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The Role of Teachers and Coordinators of Gifted Students' in Developing their Students' Leadership Abilities in High Schools

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Abstract. This study seeks to explore the reality of the role of teachers and coordinators of gifted students in developing their leadership abilities in Al-Ahsa high schools from the perspective of teachers, coordinators, and students. The descriptive analytical method was used whereby two questionnaires were distributed to a random sample of 78 high school **gifted students** and 53 **teachers and coordinators** at Al-Ahsa governorate during the academic year 2020-2021. Statistical means, standard deviations, and an independent t-test were used for the analysis of the data. Findings show that the role of teachers and coordinators in developing gifted students' leadership abilities was at a high level from the teachers' and coordinators' perspectives. From students' perspective, it was high as well, however, with a lower average compared to that of teachers. There were statistically significant differences due to the gender variable in favour of male participants in the dimensions of technical and competitive leadership abilities. However, there were no statistically significant differences attributed to gender variables in human leadership and conceptual **leadership abilities** dimensions, nor in terms of the job title variable. Considering these findings, it is recommended the role of teachers and coordinators of gifted students is strengthened through specialized leadership training, and by giving more attention to the development of leadership abilities among females.

Keywords: teachers and coordinators; gifted students; leadership abilities; high school

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1. Introduction

One of the many aspects where growth and development have been globally witnessed is education which is responsible for developing individuals to be responsible members of the community. Education in this context denotes all the components of the educational system where gifted students and their teachers are regarded as the basis of this system and should be duly identified and supported.

Gifted individuals are considered to be the human capital that will support Saudi leadership in achieving their ambitious Vision 2030 and place Saudi Arabia among the advanced countries. For this reason, the Saudi government has been focused on providing comprehensive sponsorship programmes such as Misk 2030 Leaders' Program which was launched to incubate promising leaders. This program acknowledges the role played by future leaders who wish to develop and innovate and, therefore, achieve progress and the development of the country (Misk, 2022). This support keeps pace with the latest trends in gifted education to nurture giftedness, and further with the more recent support that has been geared towards developing transformational giftedness, i.e., talent investment for the development of human life and society (Dai, 2022; Reis & Renzulli, 2022; Subotnik et al., 2022).

Focusing on the talent development paradigm and the contributions of its theories, this development process is based on the dynamic interaction between many endogenous and exogenous factors. Internal factors are associated with individuals, including their different abilities such as leadership abilities, whereas the latter is associated with the environment; the most important of which is the educational environment, including teachers and educators as its most important components (Dai & Li, 2020; Gagne, 2021a, b; Gierczyk & Pfeiffer, 2021; Paik et al., 2018; Swanson et al., 2020). Recent studies are shifting towards talent development and exploring the aspects related to it. Therefore, examining the endogenous and exogenous factors in the development process is important to ensure the continuity of development and talent growth. Among the important factors are leadership abilities as an endogenous factor, and the role of teachers' support to gifted students as an exogenous factor. Reviewing the educational environment and regulations for gifted people, researchers can conclude that two roles are responsible for the development of gifted students in public schools: teachers and coordinators of gifted students. Having different roles to play in this process may lead to various impacts on students' leadership development. Thus, the current study attempts to explore the reality of the role of teachers and coordinators of gifted students in developing their student leadership abilities in high schools.

2. Literature Review

2.1 Leadership Abilities and Talent Development

Gagne's (2021a) differentiated model of giftedness and talent, and the evolving complexity theory (ECT) of Dai (2017, 2019) confirmed that the talent development of gifted students is connected to influential endogenous and exogenous factors, which support the transition and transformation of such

talents from aptitudes to excellence in various fields. For Dai (2017), the individual is a system, interacting with the surrounding environment with its diverse factors. These studies have concluded that endogenous factors such as individual abilities, skills, and personal traits, along with the environmental factors found in the field of education, especially school and teaching staff, interact to develop talents and nurture them to reach the maximum possible level (Dai & Li, 2020; Gierczyk & Pfeiffer, 2021).

