, and motor abilities. Renzulli (2016) defined giftedness that highly productive people are characterized by three interlocking clusters of ability, these clusters being above average (though not necessarily superior) ability, task commitment, and creativity

Al-Shahrani's study (2003) indicated knowledge of the contributions of the school administration in discovering and caring for the gifted student through investigating the extent of awareness of primary school principals and educational supervisors in Bisha Governorate in Saudi Arabia about the concept of the gifted student, its characteristics, The results indicated that the awareness of school principals and educational supervisors of each of the gifted child's concept, its characteristics, methods of discovery and methods of caring for all of them ,was with an average degree of awareness, and that there are no statistically significant differences between principals and supervisors in most dimensions, as it was found that no tools are applied in schools to discover the gifted student, as there are no programs, plan or any other services to care for the gifted students.

Juma'a study (2006) investigated the role of the school principal in discovering and caring for talented students in governmental primary schools in Riyadh by examining the methods used to detect talented students, examining the methods used to care for talented students and identifying the obstacles that limit the effectiveness of school administration in caring for talented students in governmental primary schools from the viewpoint of the study members. And identify the differences with statistical significance between the opinions of the study members towards the methods of detection and care for gifted and handicapped students according to a number of variables, results of the study showed that there were no statistically significant differences in the views of principals towards the methods used to detect talented students in governmental primary schools and their care attributed to the variables of the building type, educational qualification, teaching experience, experience in school administration and training courses and their type.

Al-Kaabi (2007) aimed to reveal the role of general education school principals in the UAE in caring for outstanding students and how these perceptions differ with some variables such as gender, years of experience and administration, and the study community was all school principals in the UAE and they are (758) principals and the sample of the study is (169) male and female principals, where a questionnaire was used for this purpose. The results of the study have shown that the role of education school principals in the UAE in caring for the excelling in general is very high, as well as the absence of statistically significant differences in the role of the principals in caring for the outstanding due to the variables: gender, years of experience and the emirate.

Balwani (2008) pointed to the role of school administration in developing creativity in governmental schools in Palestine. The study reached that the field of the teacher in the development of creativity was "very" large at 86.7%, and the field of school administration in the development of creativity was "very" large at 75%.

The study of Al-Khatib (2011) aimed to build a proposed strategy to develop the reality of educational services provided to gifted students in the light of international standards, and to identify methods for detecting them, and the programs and extension and rehabilitation services provided to them in Palestinian governmental schools. The results showed that the teaching staff members 'estimates were low on the contents of the dimensions related to the detection of gifted students, designing programs and curricula, applying appropriate teaching and evaluation methods to them, while their estimates were average on the dimensions related to program management, guidance for the gifted, and professional development.

The Houry (2015) reported that the role of preparatory and secondary school principals in caring for gifted students from the point of view of teachers in the State of Qatar was recognized, The results found that the role of Preparatory and secondary school principals in caring for gifted students from the teachers' point of view was moderate, and there are statistically significant differences according to the "gender variable in favor of females," and according to the variable of experience in favor of the category of experience (6-10 years), there are no differences according to variable the school stage.

This study aims to identify the role of government and private school principals of both sexes in caring for gifted students in Ajloun governorate, by answering the following questions:

What is the role of school principals in caring for gifted students in Ajloun Governorate?

Are there statistically significant differences in the responses of school principals in caring for gifted students in Ajloun Governorate at the level of significance (5 = 0.05) due to the gender variable?

Are there statistically significant differences in the responses of school principals in caring for gifted students in Ajloun Governorate at the level of significance (5 = 0.05) due to the variable of experience?

Are there statistically significant differences in the responses of school principals in caring for gifted students in Ajloun Governorate at the significance level (5 = 0.05) due to the variable of the school stage?

Are there statistically significant differences in the responses of school principals in the care of gifted students in Ajloun Governorate at the level of significance  $(0.05 = \alpha)$  due to the variable of educational qualification?

## Method

## **Research Design**

A descriptive approach was used to achieve the purpose of this study. Descriptive research aims to describe specific phenomena, events or things, collect facts and information, and notes about them, describe their own circumstances, and report their status as it exists. In fact, descriptive research does not stop at the limit of the description or descriptive diagnosis, it also concerned with a report. It should be the things and phenomena that the research deals with certain values or criteria and the suggestion of steps or methods that can be followed to get them to the image that they should be in these standards or values (Al-Tal, Al-Batsh & Abu Zaina, 2007)

### Participants

The study population consisted of male and female principals of public and private schools in the Ajloun governorate, from the fourth to the twelfth grade, totaling (140) male and female principals. The study sample consisted of all male and female principals of the study community within the supervision of the Ajloun Education Directorate, and the school data was obtained from the Planning Department and the Special Education Department in the Ajloun Education Directorate, where the survey sample consisted of (20) male and female principals from public and private schools, and the study sample consisted of (56) male and female principals of public and private schools.

The sample of the study consisted of (56) male and female principals from public and private schools, The following table shows their characteristics (1):

#### Table 1.

Structures of Participants

| Variables     |   | Ν   | %    |
|---------------|---|-----|------|
| Condon        | Male  | 19  | 33.9 |
| Gender        | Female                                      | 37  | 66.1 |
|               | 5 years or less                             | 4   | 7.1  |
| Experience    | 6 to 10 years                               | 5   | 8.9  |
|               | More than 10 years                          | 47  | 83.9 |
| D ''          | Principal of a secondary school             | 11  | 19.6 |
|               | Primary school principal                    | 35  | 62.5 |
| Position      | Principal of a primary and secondary school | 8   | 14.3 |
|               | Principal of a private school               | 2   | 3.6  |
|               | High diploma or less                        | 32  | 57.1 |
| Qualification | Master                                      | 20  | 35.7 |
|               | PhD   | 4   | 7.1  |
| Total         |   | 140 |      |

#### **Data Collection Tools**

To achieve the goal of the study related to the role of principals of public and private schools in Ajloun in caring for gifted students, a questionnaire was developed for the role of principals of public and private schools in Ajloun in caring for gifted students by referring to theoretical literature and related previous studies, such as the (Houry, 2015; Al-Khatib, 2011; Bailey, 2011 & Lewis, Cruziro & Hall, 2007).

