



RESEARCH ARTICLE

Innovative Leadership among Public School Principals in Irbid Governorate: Teachers' Perspective

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ARTICLE INFO	ABSTRACT
Received: Apr 24, 2024	<p>This article identifies the degree of innovative leadership practice in the Irbid Governorate among the principals from the viewpoint of teachers according to gender, academic qualifications, and number of years of experience. The research methodology involves using the descriptive survey approach. The research sample consists of a simple and random sample of (344) male and female teachers. The research instrument is a 31-item questionnaire developed to achieve the research objectives. The findings indicate that the degree of school principals' practice of innovative leadership from the perspective of teachers in Irbid Governorate was medium. The results show statistically significant differences between the degrees of practicing innovative leadership among secondary school principals due to the gender variable favoring females. The results also demonstrate no statistically significant differences due to the variables of number of years of experience and academic qualification. Given the previous results, this article recommends conducting more studies on innovative leadership among school principals in academic communities in other areas in the Hashemite Kingdom of Jordan and linking it to variables such as the quality of job creativity and holding training courses for managers on innovative leadership style.</p>
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INTRODUCTION

Development in education-based institutions is established on administrative and technical activities in the educational field. Development is also represented in educational institutions in various fields in order to keep pace with technological developments to prepare managers and provide them with the leadership skills necessary to face technological, social and cultural challenges, as these challenges require confrontation through distinguished administrative performance. The world is witnessing major changes that have had negative effects on educational institutions. Due to these changes, it is necessary to apply the best modern leadership methods in order to confront developments in all areas of life.

The education-based systems of the twenty-first century no longer focus solely on building a person with deep knowledge in a specific field of knowledge, as much as they focus on raising a learnable person. There is a need for innovative education that focuses on modeling behavior as much as it focuses on evoking and arousing the characteristics of learners through thinking processes and formulating challenges that place the learner in a position that urges him to practice mental trial processes that motivate him to analyze and develop his ideas, values, and perceptions, and then choose the appropriate alternative and wise decision.

Regarding the importance and need for secondary education for innovative leadership that contributes to creating an organizational climate that encourages innovative work, modern administrative methods must be followed that emphasize motivating employees, providing them with the opportunity to participate in decision-making, and satisfying their psychological and social needs. As a result, these administrative methods can lead to the discovery of their energies, talents and innovations, leading to refining students' skills and abilities and directing them to excellence and creativity to create a creative school environment that contributes to the development of the individual, society and workers (Al-Sulami, 2012).

Concerning the innovative manager, he is sophisticated and continuous, and his thinking does not stop at a certain limit, but rather every idea he proposes leads to another idea. The innovative manager is distinguished from others by some personal qualities, such as self-confidence, love of working alone, not being bound by teamwork, taking risks, and working in ambiguous circumstances. He is also a peaceful person who does not give up or submit easily and insists on finding solutions to the problems he faces (Qandil, 2010). The innovative leader is not afraid to face problems and difficulties because he knows that he is able to overcome them. A work environment whose leader is an innovator is a work environment in which respect, cooperation, and understanding prevail, and all employees in it are able to confront any emergency with ease, as the innovative educational leader reflects his qualities and abilities on the environment he is responsible for and supports (Ayyad, 2019).

Innovative leadership is concerned with a set of leadership behaviors necessary to facilitate innovation and obtain better innovative performance at the teacher level, as there must be a specific leadership behavior to drive innovation among secondary school employees (Zuraik, 2016). Innovation leaders need to use a different set of strategies to develop the skill sets necessary for the innovation process, allocating resources, establishing processes, creating effective learning environments, being open to external ecosystems, accepting failure as part of the learning process and promoting progress (Altarawneh & Al-Ghammaz, 2023; Morris et al., 2010).