Leadership development is one of the main objectives of educational services for gifted students – particularly in high schools – to prepare them to lead the future (Little & Kearney, 2021). It is also one of the important skills for gifted individuals to develop their talent and support the attainment of the expert level in their fields (Olszewski-Kubilius et al., 2021). In this respect, Supriyanto et al. (2020) view leadership development as a significant factor in guiding individuals and improving their behaviour. This is confirmed by Olszewski-Kubilius, et al. (2019), namely that individuals who are productive and privileged have more than just raw talents in the field or opportunities to develop their talents. They are distinguished by their abilities to lead and focus on the opportunities they are offered, and continue to succeed even when success standards are high.

Leadership development has long received the attention of talent researchers. Leadership from the point of view of gifted education, as stated by Marland in 1972 – when giftedness and talent were first defined by the United States Office of Education – is "a unique and independent form of giftedness" (Rogers, 2009, p. 633). These abilities have been highly emphasized in the standards of the National Association for Gifted Children (NAGC, 2019). The State of the States in Gifted Education 2018-2019 report of the mega project covering the United States of America showed interest in leadership talent; a total of 16 states have included leadership abilities in their definition of talent. It was also proposed as a solution to address the under-representation of special groups of talent, an accredited educational service for gifted students at the senior level of primary school. Some services were also suggested to develop leadership abilities (Rinn et al., 2020).

In education, Sisk and Rosselli (1987) designed the first leadership development model for gifted students. They adapted this model in 2010 to match the needs of gifted students to develop global leadership (Sisk, 2013). The development of these abilities has become a key part of some models such as the schoolwide enrichment model of Reis and Renzulli (2022). Moreover, Sternberg (2022) has also introduced the active concerned citizenship and ethical leadership (ACCEL) model, which aims to teach and evaluate active leadership that serves society. This model has been developed to teach students how to make a positive impact to make the world a better place.

Leadership abilities are important in all fields. Therefore, preparing students, planning, and implementing programmes to nurture abilities must be pursued and supported in order to enable students to make a difference in their societies. The process of developing the leadership abilities of gifted students is directly associated with the educational process. It is also linked to the tasks that enable

them to demonstrate their high leadership potential (Little & Kearney, 2021). Students work to exercise leadership abilities in a targeted manner by engaging in community-serving projects that address associated issues (Choi & Kaufman, 2021; Desmet, 2022; Lee et al., 2021). It is agreed agree that leadership, including its abilities for gifted students, such as the technical, human, cognitive and administrative abilities, are significant owing to their importance in formulating students' cognitive, psychological, and emotional personalities. It is also important to determine the level of these abilities and the students' needs based on age groups so that these abilities are nurtured appropriately to achieve future desired goals (Sulaiman, 2015).

3. Role of Teachers and Coordinators in the Development of Gifted Students' Leadership Abilities

Following the footsteps of developed countries, the Kingdom of Saudi Arabia has supported gifted students by providing them with various talent programmes, as well as providing and training competent teachers and coordinators to take care of these students (Ministry of Education, 2016). Among the roles of coordinators is to develop the abilities needed for gifted students' development, especially leadership abilities (Henderson & Jarvis, 2021). A study by Swanson et al. (2020) found that teachers' perceptions and practices toward students are an influential factor in the development of their talents. They also concluded that there was a positive impact of developing teachers professionally on providing appropriate educational opportunities for gifted students and their development.

Having surveyed the standards implemented by the Education and Training Evaluation Commission (ETEC) (2020) for teachers gifted students, and the standards of the National Association for Gifted Children (NAGC) (2019), three roles are found to be played by teachers and coordinators of gifted students, namely they discover and identify appropriate services, apply strategies that develop the leadership abilities of gifted students, and employ available technology such as websites and social media programmes.

The ETEC's standards (2020) indicate that they identify gifted students in all dimensions, including leadership abilities. According to the NAGC (2019) standards, teachers should involve gifted students in identifying their abilities, including leadership. They should also create a safe learning environment that promotes the development of leadership abilities. Therefore, teachers should have the characteristics and abilities which enable them to nurture this category properly (Hussein, 2017).

Reviewing the literature on the roles of teachers of gifted students and gifted students' leadership ability development, and based on the work of Buftean and Alkhawaldah (2016), Sheikh Jalil (2017), Aljumaili and Zu'bi (2018), teachers of gifted students are found to be responsible for the development of technical leadership abilities such as time management, meetings, planning, performance benchmarking and risk forecasting. In addition they promote human leadership ability development, such as forming appropriate task teams, identifying tasks and needs of individuals, investing in their abilities and managing

communication and interaction among them. They also foster conceptual leadership ability development, such as reflection, deduction and thinking in different, independent, and creative ways and the producing, organizing, and developing of new ideas. Finally, teachers engender competitive leadership ability development such as achieving goals efficiently, considering quality standards, performance evaluation, developing special skills, and benefiting from and simulating successful experiences.