#### **Content Validity**

This questionnaire, in its primary form, consisted of (25) items that measure the role of public and private school principals in Ajloun governorate in caring for gifted students. Its paragraphs were divided into four fields:

> The role of the principal in providing the physical environment for the care of gifted students: consisted of (7) paragraphs.

- > The role of the principal in discovering gifted students: consisted of (6) paragraphs.
- The role of the principal in caring for gifted students: consisted of (8) paragraphs.

> The principal 's role in the professional development of gifted students' supervisors: consisted of (4) paragraphs.

Each paragraph of the questionnaire was given a graded weight depending on the Likert type scale, and the answers were: (always estimates 5, often estimates 4, sometimes estimates 3, rarely estimate 2, never estimates (1).

The validity of the questionnaire on the role of public and private school principals in Ajloun Governorate in caring for gifted students was verified through the use of virtual validity. The questionnaire was presented to a panel of 13 experienced and specialized.

The approval of the panel was based on the paragraphs (90%) or more, indicating the validity of the paragraph, as the wording of some paragraphs was modified based on the opinions of the panel, because it obtained approval of not more than 50%, and two new paragraphs were added, and the third and fourth areas were merged together. The questionnaire consisted of (27) items, the paragraphs of which were distributed in three fields:

• The role of the principal in providing the physical environment for caring for gifted students: consisted of (7) paragraphs.

• The role of the principal in discovering gifted students: consisted of (6) paragraphs.

• The role of the principal in caring for gifted students and professional development for supervisors of gifted students: consisted of (14) paragraphs.

#### **Construct Validity**

In order to get construct validity, the scale was apply in pilot study (25), the result show correlations between items and scale, the results show that the correlation was between (0.41 - 0.81), and it's accepted to this study. Table 2 shows the results between sub scale and the correlation.

### Table 2.

The Results between Sub-scale and the Correlation

| Subscale | Title   | Correlation |
|----------|---|-------------|
| Number   |   |             |
| 1        | The principal's role in providing the physical environment for  | 60          |
| 1        | caring for gifted students                                      | .09         |
| 2        | The principal's role in discovering gifted students             | .71         |
| 2        | The role of the principal in caring for gifted students and the | 96          |
| 3        | professional development of supervisors of gifted students      | .00         |

#### Reliability

The stability of the tool of the role of public and private school principals in caring for gifted students in the Ajloun Governorate was confirmed by using the Cronbach Alfa Coefficient equation to find an internal consistency formula, as the degree of stability coefficient reached (0.942), which is an acceptable value for the purposes of the current study in light of previous studies, and Table 2 shows Stability of the test in the Cronbach Alfa Coefficient.

#### Table 2.

Stability Coefficient Values to Identify the Role of Public and Private School Principals in Caring for gifted Students in Ajloun Governorate Using the Cronbach Alfa Coefficient

| Title   | Correlation   |  |
|---|---|--|
| The principal's role in providing the physical environment for  | 860   |  |
| caring for gifted students                                      | .009  |  |
| The principal's role in discovering gifted students             | .801  |  |
| The role of the principal in caring for gifted students and the | 026   |  |
| professional development of supervisors of gifted students      | .920  |  |
|   | .942  |  |
|   | TitleThe principal's role in providing the physical environment for<br>caring for gifted studentsThe principal's role in discovering gifted studentsThe role of the principal in caring for gifted students and the<br>professional development of supervisors of gifted students |  |

#### Study variables

The study included the following variables: Gender: It has two categories (male, female). Years of Experience: It has three levels (5 years or more, 6 to 10 years, more than 10 years). Nature of work: It has four levels (principal of a secondary school, principal of a primary school, principal of a primary and secondary school, principal of a private school). Academic qualification: It has three levels (higher diploma and less, MA, PhD).

#### Study procedures:

- > Preparing the study questionnaire in its primary and final form.
- > Verify the validity and reliability of the study tool.
- Determining the study population.

Determine the study sample.

 $\blacktriangleright$  Distribution of the study tool to the study sample during the second semester 2018/2019, as the researchers conducted interviews with the principals of public and private schools in order to clarify the aim of the study, and everyone showed cooperation, and the questionnaire was distributed to the principals of public and private schools in Ajloun Governorate.

> The questionnaires were audited, and its data was checked and validated for statistical analysis purposes.

Statistical analysis program (SPSS) was used to analyze data and obtain results.

> The role of principals of public and private schools in Ajloun Governorate in caring for gifted students has been determined by adopting the following criteria to judge the degree of applicability:

High value of the substitute - the lowest value of the substitute

3 5-1/3 = 4/3 = 1.33 the extent Thus, it is from: 1.1- 2.42 low role 2.43 - 3.66 average role 3-5.67 high role

The results were presented, discussed and appropriate recommendations developed in light of the results of the study mechanism.

### Results

This study aimed to identify the role of government and private school principals of both sexes in caring for gifted students in Ajloun governorate, by answering the following questions:

What is the role of school principals in caring for gifted students in Ajloun Governorate?

To answer this question, the averages and the standard deviations for the schools' principals in caring for gifted students in Ajloun Governorate were calculated in general and for each field of the study tool, and Table (3) shows that.

#### Table 3.

Averages and Standard Deviations for School Principals in the Care of Gifted Students in Ajloun in Descending Order

| Number | Field  | Μ    | SD   | Ranks | Role    |
|--------|--|------|------|-------|---------|
| 3      | The third field: The role of the principal in caring for | 3.51 | 0.91 | 1     | Average |
|        | gifted students and the professional development of      |      |      |       |         |
|        | supervisors for gifted students                          |      |      |       |         |
| 1      | The third field: The role of the principal in caring for |      |      |       |         |
|        | gifted students and the professional development of      | 3.51 | 0.91 | 1     | Average |
|        | supervisors for gifted students                          |      |      |       |         |
|        | The first field: The role of the principal in providing  |      |      |       |         |
| 2      | the physical and psychological environment to care for   | 3.34 | 0.91 | 2     | Average |
|        | gifted students  |      |      |       |         |
| Total  |  | 3.39 | 0.85 |       | Average |

It is noted from Table (3) that the role of school principals in caring for gifted students in Ajloun in general was moderate. As the average reached (3.39) and the standard deviation (0.85), and all tool domains were in the middle round, as the averages ranged between (3.51 - 3.15), and the third field was in the first rank, The role of the principals in the care of gifted students and the professional development of supervisors of gifted students ", with an average of (3.51) and a standard deviation (0.91) and an average role, and the second rank was for the first field: The role of the principals to provide the physical and psychological environment for the care of gifted students "with an average of (3.34) and a standard deviation (0.91) and an intermediate role, and the last rank was for the second field: the role of the principals in discovering gifted students" with an average of (3.15) and a standard deviation (0.97) with an average role. As for the paragraphs for each domain, the results are as follows.