Notably, administrative creativity is related to innovative features in terms of their availability in educational institutions, in addition to working with innovative features, which reflects positively on the educational process and its outcomes. The administrative challenges facing educational leaders center on the absence of transparency, flexibility, and excellence. Therefore, the concept of innovation must keep pace with scientific and technological development, as employing innovative features has great effectiveness in spreading functional creativity, as indicated by (Al-Kassab, 2017). Al-Jamal (2005) explained that the attitudes of educational leaders towards leadership and innovation stem from their essential and defined role in management and leadership to develop the educational process.

Innovative leadership is one of the basic pillars in schools, as it is a global goal in itself and a strong indicator of achieving its requirements. Innovative leadership gives the working team of teachers more freedom in developing school work methods and strategies and how to perform job tasks. It also gives the organizational structure a kind of flexibility that helps in dealing with emergency situations. Innovative leadership also allows schools to develop the educational process and get rid of routine procedures and traditional tasks that prevent teachers from administrative innovation and

cause delays in the implementation of study plans. Innovative leadership also provides educational value, contributes to improving the quality of the educational system, and the use of knowledge, information and communication technology, which supports the process of change and development that education should contribute to producing in order to adapt to societal needs (Harzallah, 2015).

Innovative leadership helps achieve growth and progress in various fields. Selecting leaders who encourage innovation contributes to motivating employees and students to work honestly and sincerely in their work, and achieves job satisfaction between them and their managers. A leader with innovative capabilities contributes to directing education, caring for students and helping them to be able to fulfill educational requirements, combining educational leadership qualities, and bearing responsibility for making decisions that positively affect the overall outcomes of educational institutions (Al-Hajjaj, 2019).

Innovative leadership is what contributes to the production of new ideas or the development of new theory or methods of work that lead to the application of technology and making appropriate changes (Abbas, 2018). It is a leadership style characterized by achieving mastery and innovation in the organization's business results. At its core, it relies on innovative insight as well as innovative philosophy in policies, strategies, and methods, to provide everything that is new and positive (Chia & Yang, 2012). Innovative leadership is defined as administrative, technical, and conceptual practices carried out by leaders to encourage workers to achieve set goals, in addition to supporting them in solving problems in creative and innovative ways (Al-Jarayda & Al-Jhouri, 2014).

Innovative leadership is the practical practice of new ideas in flexible ways that aim to increase the effectiveness of current work methods in achieving the organization's goals (Abu Ajwa, 2018). It is moving out of the circle of thinking into the realm of application and implementation of all solutions in an innovative and creative way that is out of the ordinary in order to achieve the set goals (Alim, 2018). Innovative leadership is also the ability of school principals to produce unusual, creative, and motivational ideas for individuals working in the school by solving problems and working to innovate and change new ideas with effective and conscious leadership (Al-Hajjaj, 2019).

It is a type of leadership in which the leader is distinguished by the ability to present and implement new ideas, products or practices at work, whether he discovers himself or reaches them through employees. Through presenting and implementing these ideas, he seeks to achieve prosperity and distinction for the organization and create faster and greater value compared to competitors (Al-Zanoun & Mazhar, 2019). It is defined as a type of leadership that promotes innovation practices at the administrative and operational levels and achieves goals in innovative ways (Ariratana, et al., 2011).

To become an innovative leader, an innovative leader must possess a clear, specific future vision. He is always in touch with the future, and this gives him latent energy that he benefits from in managing, directing, and developing innovation processes in his school. He also instills confidence in others by practicing creativity and innovation on a broader scale and encourages creative thinking and harmony in implementing innovative ideas. He also recognizes the individual differences of teachers, enhances strengths, addresses weaknesses, encourages teachers who are characterized by initiative and innovation and helps in decision-making, is characterized by presenting innovative ideas, contributes to finding innovative solutions to problems and pressures during work, raises the morale of workers and increases their self-confidence. With this detailed introduction associated with the innovative leadership, the related literature review is given in the subsequent section.