According to this study, these four roles and the teachers' own leadership abilities can shape the leadership abilities needed for gifted students and make those students with leadership personalities stand out. This study also hypothesizes that supporting and developing these abilities will significantly affect gifted students' future. On reviewing studies on leadership and development among gifted students, a significant local study was identified which was conducted by Al-Bishri and Al-Harsh (2020) on gifted students in both intermediate and high schools in Riyadh. Moreover, Elshohry (2019) carried out a study on a sample of gifted students in intermediate schools in Tabuk. Both studies found a high level of leadership skills among gifted students.

Globally, Herber (2019) conducted a 15-year longitudinal case study on an individual with leadership talent. The results showed a range of endogenous and exogenous factors critical to the development of this talent. Among the endogenous factors are motivation, emotional and practical intelligence. External factors include environmental support and family where both endogenous and exogenous factors contributed to the subject's psychological and social development. Meyer and Rinn (2021) reviewed 38 qualitative, quantitative, and mixed-method studies on leadership and leadership talent development to conclude that the definition of leadership depends on the developmental stage. Discrepancies in definition are an influential factor in nurturing these talents and what aspects on which to focus. A set of endogenous and exogenous factors in leadership talent development was proposed by Meyer and Rinn (2021) to be paid due attention by the caregivers, including the social and cultural context of the teachers, and the school environment.

4. Study Problem

After reviewing literature and previous studies on the development of leadership skills among gifted students, it was found that leadership development and its associated variables are among the topics covered by gifted students' development. This can be conducted either directly or indirectly by including some of these skills in talent programmes. Notwithstanding this trend, studies that investigated leadership development in high schools are scarce (Little & Kearney, 2021). In addition, Sternberg (2022) stated that leadership abilities are not taught directly in schools, whether for gifted students or others.

A survey conducted by the Gulf Arab States Educational Research Center (GASERC) (2020) on the main trends and international and local practices in the Gulf Countries reveals that educational programmes and services for gifted students are merely focusing on educational enrichment, thinking skills

development and some other skills, but are not explicitly focused on leadership ability development.

A review of local gifted education programmes has also revealed that leadership abilities are not explicitly focused on in any of these programmes (Department of Planning and Development, 2020; Ministry of Education, 2016). In addition, local studies such as those of Al-Bishri and Al-Harsh (2020) and Elshohry (2019) focused on measuring the level of various leadership aspects of gifted students such as the skills and traits at different school stages. As far as the literature review is concerned, this study was triggered by the following:

- Lack of studies aimed at measuring the leadership abilities of high school gifted students as an initial stage in the preparation of future leaders;
- Lack of studies on the teachers and coordinators' roles in the development of these skills despite their importance as exogenous factors, and their abilities to predict the future and contribute to the preparation of young leaders via knowledge and competence; and
- Fieldwork conducted in the Ministry of Education which proved that gifted students require nurturing of their leadership abilities to achieve the highest levels in their future.
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4.1 Study Questions

Having the consideration of the aim of the study stated above, this study endeavours to answer the following two questions:

1. What is the reality of the role of teachers and coordinators in the development of gifted students' leadership abilities in Al-Ahsa high schools from their perspective?
2. Are there statistically significant differences at the level of significance (α=0.05) in the reality of the role of teachers and coordinators in developing the leadership abilities of gifted students from teachers and coordinators' perspectives based on gender (male - female) and job title (teacher - coordinator)?

5. Methodology

To achieve the objectives and answer the questions of the study, the quantitative descriptive method has been employed which is one of the forms of organized scientific analysis and interpretation to describe a specific phenomenon or problem by collecting, classifying, and analysing standardized data. It is suitable for describing the reality of the topic being investigated and is related to defining the roles of teachers and coordinators of gifted students in developing the leadership abilities of their students in secondary schools in fields of study. The data were subsequently analysed, and the findings deduced.