#### Table 4.

Averages, Standard Deviations, Ranks and Role of principals in Gifted Student Care and Professional Development for Supervisors of Gifted Students in Descending Order

| Number | Field   | Μ    | SD   | Ranks | Role     |
|--------|---|------|------|-------|----------|
| 17     | The principal provides awards for talented students         | 4.16 | 1.09 | 1     | High     |
| 18     | The principal is interested in the creativity of gifted     | 3.93 | 1.17 | 2     | High     |
|        | students  |      |      |       |          |
| 22     | The principal has positive trends in caring for gifted      | 3.89 | 1.12 | 3     | High     |
|        | students  |      |      |       |          |
| 27     | The principal attends classes for teachers to assess the    | 3.77 | 1.21 | 4     | High     |
|        | interest in gifted students                                 |      |      |       |          |
| 26     | The principal rewards teachers interested in gifted         | 3.75 | 1.21 | 5     | High     |
|        | students  |      |      |       |          |
| 16     | The principal emphasizes on teachers to design              | 3.48 | 1.16 | 6     | Moderate |
|        | enrichment curricula for gifted students                    |      |      |       |          |
| 14     | The Principal imposes on teachers to include lesson plans   | 3.45 | 0.97 | 7     | Moderate |
|        | for activities for gifted students                          |      |      |       |          |
| 15     | The Principal instructs the counselor to follow the         | 3.43 | 1.45 | 8     | Moderate |
|        | programs of gifted students                                 |      |      |       |          |
| 21     | The Principal provides recreational trips for talented      | 3.32 | 1.15 | 9     | Moderate |
|        | students  |      |      |       |          |
| 25     | The Principal encourages research on talented students      | 3.32 | 1.11 | 9     | Moderate |
| 20     | The principal provides scientific trips for gifted students | 3.30 | 1.13 | 11    | Moderate |
| 19     | The principal allows talented students to use the school    | 3.27 | 1.40 | 12    | Moderate |
|        | facilities outside the official hours                       |      |      |       |          |
| 23     | The principal holds introductory sessions about the         | 3.09 | 1.12 | 13    | Moderate |
|        | characteristics of gifted students to teachers              |      |      |       |          |
| 24     | The principal holds introductory courses about the          | 3.02 | 1.10 | 14    | Moderate |
|        | characteristics of gifted students for parents              |      |      |       |          |
| Total  |   | 3.51 | 0.91 |       | Moderate |

It is noted from Table (4) that the role of the principal in caring for gifted students and the professional development of supervisors for gifted students was average, as the average (3.51) and standard deviation (0.91), and the paragraphs of this field came in the high and medium role.

As the averages ranged between (4.16 - 3.02), and paragraph (17) which states that "Principal provides awards for talented students", came in the first rank with an average of (4.16) and a standard deviation (1.09) with a high role. The second rank is mentioned in paragraph (18), which states, "The principal is interested in the creativity of gifted students", with an average of (3.93) and a standard deviation (1.17) and a high role. And in the penultimate rank, paragraph (23) stated that "The principal holds introductory sessions about the characteristics of gifted students to teachers ", with an average of (3.09) and a standard deviation (1.12) and an average role. And in the last rank, paragraph (24) states that "The principal holds introductory courses about the characteristics of gifted students for parents", with an average of (3.02) and a standard deviation (1.10) and an average role.

#### Table 5.

Averages, Standard Deviations, Ranks, and Role of principals in Providing the Physical and Psychological Environment to Care for Gifted Students in Descending Order

| Number | Field   | Μ    | SD   | Ranks | Role     |
|--------|---|------|------|-------|----------|
| 1      | The principal provides teaching aids to meet the needs of     | 3.96 | 1.03 | 1     | High     |
|        | the gifted  |      |      |       |          |
| 2      | The principal provides additional tools in scientific         | 3.63 | 1.05 | 2     | moderate |
|        | laboratories for gifted students                              |      |      |       |          |
| 4      | The principal provides an internet connection at the school   | 3.50 | 1.35 | 3     | moderate |
|        | for talented students   |      |      |       |          |
| 6      | The principal provides books that suit the talents of         | 3.30 | 1.09 | 4     | moderate |
|        | students in the library                                       |      |      |       |          |
| 3      | The principal allocates classes in the schedule, in which     | 3.09 | 1.20 | 5     | moderate |
|        | teachers develop the talents of gifted students               |      |      |       |          |
| 7      | The principal provides a file for each gifted student         | 3.07 | 1.16 | 6     | moderate |
|        | documenting information about him                             |      |      |       |          |
| 5      | The principal provides special halls for talented students to | 2.86 | 1.26 | 7     | moderate |
|        | practice their hobbies  |      |      |       |          |
| Total  |   | 3.34 | 0.91 |       | Moderate |

It is noted from Table (5) that the role of the principal to provide the physical and psychological environment to care for gifted students was average, as the mean (3.34) and the standard deviation (0.91). The paragraphs of this field came in the high and medium round, as the averages ranged between (3.96-2.86). Paragraph 1 which states that" The principal provides teaching aids to meet the needs of the gifted" came in the first rank, with an average of (3.96) and a standard deviation (1.03) with a high role. The second rank was mentioned in paragraph (2) which states:" The principal provides additional tools in scientific laboratories for gifted students", with an average of (3.63) and a standard deviation (1.05) and an average role. The penultimate rank was for paragraph (7), which states that" The principal provides a file for each gifted student documenting information about him" "With an average of (3.07) and a standard deviation (1.16) and an average role. And in the last rank, paragraph (5) states that " The principal provides special halls for talented students to practice their hobbies" With an average of (2.86) and a standard deviation (1.26), with an average role.