LITERATURE REVIEW

Research has documented the innovative leadership and its key role in the managers' and employees' performance. In a study conducted in Indonesia, Soemartono (2014) reconstructed educational policies in Bali and identified best practices in creative and innovative educational leadership using practical research. It also examined the role of innovative leadership in developing the quality of education and the extent of its participation in supporting society and the services provided by the state in the field of education. The findings indicated the importance of innovative leadership in improving community participation in supporting educational development programs.

From a different lens, Al-Shahrani (2017) investigated the degree of innovative leadership practice among academic leaders at the University of Bisha in the Kingdom of Saudi Arabia from the viewpoint of faculty members. The results showed that the degree of practicing innovative leadership among academic leaders, with its dimensions of perseverance and determination, personal initiatives, new ideas, and dealing with problems was medium. Also, Ghoneim (2018) developed a proposed vision for developing the performance of principals in UNRWA schools in Palestine in light of innovative leadership. The findings indicated that the overall score for the performance of principals and assistants at UNRWA in light of innovative leadership and its dimensions on innovative planning, communication, innovative communication, solving problems in an innovative way, and making decisions in an innovative way is significant.

Moreover, Al-Juman and Matar (2018) reported on detecting the innovative traits of counselors from the point of view of school principals by constructing a scale of innovative traits. The results showed that male and female guides possess innovative traits, as well as the absence of statistically significant differences between males and females in innovative traits. Al-Jarbini (2018) identified the degree of innovative leadership practice among educational leaders and its relationship to the effectiveness of decision-making from the point of view of college deans and academic department heads in Palestinian universities. The results indicated a significant degree of response in the degree of management's practice of innovative leadership with employees, work environment, and innovative behavior. The findings also showed a positive correlation between the degree of innovative leadership practice and the effectiveness of decision-making.

On the other hand, Al-Bana (2020) identified the degree of practicing innovative leadership among Wadi Al-Seer district school principals and its relationship to the quality of school performance. The findings showed no statistically significant differences in the study sample's responses of practicing innovative leadership among Wadi Al-Seer district school principals at the Wadi Al-Seer district practiced innovative leadership attributable to the variables of gender, academic qualification, and experience. There are also statistically significant differences in the level of quality of school performance of Wadi Al-Seer district school principals due to "gender" variables. Also, there are also no statistically significant differences in the level of quality of school performance of Wadi Al-Seer district school principals due to the variables "academic qualification, number of years of experience". The results also showed a statistically significant correlation between innovative leadership in all its fields and the quality of school performance.

Likewise, Al-Tarawneh (2022) identified the level of innovative leadership among Arabic language teachers in the Southern Mazar District from their point of view. The results showed that the degree of innovative leadership practice among Arabic language teachers in the Southern Mazar District was medium. Also, Abu Trieh (2022) identified the degree to which principals of basic schools in Zarqa First Education practice innovative leadership, and its relationship to improving the performance of male and female teachers. The results indicated that the overall score for innovative leadership and improving the performance of male and female teachers was high. The results also showed no statistically significant differences in the sample members' answers about the degree of practicing innovative leadership due to the variables "gender, specialization, academic qualification, and number of years of experience.

On the other hand, Abu Trieh (2022) found no statistically significant differences in the answers of the sample members regarding the degree of improvement in the performance of male and female teachers due to the variables “gender, specialization, academic qualification, and number of years of experience”. The results also showed a positive correlation between practicing innovative leadership and improving teachers’ performance. With this in mind, an analysis of the previous studies shows that each study has its own results depending on the study objectives, study questions, and research problems. The current study is distinguished from previous studies in that it addressed the research area of innovative leadership among secondary school principals in the Irbid Governorate from the teachers’ point of view. More importantly, it also targeted the category of male and female teachers in Irbid Governorate, and this is what distinguishes this study. Accordingly, given the previous literature review, the research problem is offered in the third section.