5.1 Sample of the Study

The sample consisted of 78 gifted students: 37 males and 41 females, all students of the same educational level, as well as 53 teachers and 28 coordinators, of whom 40 were males and 13 females, based on the statistics of the study population (Department of Planning and Development, 2020). All of them supervise and teach gifted students in general education schools.

6. Instrumentation and Procedures

6.1 Instruments

The self-report questionnaire (prepared by the first author of this research) was aimed to measure the level of teachers' and coordinators' practice of leadership ability development processes of gifted students in high school from the students' perspective. The instrument consisted of four dimensions that reflect the content of the role of teachers and coordinators as described in Table 1. It was designed in the form of two questionnaires: one for gifted students and the other for their teachers and coordinators.

Table 1. Dimensions of Teachers and Coordinators in Leadership Ability Development

Dimension	Description	Number of Items
Technical leadership abilities	It refers to a set of organizational capabilities such as time and meeting management, preparing plans, setting performance standards, and risk forecasting.	**20**
Human leadership abilities	It refers to a set of personal and social skills, such as forming the appropriate work team, defining tasks and needs of individuals and investing in their abilities, and managing the communication process and interaction among them.	**15**
Conceptual leadership abilities	It refers to a set of mental abilities such as contemplation; deduction; thinking in different, independent, and creative ways; and producing, organizing, and developing new ideas.	**13**
Competitive leadership abilities	It refers to a set of practical capabilities such as achieving goals efficiently, considering quality standards, evaluating performance, developing special skills, and benefiting from and simulating successful experiences.	**14**
Total		**62**

6.2 Instrument Design

The following steps were followed to build the instrument:

First: The literature and metrics about leadership abilities were reviewed as well as ways to develop them. Sulaiman (2015), Buftean and Alkhawaldah (2016), Aljumaili and Zu'bi (2018) and Farwanah and Alhelo (2014) were used as key references to collect the most important dimensions and key items that fall within each dimension.

Second: The instrument was formulated in its first draft in two questionnaires that were validated by nine (9) validators. In its final draft, it consisted of 62 items to be answered on a five-point Likert scale as follows: Strongly agree = 5; Agree = 4; Not Sure = 3; Disagree = 2; and Strongly disagree = 1. While all items are positive, high-grade results from the two questionnaires indicate a high level of the role of teachers and coordinators of gifted students in leadership ability development in a high schools.

Third: Reliability and internal validity: To verify the endogenous consistency of the questionnaires, Pearson correlation coefficient was calculated to determine the degree of association of each item to the overall degree of dimension, and the degree of the dimension to the scale.

Table 2. Pearson Correlation Coefficients between Items of Dimensions and the Total Score of Gifted Students'

Pearson Correlation Coefficients between items of dimensions and the total score of gifted students' questionnaire						
Dimension	No.	Dimension correlation coefficient	No.	Dimension correlation coefficient	No.	Dimension correlation coefficient
Technical leadership abilities	1	0.810**	8	0.816**	15	0.859**
	2	0.679**	9	0.799**	16	0.792**
	3	0.713**	10	0.777**	17	0.707**
	4	0.753**	11	0.828**	18	0.874**
	5	0.702**	12	0.751**	19	0.825**
	6	0.561**	13	0.839**	20	0.734**
	7	0.667**	14	0.793**		
Human leadership abilities	1	0.614**	6	0.872**	11	0.724**
	2	0.836**	7	0.819**	12	0.769**
	3	0.749**	8	0.789**	13	0.759**
	4	0.768**	9	0.831**	14	0.786**
	5	0.740**	10	0.891**	15	0.828**
Conceptual leadership abilities	1	0.868**	6	0.827**	11	0.891**
	2	0.843**	7	0.762**	12	0.850**
	3	0.928**	8	0.885**	13	0.889**
	4	0.824**	9	0.751**		
	5	0.864**	10	0.799**		
	1	0.845**	6	0.888**	11	0.811**

Competitive leadership abilities	2	0.828**	7	0.813**	12	0.885**
	3	0.887**	8	0.861**	13	0.854**
	4	0.837**	9	0.785**	14	0.814**
	5	0.813**	10	0.872**		

**Statistically significant at level 0.01 or less

Results depicted in Table 2 show a positive correlation coefficient for each item with its dimension, and that it is statistically significant at the significance level (0.01) or less. This value indicates the validity of the endogenous consistency of the questionnaire and its reliability.