#### Table 6.

Means, Standard Deviations, Ranks and the Role of Principals in Discovering Gifted Students in Descending Order

| Number | Field   | Μ    | SD   | Ranks | Role     |
|--------|---|------|------|-------|----------|
| 9      | The Principal depends on the views of teachers in the       | 3.80 | 1.12 | 1     | High     |
|        | detection of gifted students                                |      |      |       |          |
| 10     | The Principal depends on the achievement tests for the      | 3.55 | 1.13 | 2     | moderate |
|        | detection of gifted students                                |      |      |       |          |
| 12     | The principal provides creative thinking tests to discover  | 2.93 | 1.19 | 3     | moderate |
|        | talented students   |      |      |       |          |
| 8      | The principal provides a specialist to detect talented      | 2.89 | 1.30 | 4     | moderate |
|        | students  |      |      |       |          |
| 11     | The principal provides a specialist in applying IQ tests to | 2.88 | 1.35 | 5     | moderate |
|        | detect gifted students                                      |      |      |       |          |
| 13     | The principal provides standards for the detection for      | 2.86 | 1.15 | 6     | moderate |
|        | gifted students   |      |      |       |          |
| Total  |   | 3.15 |      |       | Moderate |

It is noted from Table (6) that the role of the principal in discovering gifted students was average, as the mean (3.15) and a standard deviation (0.97). The paragraphs of this field came in the high and medium round, as the averages ranged between (3.80 - 2.86). In the first rank, paragraph (9) states that, "the principal depends on the views of teachers in the detection of gifted students", with an average of (3.80) and a standard deviation (1.12) with a high role. In the

second rank, paragraph (10) which states that" the principal depends on the achievement tests for the detection of gifted students" With an average of (3.55) and a standard deviation (1.13) and an average role. In the penultimate rank, paragraph (11) states that " The principal provides a specialist in applying IQ tests to detect gifted students" with an average of (2.88) and a standard deviation (1.35) with an average role. In the last rank, paragraph (13) states that "the principal provides standards for the detection for gifted students" With an average of (2.86) and a standard deviation (1.15), with an average role.

Are there statistically significant differences in the responses of school principals in caring for gifted students in Ajloun Governorate at the level of significance (= = 0.05) due to the gender variable?

To answer this question, the mean and standard deviations were calculated for the responses of school principals in the care of gifted students in the province of Ajloun, according to the gender variable, and a t-test was applied, and Table (7) shows that.

#### Table 7.

Averages and Standard Deviations of School Principals' Responses in the Care of Gifted Students in the Province of Ajloun, and the t-Test Depending on the Gender Variable

| Field  | gender  | Ν  | Μ     | SD   | Т     | Sig   |
|--|---------|----|-------|------|-------|-------|
| The first field: The role of the principal in        | Male    | 19 | 3.41  | 0.95 |       |       |
| providing the physical and psychological             | Formala | 27 | 2 21  | 0.80 | 0.362 | 0.719 |
| environment to care for gifted students              | гетае   | 57 | 5.51  | 0.89 |       |       |
| The second field: The role of the principal in       | Male    | 19 | 3.39  | 1.00 | 1 251 | 0.192 |
| discovering gifted students                          | Female  | 37 | 3.03  | 0.95 | 1.551 | 0.162 |
| The third field: The role of the principal in caring | Male    | 19 | 3.49  | 0.90 |       |       |
| for gifted students and the professional             | Fomalo  | 27 | 3 5 3 | 0.03 | -     | 0.889 |
| development of supervisors for gifted students       | Female  | 37 | 3.33  | 0.95 | 0.141 |       |
| Total  | Male    | 19 | 3.45  | 0.84 | 0 362 | 0.710 |
| 10(a) —  | Female  | 37 | 3.36  | 0.86 | 0.302 | 0./19 |

The results in Table (7) indicate that there were no statistically significant differences at (=  $0.05 = \alpha$ ) for the principals' responses in the care of gifted students in Ajloun Governorate, according to the gender variable. Based on the calculated value of (T) as it reached (0.362) and the level of significance (0.719) for the total degree, as well as the absence of statistically significant differences in all fields, based on the calculated value of (T) as it reached between (1.351--0.141) and the level of significance between (0.182- 0.889).

Are there statistically significant differences in the responses of school principals in the care of gifted students in *Ajloun Governorate at the significance level (5 = 0.05) due to the variable of experience?* 

To answer this question, averages and standard deviations for the responses of school principals in the care of gifted students in Ajloun Governorate were calculated according to the variable of experience.

#### Table 8.

Averages and Standard Deviations of School Principles' Responses in Caring for Gifted Students in Ajloun Governorate, Depending on the Variable Experience

| Field   | Experience         | Ν  | Mean | SD    |
|---|--------------------|----|------|-------|
| The first field: The role of the principal in providing the | 5 years or less    | 4  | 3.50 | 1.828 |
| physical and psychological environment to care for gifted   | 6 to 10 years      | 5  | 3.23 | 1.038 |
| students  | More than 10 years | 47 | 3.34 | .815  |
|   | Total              | 56 | 3.34 | .905  |
| The second field: The role of the principal in discovering  | 5 years or less    | 4  | 3.33 | .933  |
| gifted students   | 6 to 10 years      | 5  | 3.07 | 1.251 |
|   | More than 10 years | 47 | 3.15 | .965  |
|   | Total              | 56 | 3.15 | .971  |
| The third field: The role of the principal in caring for    | 5 years or less    | 4  | 3.38 | .934  |
| gifted students and the professional development of         | 6 to 10 years      | 5  | 3.93 | 1.155 |
| supervisors for gifted students                             | More than 10 years | 47 | 3.48 | .890  |
|   | Total              | 56 | 3.51 | .909  |

|       | 5 years or less    | 4  | 3.40 | 1.1123 |
|-------|--------------------|----|------|--------|
| Total | 6 to 10 years      | 5  | 3.56 | 1.033  |
| Total | More than 10 years | 47 | 3.37 | .822   |
|       | Total              | 56 | 3.39 | 845    |

It is noted from Table (8) that there are apparent differences between the averages of the responses of the school principals in caring for gifted students in Ajloun governorate according to the variable of experience. As the category (6 to 10 years) got the highest average of (3.56), and the category (5 years or less) came second with an average of (3.40) and finally the mean for the category (more than 10 years) was (3.37),