Research Problem

Innovative leadership requires reliance on modern methods that are more flexible, more effective, more motivating, and have a highly competitive creative spirit among teachers in any educational institution. It also has the ability to build a network of contact and communication between all employees of the educational institution using modern means of communication, and the participation of employees in achieving goals with high efficiency (Salem, 2018). Decision making is one of the most important roles of innovative leadership. It is a basic process in educational institutions and is considered a fundamental focus of the activities of managers. The principal makes decisions related to leadership and innovation functions and encourages workers and teachers to take the initiative in the process of wise decision-making characterized by strength and boldness after studying all possible possibilities for the decision-making process and then choosing the best alternative and the most appropriate decision to solve any problem that schools may be exposed to.

The innovative leadership style is a distinct style used to change the current situation and reach goals in an ideal way through its distinct dimensions. Innovative leadership works to develop the communication process between employees and leaders so that they deal with a collective cooperation method to obtain their trust and cooperation and ensure their loyalty, as well as their feeling of stability and continuity in work, which leads to generating the incentive to invest their latent innovative energies. The entrepreneurial dimension is the process of realizing the importance of achieving leadership in the school and its ability to achieve leadership through innovation. Therefore, the school works to create a stimulating climate for employees’ initiatives by providing the necessary means to achieve the desired goals (Mohsen, 2018).

The importance of innovative leadership is highlighted in developing the spirit of creativity in schools and work teams to increase opportunities for creative initiatives and reaching goals in unusual ways that rely on knowledge and good implementation. Innovative leaders are distinguished by their awareness that the innovation process is the best way to grow, overcome difficulties, and invest in opportunities (Ghoneim, 2018). At the educational level, all schools seek to improve the performance of male and female teachers to keep pace with these challenges and changes in order to be able to adapt to future conditions. This requires conscious, wise, innovative and creative leadership, as traditional leadership styles are no longer able to adapt to those conditions (Al-Dweik, 2020; Kanval et al., 2024).

Achieving innovative leadership falls on the responsibility of academic leaders, as the leader must be innovative, characterized by perseverance, as he must realize the importance of innovation in work and look at everything that is new. The leader shall also be interested in new methods of thinking, work to employ them in the institution so that he can raise the productive competencies of his employees, including administrators and faculty members, and stimulate ideas, avoid problems, and manage crises so that he can keep pace with development and move with it (Al-Shahrani, 2017; Rashid et al., 2023). Due to the lack of studies exploring the innovative leadership of principals and

the role that the principal plays in highlighting this phenomenon that is considered one of the administrative problems, which in turn leads to obtaining negative learning outcomes and not achieving the school's goals, the research problem is reflected in answering the following two research questions:

1. What is the degree of innovative leadership practice among public school principals in Irbid Governorate from the teachers' perspective?
2. Are there statistically significant differences at the significance level ($0.05 \geq \alpha$) between the responses of the research sample participants in their responses of the degree of innovative leadership practice among public school principals in Irbid Governorate according to the variables "gender, academic qualification, number of years of experience?"

Research Significance

The significance of the research is reflected in addressing an important topic of innovative leadership that is directly related to the educational domain. The theoretical significance is drawn from the importance of the changes included in the research on innovative leadership, especially the vitality and novelty of the topic of innovative leadership, its dimensions, and its importance in developing leadership methods. The theoretical importance also lies in identifying innovative leadership among public school principals in the Irbid Governorate and its importance in developing leadership methods that will contribute to developing and improving innovative leadership among school principals.

The practical importance, however, is shown in providing educational officials with a clear picture of the innovative leadership of school principals to take appropriate action to increase the pursuit of applying innovative leadership to play a major role in enhancing the values of success and development in the educational field through providing precise information about innovative leadership and benefiting from its results, which will help in the future to find alternative solutions to overcome obstacles and raise the level of educational institutions among school principals from the perspective of teachers in Irbid Governorate in identifying the positives for their development and the negatives for avoiding them. The practical importance is also seen in benefiting researchers, those interested, and scholars in the field of education from the information provided by the study on the subject of innovative leadership.