Table 3. Pearson Correlation Coefficients between Items' Dimensions and the Total Score of Gifted Students' Teachers and Coordinators

Pearson Correlation Coefficients between Items' dimensions and the total score of gifted students' teachers and coordinators' questionnaire						
Dimension	No.	Dimension correlation coefficient	No.	Dimension correlation coefficient	No.	Dimension correlation coefficient
Technical leadership abilities	1	0.690**	8	0.541**	15	0.785**
	2	0.771**	9	0.668**	16	0.814**
	3	0.695**	10	0.620**	17	0.875**
	4	0.826**	11	0.839**	18	0.800**
	5	0.754**	12	0.739**	19	0.869**
	6	0.754**	13	0.768**	20	0.853**
	7	0.761**	14	0.698**		
Human leadership abilities	1	0.569**	6	0.862**	11	0.812**
	2	0.772**	7	0.861**	12	0.598**
	3	0.788**	8	0.828**	13	0.745**
	4	0.710**	9	0.806**	14	0.724**
	5	0.858**	10	0.813**	15	0.760**
Conceptual leadership abilities	1	0.817**	6	0.739**	11	0.786**
	2	0.724**	7	0.724**	12	0.800**
	3	0.772**	8	0.776**	13	0.679**
	4	0.769**	9	0.614**		
	5	0.546**	10	0.836**		
Competitive leadership abilities	1	0.740**	6	0.657**	11	0.773**
	2	0.767**	7	0.548**	12	0.852**
	3	0.839**	8	0.674**	13	0.735**
	4	0.827**	9	0.659**	14	0.851**
	5	0.751**	10	0.771**		

**Statistically significant at level (0.01) or less

Results depicted in Table 3 indicate a positive correlation coefficient for each phrase with its dimension, and that it is statistically significant at the significance level (0.01) or less. This value proves the endogenous consistency of the questionnaire, and validity.

6.3 Gifted Students' Questionnaire

Table 4. Cronbach's Alpha Reliability Test of Gifted Students' Questionnaire

Dimension	Number of Items	Cronbach's Alpha
Technical leadership abilities	20	0.962
Human leadership abilities	15	0.955
Conceptual leadership abilities	13	0.965
Competitive leadership abilities	14	0.968
Total	62	0.988

Table (4) illustrates that the result of Cronbach's alpha reliability measurement is high at (0.988) which indicates that the tool has a high degree of reliability.

6.4 Teachers' and Coordinators' Questionnaire

Table 5. Cronbach's Alpha Reliability Test of Teachers' and Coordinators' Questionnaire

Dimension	**Number of Items**	**Cronbach's Alpha**
Technical leadership abilities	20	0.955
Human leadership abilities	15	0.948
Conceptual leadership abilities	13	0.896
Competitive leadership abilities	14	0.923
Total	**62**	**0.975**

The result of Cronbach's alpha reliability measurement is high at (0.975) which indicates a high degree of reliability.

7. Data Analysis

7.1 Findings and Discussion

Results Related to the First Question: What is the reality of the role of teachers and coordinators in the development of gifted students' leadership abilities in Al-Ahsa high schools from their perspective?

To determine the reality of the role of teachers and coordinators of gifted students in developing leadership abilities at high schools from the perspective of teachers, coordinators, and students in Al-Ahsa, means and standard deviations of the four dimensions of the questionnaire have been calculated. Table 6 shows the results of this question.

Table 6. The Reality of the Role of Teachers and Coordinators of Gifted Students in developing Leadership Abilities at high schools from the Perspective of Teachers

Dimension	Teachers & coordinator		Students	
	Means	Std. Deviation	Means	Std. Deviation
Technical leadership abilities	4.15	0.619	3.87	0.731
Human leadership abilities	4.45	0.571	4.13	0.697

Conceptual leadership abilities	4.44	0.454	4.15	0.747
Competitive leadership abilities	4.38	0.528	4.09	0.776
Total	4.34	0.480	4.04	0.701

Table 6 shows that all means values of approval by teachers and coordinators regarding this question were high with a total average of means (4.34). This means that they strongly agree about their role in developing the leadership abilities of gifted students. In addition, the total average calculated for the responses of the gifted students was (4.04) which indicates that they agree with the reality of the role of teachers and coordinators in developing their leadership abilities. This result is consistent with the result of the study by Al-Bushiri and Al-Harsh (2020), as well as with the result of the study by Hussein (2017), which showed the agreement of the study sample on the teacher's positive impact on developing their leadership abilities.