To determine whether the differences between the averages were statistically significant at the degree of significance (=  $0.05 = \alpha$ ), One way ANOVA analysis was applied, and the results of the variance analysis came as shown in Table (9):

### Table 9.

ANOVA Test to Find the Significance of the Differences of School Principals' Responses in Caring for Gifted Students in Ajloun Governorate according to the Variable of Experience

| Field                               | Source of      | DF | Mean    | Sum of  | F     | Sig   |
|-------------------------------------|----------------|----|---------|---------|-------|-------|
|                                     | Variations     |    | Squares | Squares |       |       |
| The first field: The role of the    | Between groups | 2  | 0.082   | .164    | 0.097 | 0.908 |
| principal in providing the physical | Within groups  | 53 | 0.847   | 44.888  | _     |       |
| and psychological environment to    | Total          | 55 |         | 45.052  | _     |       |
| care for gifted students            |                |    |         |         |       |       |
| The second field: The role of the   | Between groups | 2  | 0.085   | .170    | 0.087 | 0.917 |
| principal in discovering gifted     | Within groups  | 53 | 0.976   | 51.734  | _     |       |
| students                            | Total          | 55 |         | 51.904  | _     |       |
| The third field: The role of the    | Between groups | 2  | 0.495   | .990    | 0.591 | 0.558 |
| principal in caring for gifted      | Within groups  | 53 | 0.838   | 44.419  | _     |       |
| students and the professional       | Total          | 55 |         | 45.409  | _     |       |
| development of supervisors for      |                |    |         |         |       |       |
| gifted students                     |                |    |         |         |       |       |
|                                     | Between groups | 2  | 0.078   | .155    | 0.105 | 0.900 |
| Total                               | Within groups  | 53 | 0.738   | 39.104  | _     |       |
|                                     | Total          | 55 |         | 39.259  | _     |       |

The results in Table (9) indicate that there were no statistically significant differences at  $(0.05 = \alpha)$  for the responses of the school principals in caring for gifted students in Ajloun Governorate according to the variable of experience. Based on the calculated value of F as it reached (0.105), and with a degree of significance (0.900), as well as the absence of statistically significant differences in all fields, as the calculated values of (F) ranged between (0.591 - 0.087) and with a level of significance between (0.558 - 0.917).

4-Are there statistically significant differences in the responses of school principals in the care of gifted students in Ajloun Governorate at the significance level (5 = 0.05) due to the variable of the school stage?

To answer this question, the mean and standard deviations for the responses of the school Principles in the care of gifted students in Ajloun Governorate were calculated according to the variable of the school stage.

## Table 10.

Means and Standard Deviations of School Principles' Responses in Caring for Gifted Students in Ajloun Governorate Depending on the Variable school Stage

| Field   | School Stage                    | Ν  | Mean | SD    |
|---|---------------------------------|----|------|-------|
| <b>The first field:</b> The role of the Principal in providing the physical and psychological environment to care for gifted students | Principal of a secondary school | 11 | 3.06 | 1.089 |
|   | Primary school principal        | 35 | 3.46 | .801  |
|   | Principal of a primary and      | 8  | 3.32 | .511  |
|   | secondary school                |    |      |       |
|   | Principal of a private school   | 2  | 3.00 | 2.828 |
|   | Total                           | 56 | 3.34 | .905  |
| <b>The second field:</b> The role of the principal in discovering gifted students   | Principal of a secondary school | 11 | 2.53 | .977  |
|   | Primary school principal        | 35 | 3.41 | .909  |
|   | Principal of a primary and      | 8  | 2.96 | .912  |
|   | secondary school                |    |      |       |
|   | Principal of a private school   | 2  | 2.83 | 1.179 |
|   | Total                           | 56 | 3.15 | .971  |
|   | Principal of a secondary school | 11 | 3.23 | 1.288 |
| The third field: The role of the director in  | Primary school principal        | 35 | 3.66 | .786  |
| caring for gifted students and the  | Principal of a primary and      | 8  | 3.38 | .699  |
| professional development of supervisors for   | secondary school                |    |      |       |
| gifted students   | Principal of a private school   | 2  | 3.04 | 1.465 |
|   | Total                           | 56 | 3.51 | .909  |
|   | Principal of a secondary school | 11 | 3.03 | 1.070 |
| Total   | Primary school principal        | 35 | 3.55 | .752  |
|   | Principal of a primary and      | 8  | 3.27 | .625  |
|   | secondary school                |    |      |       |
|   | Principal of a private school   | 2  | 2.98 | 1.755 |
|   | Total                           | 56 | 3.39 | .845  |

It is noted from Table (10) that there are apparent differences between the averages of the responses of the school principals in caring for gifted students in Ajloun governorate according to the variable of the school stage. The (primary school principal) category obtained the highest average of (3.55), and the (secondary school principal) category at the second rank with an average of (3.03) and finally the mean for the category (private school principal) was (2.98), and to determine whether the differences between the averages Statistically significant at the degree of significance (=  $0.05 \alpha$ ), one way ANOVA was applied, and the results of the analysis of variance came as shown in Table (11).

# Table 11.

ANOVA Test to Find the Significance of the Differences of the Principals' Responses in Caring for Gifted Students in Ajloun Governorate according to the Variable of the School Stage

| Field                                   | Source of      | DF | Mean    | Sum of  | F     | Sig  |
|---|----------------|----|---------|---------|-------|------|
|   | Variations     |    | Squares | Squares |       |      |
| The first field: The role of the        | Between groups | 3  | .515    | 1.545   | .616  | .608 |
| principal in providing the physical     | Within groups  | 52 | .837    | 43.507  |       |      |
| and psychological environment to        | Total          | 55 |         | 45.052  |       |      |
| care for gifted students                |                |    |         |         |       |      |
| The second field: The role of the       | Between groups | 3  | 2.359   | 7.076   |       |      |
| principal in discovering gifted         | Within groups  | 52 | .862    | 44.828  | 2.736 | .053 |
| students                                | Total          | 55 |         | 51.904  |       |      |
| The third field: The role of the        | Between groups | 3  | .745    | 2.235   | .897  | .449 |
| principal in caring for gifted students | Within groups  | 52 | .830    | 43.174  |       |      |
| and the professional development of     | Total          | 55 |         | 45.409  | _     |      |
| supervisors for gifted students         |                |    |         |         |       |      |

|       | Between groups | 3  | .926 | 2.777  | 1.319 | .278 |
|-------|----------------|----|------|--------|-------|------|
| Total | Within groups  | 52 | .702 | 36.482 |       |      |
|       | Total          | 55 |      | 39.259 |       |      |

The results in Table (11) indicate that there are no statistically significant differences at  $(0.05 = \alpha)$  for the principals' responses in the care of gifted students in the Governorate of Ajloun according to the variable of the school stage. Based on the calculated value of F as it reached (1.319), with a degree of significance (0.278), as well as the absence of statistically significant differences in all fields, as calculated values of (F) ranged between (2.736- 0.616) and at the level of significance between (0.052- 0.608).

Are there statistically significant differences in the responses of school principals in the care of gifted students in Ajloun Governorate at the level of significance (5 = 0.05) due to the variable of the educational qualification?

To answer this question, the mean and standard deviations were calculated for the responses of the school principals in caring for gifted students in Ajloun governorate according to the variable of the educational qualification.

#### Table 12.

Averages and Standard Deviations of School Principals' Responses in Caring for Gifted Students in Ajloun Governorate Depending on the Variable educational Qualification

| Field  | School Stage       | Ν  | Mean | SD    |
|--|--------------------|----|------|-------|
|  | Higher diploma and | 30 | 3.36 | 066   |
| The first field: The role of the Principal in providing                    | below              | 52 |      | .900  |
| the physical and psychological environment to care for                     | M.A.               | 20 | 3.39 | .728  |
| gifted students  | PhD                | 4  | 3.00 | 1.355 |
|  | Total              | 56 | 3.34 | .905  |
|  | Higher diploma and | 20 | 3.24 | 070   |
| The second field: The role of the principal in discovering gifted students | below              | 32 |      | .000  |
|  | M.A.               | 20 | 3.18 | 1.085 |
|  | PhD                | 4  | 2.33 | 1.045 |
|  | Total              | 56 | 3.15 | .971  |
|  | Higher diploma and | 30 | 3.58 | .825  |
| The third field: The role of the principal in caring for                   | below              | 32 |      |       |
| gifted students and the professional development of                        | M.A.               | 20 | 3.40 | .900  |
| supervisors for gifted students  | PhD                | 4  | 3.52 | 1.686 |
|  | Total              | 56 | 3.51 | .909  |
|  | Higher diploma and | 20 | 3.45 | 000   |
|  | below              | 32 |      | .000  |
| Total  | M.A. 20            |    | 3.35 | .813  |
|  | PhD                | 4  | 3.12 | 1.419 |
|  | Total              | 56 | 3.39 | .845  |

It is noted from Table (12) that there are apparent differences between the averages of the responses of school principals in caring for gifted students in Ajloun governorate according to the variable of the educational qualification. The category (higher diploma and less) obtained the highest average of (3.45), the (MA) category at the second rank with an average of (3.35), and finally the mean for the category (Ph.D.) reached (3.12), and to determine whether the differences between the averages with Statistical significance at the degree of significance (=  $0.05 = \alpha$ ), one way ANOVA was applied, and the results of the analysis of variance came as shown in Table (13):

#### Table 13.

ANOVA Test to find an Indication of the Differences of School Principals' Responses in Caring for Gifted Students in Ajloun Governorate according to the Variable of Educational Qualification

| Field                            | Source of      | DF | Mean    | Sum of  | F     | Sig  |
|----------------------------------|----------------|----|---------|---------|-------|------|
|                                  | Variations     |    | Squares | Squares |       |      |
| The first field: The role of the | Between groups | 3  | .263    | .527    | .313  | .732 |
| principal in providing the       | Within groups  | 52 | .840    | 44.526  | -     |      |
| physical and psychological       | Total          | 55 |         | 45.052  | -     |      |
| environment to care for gifted   |                |    |         |         |       |      |
| students                         |                |    |         |         |       |      |
| The second field: The role of    | Between groups | 3  | 1.468   | 2.937   | 1.589 | .214 |
| the principal in discovering     | Within groups  | 52 | .924    | 48.967  | -     |      |
| gifted students                  | Total          | 55 |         | 51.904  | -     |      |
| The third field: The role of the | Between groups | 3  | .192    | .385    | .226  | .798 |
| principal in caring for gifted   | Within groups  | 52 | .850    | 45.024  | -     |      |
| students and the professional    | Total          | 55 |         | 45.409  | -     |      |
| development of supervisors for   |                |    |         |         |       |      |
| gifted students                  |                |    |         |         |       |      |
|                                  | Between groups | 3  | .213    | .426    | .291  | .749 |
| Total                            | Within groups  | 52 | .733    | 38.833  | -     |      |
|                                  | Total          | 55 |         | 39.259  | -     |      |

The results in Table (13) indicate that there are no statistically significant differences at  $(0.05 = \alpha)$  for the responses of school principals in caring for gifted students in Ajloun governorate according to the variable of the educational qualification, based on the calculated value of F as it reached (0.291), and a score of (0.749) Also, there were no statistically significant differences in all fields, as the calculated values of (F) ranged between (1.589 - 0.226) and at the level of significance between (0.214 - 0.798).

#### **Discussion and Conclusion**

This chapter discusses the results of the study, its explanation, and its position from the results of some other studies related to agreement and disagreement. This chapter also presents recommendations that emerged from the study, which aimed to reveal the role of school principals in caring for gifted students in Ajloun Governorate. The following is a discussion of the study's findings in the light of its questions.

First: Discussing the results related to answering the first question: "What is the role of school principals in caring for talented students in Ajloun governorate?"

The results indicated that the role of school principals in caring for gifted students in Ajloun Governorate in general was average in all of the tool areas. The third field came in the first rank: The role of the principal in caring for gifted students and the professional development of supervisors for gifted students, with an average of (3.51) and a standard deviation (0.91) and an intermediate role. In the second rank was the first field: the role of the principal in providing the physical and psychological environment for caring for gifted students "with an average of (3.34) and a standard deviation (0.91) with an intermediate role, and the last rank was for the second field: the role of the principal in discovering gifted students "with an average of (3.15) and a standard deviation (0.97) and an intermediate role. These results are consistent with (Al-Shahrani, 2003) study, (Al-Khatib, 2011) study, and (Al-Houry, 2015) study, and inconsistent with (Al-Kaabi, 2007), and (Al-Balwani, 2008), where their results were highly rated.