Table 6 also shows that the total score of means of teachers and coordinators of gifted students' responses to the four dimensions of the instrument was (4.15) to the first dimension, i.e. "Agree", (4.45) to the second, i.e. "Strongly agree", (4.44) to the third, i.e. "Strongly agree" and (4.38) to the fourth, i.e. "Strongly agree". On the other hand, the mean scores for gifted students were (3.87), i.e. "Agree" for the first dimension (technical leadership abilities); (4.13) for the second dimension (human leadership abilities) i.e. "Agree"; (4.15) for the third dimension (conceptual leadership abilities), i.e. "Agree"; and (4.09) for the fourth dimension (competitive leadership abilities), i.e. "Agree". Means of gifted students' responses opinions obtained were Agree.

The results of this question are partially similar to the results of the study by Buftean and Alkhawaldah (2016) regarding female physical education teachers who have a significant role to play in enhancing female students' leadership abilities from the students' perspective. In addition, the results also are compatible with the findings of Al-Yami (2013) which found a significant role of a teacher in leadership personality development among female primary students from the teachers' perspective.

The previous results revealed that both teachers and coordinators of gifted students, as well as the students themselves agree on the level of the first and fourth dimensions. However, students have given more value to the third dimension, including conceptual leadership abilities, than to the second dimension, namely human leadership abilities. However, the responses of teachers and coordinators were the opposite. This can be attributed to the differing views between students and their teachers regarding the skills that must be developed to promote leadership abilities. It has been concluded by Lee et al. (2021) that gifted students have proposed the development of programmes and activities that would stimulate their problem-solving, logical, and critical thinking for leadership development. Therefore, this is consistent with the students' view in the current study giving higher value to the conceptual abilities that focus on thinking processes. In addition, these results are also aligned with the ETEC (2020), that teachers have noted the importance of developing non-cognitive

abilities for communication and aligning with conflict management and group association to develop the leadership abilities of gifted students. This perspective is also consistent with the teachers and coordinators in the current study who have given higher value to human skills that focus on personal and social aspects.

These results generally agree with several studies such as those of Dai and Li (2020) and Gierczyk and Pfeiffer (2021) on the role of teachers and the educational environment as effective exogenous factors of talent development in different fields.

Results Related to the Second Question: Are there statistically significant differences at the level of significance (α=0.05) in the reality of the role of teachers and coordinators in developing the leadership abilities of gifted students from teachers and coordinators' perspectives based on teachers' gender (male - female), and job title (teacher - coordinator)?

7.2 First: Differences based on Gender

The independent sample T-test was used in the analysis to determine whether there were statistically significant differences in the responses among participants due to the gender variable as well as clarifying the significance of the differences. Results are shown in Table 7:

Table 7. Results of Independent Sample T-test Differences according to Teachers' Gender

Dimension	Gender	N	Means	Std. Deviation	T-Test Value	Sig.
Technical leadership abilities	M	40	4.25	0.568	2.072	0.043*
	F	13	3.85	0.696		
Human leadership abilities	M	40	4.53	0.523	1.651	0.105
	F	13	4.23	0.671		
Conceptual leadership abilities	M	40	4.49	0.461	1.466	0.149
	F	13	4.28	0.408		
Competitive leadership abilities	M	40	4.48	0.477	2.375	0.021*
	F	13	4.09	0.589		
Total	M	40	4.42	0.458	2.238	0.030*
	F	13	4.09	0.476		

**Statistically significant at level (0.05) or less

Table 7 illustrates that there are statistically significant differences at the level of significance (0.05) and less in the responses of study sample members based on gender in the reality of the role of teachers and coordinators of gifted students in developing the leadership abilities in favour of males (4.42). This is clearly shown in the first dimension (technical leadership abilities) and the fourth dimension (competitive leadership abilities), where no statistically significant differences among the sample members were seen in the second dimension (human leadership abilities), or the third dimension (conceptual leadership abilities). After reviewing gifted students' programme plans in Al-Ahsa as well as information obtained from insiders in these programmes, it was concluded that these results could be attributed to some school initiatives to develop gifted students' leadership abilities. On the other hand, the development of leadership abilities of female high school gifted students was included in mentoring programmes directed to the development of a range of different skills in classes of female gifted students only. This could positively have affected the level of male teachers and coordinators' roles in leadership development compared to those of females.