Second: Discussing the results related to answering the second question, "Are there statistically significant differences in the responses of school principals in caring for gifted students in Ajloun Governorate at the level of significance (=  $0.05 = \alpha$ ) due to the gender variable?"

The results indicated that there were no statistically significant differences at ( $\alpha = 0.05$ ) for school principals' responses in caring for gifted students in Ajloun governorate, according to the gender variable, based on the calculated value of (T) as it reached (0.362) and the level of significance (0.719) for the total score as well the absence of statistically significant differences in all fields based on the calculated values of (T), as they reached between (1.351-0.141), and at a level of significance between (0.182-0.889). This result can be explained by the gender parity in caring

for gifted students. This result is consistent with many previous studies, such as (Al-Kaabi, 2007), (Balwani, 2008), and inconsistent with the (Al-Houry, 2015) study, as its results were in favor of females.

Third: Discussing the results related to answering the third question, "Are there statistically significant differences in the responses of school principals in the care of gifted students in Ajloun Governorate at the level of significance  $(= 0.05 = \alpha)$  due to the variable of experience?"

The results indicated that there are apparent differences between the averages of the responses of the school principals in caring for gifted students in Ajloun governorate according to the variable of experience, and to determine whether the differences between the averages are statistically significant at the degree of significance (=  $0.05 = \alpha$ ), One way ANOVA analysis was applied. The results of the analysis of variance came as follows: There were no statistically significant differences at ( $0.05 = \alpha$ ) for the responses of the school principals in caring for gifted students in Ajloun governorate according to the experience variable, based on the calculated value of (0.105), and with a score of (0.900), as well as the absence of statistically significant differences in all fields , the calculated values of (F) ranged between (0.591 - 0.087) and a level of significance between (0.558 - 0.917), where these results are consistent with (Al Kaabi, 2007), and (Balwani, 2008) study, and inconsistent with the results of (Al-Houry, 2015) study , where it was in favor of experience (6 - 10) years.

Fourth: Discussing the results related to answering the fourth question, "Are there statistically significant differences in the responses of school principals in caring for gifted students in Ajloun Governorate at the level of significance (=  $0.05 = \alpha$ ) due to the variable of the school stage?"

The results indicated that there are apparent differences between the averages of the responses of the school principals in caring for gifted students in Ajloun governorate according to the variable of the school stage, where the category (Primary school principal) got the highest average of (3.55), and the category (secondary school principal) came second with an average of (3.03). Finally, the mean for the category (principal of a private school) came to (2.98), and to determine whether the differences between the averages were statistically significant at the degree of significance (=  $0.05 = \alpha$ ), One way ANOVA analysis was applied, and the results of the analysis show that there were no statistically significant differences at  $\alpha 0.05 = \alpha$ . The responses of school principals in the care of gifted students in the province of Ajloun related to the variable of the school stage, based on the calculated value of (1.319), and with a degree of significance (0.278), as well as the absence of statistically significant differences in all areas where the calculated values of (F) ranged between (2.736 - 0.616) and at a level of 0.02. These results are consistent with (Al-Houry, 2015) study.

Fifth: Discussing the results related to answering the fifth question: which stated: "Are there statistically significant differences in the responses of school principals in caring for gifted students in Ajloun Governorate at the level of significance (=  $0.05 = \alpha$ ) due to the variable of the educational qualification?"

The results indicated that there are apparent differences between the averages of the responses of the school principals in caring for talented students in Ajloun governorate according to the variable of the educational qualification, as the category (higher diploma and less) got the highest average of (3.45), and the category (M.A) came second with an average of (3.35) and the category (Ph.D.) reached (3.12). To determine whether the differences between the averages were statistically significant at the degree of significance  $(0.05 = \alpha)$ . One way ANOVA was applied, and the results showed the absence of statistically significant differences at  $(0.05 = \alpha)$  for the responses of the principals in the care of talented students in Ajloun governorate according to the variable of the educational qualification, based on the calculated value of F as it reached (0.291), and with a degree of significance (0.749), as well as the absence of statistically significant differences in all fields as calculated (F) values ranged between (1.589- 0.226) and at the level of significance between (0.214-0.798), and these results are consistent with (Juma'a, 2006) study, and (Balwani, 2008) study.

#### Acknowledgment

Involving government school principals in training courses in the field of Gifted, preparing a resource room for gifted students and providing the supplies needed for them a Providing a special education teacher to follow up on gifted students.

### Biodata of the Author



Alia Al-Oweidi, Associate Prof, She study on special education, especially gifted education. vice dean of faculty of education Affiliation: Special Education Department, The World Islamic and Education Sciences. E-mail: alia.oweidi@wise.edu.jo ORCID: 0000-0002-5204-5433 SCOPUS ID: 56533962300

Ali Freihat, Principle in ministry of education. Part time instructor in ajloun university, PhD in Special Education, Jordan. E-mail: alifreihat92@yahoo.com