This conclusion may indicate that teachers and coordinators of gifted male students practise field leadership more than female teachers do. Moreover, they are aware that practising leadership in the field is important, and that competition among male schools is often accompanied by district-level media publicity. Thus, it leads male teachers to enhance the competitive leadership abilities of gifted students in these schools. Male teachers and coordinators exercise more leadership for gifted students in this field compared to female teachers. This is common in the Arab culture, where men have more authority and leadership opportunities than women do. This was reflected in educational practices within the school, and this was confirmed by many studies, for examples, that of Al-Badarin and Al-Qasimah (2013). It is recommended that the leadership roles of female teachers should be strengthened and reflected in their leadership practices. These experiences should then subsequently be transferred to female students.

7.3 Second: Differences based on Job Title

The independent sample T-test was used in the analysis to determine whether there were statistically significant differences in the responses among participants based on job titles as illustrated in Table 8:

Table 8. Results of Independent Sample T-test Differences based on Job Titles

Dimension	Job title	N	Means	Std. Deviation	T-Value	Sig.
Technical leadership abilities	Teacher	28	4.23	0.469	0.974	0.335
	Coordinator	25	4.07	0.754		
Human leadership abilities	Teacher	28	4.38	0.583	-1.020	0.313
	Coordinator	25	4.54	0.556		

Conceptual leadership abilities	Teacher	28	4.47	0.459	0.503	0.617
	Coordinator	25	4.41	0.455		
Competitive leadership abilities	Teacher	28	4.38	0.481	-0.038	0.970
	Coordinator	25	4.39	0.586		
Total	Teacher	28	4.35	0.428	0.202	0.841
	Coordinator	25	4.32	0.541		

**Statistically significant at level (0.05) or less

The results in Table 8 show that there are no statistically significant differences at the level of significance (0.05) and less in the responses of the participants based on the job title variable on the reality of the role of gifted students' teachers and coordinators in developing leadership abilities. Although there are differences in their roles, they overlap in aspects such as the introduction and preparation of enriching programmes (General Administration for Gifted Students, 2016). This may explain why there are not statistical differences between teachers and coordinators in the development of leadership abilities among the study sample participants.

8. Implications and Limitations

Considering the results, the importance is emphasised of enhancing the role of teachers and coordinators of gifted students as influential exogenous factors that support leadership ability development through professional development and specialized leadership training. It is also recommended that leadership development programmes should be designed, especially for students in high schools where these programmes are crucial for building the capacity of students who are destined to lead the future of the country. More attention should be given to female gifted students to ensure that their leadership abilities are developed at a higher level. Research in leadership abilities is significantly crucial for the impact it makes on talent development. Differences between these abilities are attributed to differences in talent and age groups.

It should also be noted that this study was conducted on gifted high school students in Al-Ahsa and their teachers and coordinators, where these programmes have specific tasks for teachers and coordinators. It is worth noting that this sample is under the management of the General Administration for Gifted Students. Thus, this sample has its own circumstances that may or may not apply to other gifted students or their teachers and coordinators at other grades and in other regions, making the results of the current study limited to this sample's circumstances.

9. Closing Remark

Students' leadership abilities are extremely important, whether for their future life or for their contribution to accelerating the growth trajectory in their home

countries. The philosophy of this study stemmed from the fact that today's students are the leaders of tomorrow. Their energies and leadership traits must be prioritised and refined through our deep belief in the necessity of training students and refining their talents, as well as training them in leadership at school to encourage and motivate them and their colleagues towards achieving the desired goals. This necessitates important and major roles for the teachers in charge of their education, which is represented by defining the appropriate leadership roles for each student and the tasks related to each role as well as training the nominated students on leadership tasks under the supervision of the designated person. It also requires the gifted students' interest in the tasks assigned to them as well as their commitment to enhance their skills by practising these both in and beyond the school. The study suggests further studies concerned with the roles that students' parents can play in enhancing the leadership capabilities of their children.

Ethical Statement

The researchers confirm that they have obtained scientific research ethics approval and have complied with its standards in this study. The idea for and objectives of the study were presented to the sample before conducting the study, and confidentiality and anonymity have been assured.

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