#### References

- Al-Houry, G. (2015). The role of middle and high school principals in caring for gifted students from the viewpoint of teachers in Qatar, (unpublished Master Thesis), Middle East University: Amman, Jordan.
- Al-Kaabi, S. (2007). The role of principals of education schools in the United Arab Emirates in caring for the Gifted from the viewpoint of the principals themselves, (unpublished Master Thesis), Yarmouk University: Irbid, Jordan.
- Al-Khatib, M. (2011). Building a proposed strategy to develop the reality of educational services for gifted students in view of international standards, (unpublished doctoral thesis), Amman Arab University: Amman, Jordan
- Al-Momanim, H., & Al-Oweidi, A. (2020). The Psychometric Characteristics of the Renzulli Scale of Behavioral Characteristics (3rd Edition) in the Detection of Gifted Students in the Age Group (12-18) in Jordan. *Journal for the Education of Gifted Young Scientists*, 8(1), 105-132. http://dx.doi.org/10.17478/jegys.626513
- Al-Oweidi, A. (2019). The Impact Training of a Program on Improving the Cognitive Competencies of Teachers in Identifying Gifted Preschoolers. *Journal for the Education of Gifted Young Scientist*, 7(2), 363–372. http://dx.doi.org/10.17478/jegys.539724
- Al-Saadi, R. (2008). "The school's role in developing the talent of students from the viewpoint of principals of public schools in the Jenin Governorate." Research paper presented to the Sixth Arab Scientific Conference for Gifted People, Amman, (26-28) 2008.
- Al-Shahrani, F. (2003). The contributions of the school administration in discovering and caring for gifted students from the viewpoint of primary school principals and educational supervisors in Bisha Governorate (unpublished Master Thesis), Umm Al-Qura University: Mecca, Saudi Arabia.
- Al-Srour, N., & Al-Oweidi, A. (2013). The level of services provided to gifted students in regular schools. Journal of Educational Sciences, King Saud University, 25(2),303-326.
- Aslan, S., & Yukay-Yuksel, M. (2018). An investigation of the relationship between social behavior characteristics and selfperceptions of gifted children in primary school. *Journal for the Education of Gifted Young Scientists*, 6(1), 17-42. https://doi.org/10.17478/JEGYS.2018.71
- Al-Tal, S, Al-Batsh, M & Abu Zaina (2007). Research Methods for Research Design and Statistical Analysis. Dar Al Masirah: Amman
- Bailey, C. L. (2011). An examination of the relationships between ego development, Dabrowski's theory of positive disintegration, and the behavioral characteristics of gifted adolescents. *Gifted Child Quarterly*, 55(3), 208–222. https://doi.org/10.1177/0016986211412180
- Bekey, S. W., & Michael, W. B. (1987). The performance of gifted girls in upper elementary school grades on Piagetian tasks of concrete and formal operations. *Educational Research Quarterly*, 10(4), 2–9.
- Birlean, C., & Shore, B. M. (2018). Cognitive development of giftedness and talents: From theory to practice. In J. L. Roberts, T. F. Inman, & J. H. Robins (Eds.), Introduction to gifted education (pp. 95–118). Waco, TX: Prufrock Press.
- Clark, B. (2002). Growing up giftedness (6th Ed.). New York: Macmillan Publishing Company.
- Colangelo, N., & Assouline, S. G. (2000). Counseling gifted students. In K. A. Heller, F. J.
- Cross, J. R., & Cross, T. L. (2015). Clinical and mental health issues in counseling the gifted individual. Journal of Counseling & Development, 93(2), 163–172. https://doi.org/10.1002/j.1556-6676.2015.00192.x.
- Cross, T. L., Anderson, L., Mammadov, S., & Cross, J. R. (2017). Social and emotional development of students with gifts and talents. In J. L. Roberts, T. F. Inman, & J. H.
- Jarwan, F. (2016). Gifted and Talented. (7th ed), Amman: Al-Fikr Publishers.
- Juma, P. (2006). The role of the principal of the school in discovering and caring for talented students in government primary schools in Riyadh, (unpublished Master Thesis), King Saud University: Riyadh, Saudi Arabia.

- Jung, J. Y, & Worrell, F. C. (2017). School psychological practice with gifted students. In M. Thielking & M. Terjesen (Eds.), Handbook of Australian school psychology: Integrating international research, practice, and policy (pp. 575–593). Cham, Switzerland: Springer.
- Jung, J. Y. (2012). Giftedness as a developmental construct that leads to eminence as adults: Ideas and implications from an occupational/career decision-making perspective. *Gifted Child Quarterly*, 56(4), 189–193. https://doi.org/10.1177/0016986212456072

Kouzes, J., & Posner, B. (2002). The leadership challenge (3rd ed.). San Francisco, CA: Jossey-Bass.

- Lewis, E. & Milton, M. (2005). Attitudes of teachers before and after Professional Development. Australasian Journal of Gifted Education, 14(1), 5-14.
- Lewis, J. D., Cruzeiro, P., & Hall, C. (2007). Impact of two elementary school principals' leadership on gifted education in their buildings. *Gifted Child Today*, 30(2), 56–62.

Lunenburg, F. C., & Ornstein, A. C. (2004). Educational administration: Concepts and practices. Belmont, CA: Thomson.

- Macdonald, J (2014). Stakeholder or gatekeeper: the role of the principal in gifted education, Doctorate Thesis.
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). School leadership that works: From research to results. Aurora, CO: McREL.

Massad, M. (2002). Jordanian Experience in caring with Gifted Students, ministry of Education, www.moe.gov.jo.

McClain, M.-C., & Pfeifer, S. (2012). Identification of gifted students in the United States today: A look at state definitions, policies, and practices. *Journal of Applied School Psychology*, 28(1), 59–88. https://doi.org/10.1080/15377903.2012.643757.

Patterson, J. L., & Kelleher, P. (2005). Resilient school leaders: Strategies for turning adversity into achievement. Alexandria, VA: ASCD.

- Qatami, Y., Zouini, F., Qatmai, N., Abu Zaid, N., Zaza, H., Matar, J., Samawi, F., &Rababa, H. (2016). Methods and methods of detecting gifted and outstanding (1st ed.) Amman:Dar Wael for Publishing and Distribution.
- Reis, S. & Housand, A. (2007). Characteristics of Gifted and Talented Learners: Similarities and Differences A Cross Domains. In F. A. Karnes & K. R. Stephens (Eds). Achieving Excellence (pp. 52-81) New York, NY: Pearson, Merrill Prentice Hall.
- Renzulli, J. S. (2016). The three-ring conception of giftedness: A developmental model for promoting creative productivity. In S. M. Reis (Ed.), reflections on gifted education: Critical works by Joseph S. Renzulli and colleagues (pp. 55–90). Waco, TX: Prufrock Press.
- Robins, J. H., Coleman, L. J., Micko, K. J., & Cross, T. L. (2015). Twenty-five years of research on the lived experience of being gifted in school: Capturing the students' voices. *Journal for the Education of the Gifted*, 38(4), 358–376. https://doi.org/10.1177/0162353215607322
- Siegel, D., Moore, M., Mann, R. L., & Wilson, H. E. (2010). Factors that influence inservice and preservice teachers' nominations of students for gifted and talented programs. *Journal for the Education of the Gifted*, 33(3), 337-360.
- Tortop, H. S., & Dinçer, S. (2016). Opinions of Classroom Teachers Working with Gifted Students in Support Training Rooms. Journal of Gifted Education Research, 4(2), 11-28.