Research Limitations

In this study, the term "innovative leadership" is mentioned, and its procedural definition is as follows:

Innovative leadership: It is defined as the methods that a leader can use and adopt to achieve the goals of the educational institution and confront the problems and challenges he faces while implementing the goals (Ayyad, 2019). Procedurally, it is defined as a leadership style applied by school principals in Irbid Governorate in order to raise the level of teachers' satisfaction, persuade them and motivate them to work hard, and deepen their degree of readiness to carry out the tasks and leadership skills required to be accomplished in the field of innovative leadership. It is measured through the responses of the research sample participants to the research instrument related to principals' practice of innovative leadership.

Research Limitations

The findings of this research can be generalized in light of the following limitations:

1. **Human Limitations:** This research is limited to a simple and random sample consisting of male and female teachers.

2. Spatial Limitations: This research is conducted in public schools in Irbid Governorate.
3. Temporal Limitations: This research is conducted in the second semester of the academic year 2022/2023.
4. Objective Limitations: This research is limited to identifying the degree of innovative leadership practice in the Irbid Governorate among the principals from the viewpoint of teachers according to gender, academic qualifications, and number of years of experience.

The generalization of the findings of the current research is determined by the psychometric characteristics of the research instrument in terms of validity and reliability.

METHOD

Research Approach

The descriptive survey approach is used to achieve the research objectives, as it is the most appropriate approach for such a study, along with using the questionnaire as an instrument for collecting data related to the study. The descriptive survey approach through which the phenomenon under study is described, its data is analyzed, and the relationships between its elements are explained.

Research Population and Sample

The research sample consists of all (8967) male and female teachers in public schools of the Irbid Governorate Directorate of Education during the second semester of the academic year (2022/2023). A simple and random sample consisting of (344) male and female teachers was selected. Table (1) illustrates the distribution of research sample participants according to research variables.

Table 1: Distribution of Research Sample Participants According to Research Variables

Variables	Levels	Number	Percentage
Gender	Males	164	%47.7
	Females	180	52.3%
Academic Qualification	Bachelor's Degree	203	59.0%
	Postgraduate Degree	141	41.0%
Number of Years of Expeirnce	Less Than (5) Years	84	24.4%
	From (5) To (10) Years	138	40.1%
	(10) Years and Above	122	35.5%
Total		344	%100

Research Instruments

The research instrument is a 31-item questionnaire developed based on theoretical literature and previous studies (see Al-Shahrani, 2017; Al-Juman & Matar, 2018) to identify the degree of innovative leadership among school principals from the perspective of teachers in Irbid Governorate, as well as the suggestions and comments of validators and educational specialists. A five-point Likert scale was adopted for the questionnaire, as five levels were specified for the first questionnaire, as follows: (5) very high, (4) high, (3) medium, (2) low, (1) very low.

Research Instrument Validity

To check the research instrument "questionnaire" validity, the questionnaire in its initial form is reviewed by a group of (10) validators, including faculty members at the faculties of education in Jordanian universities with expertise in the area of educational technology to determine the appropriateness of the items, their suitability to the research sample, their linguistic correctness, their comprehensiveness of the related domain to measure the degree of innovative leadership

among school principals from the perspective of teachers in Irbid Governorate. They are also asked to provide any proposed amendments, suggest items they deem necessary, and delete unnecessary items. After returning the questionnaire, the proposed amendments, agreed upon by (80%) of the validators in their recommendations, are made.

Research Instrument Reliability

To check the research instrument reliability, its reliability coefficients were calculated in two methods. The first method was the test-retest method, as it was applied to a 30-participant pilot sample from the research population and outside the research sample by applying it twice, with a time interval between the first application and the second application of two weeks. Table (2) illustrates the values of the reliability coefficients for the domains using the retest method and the Cronbach's alpha method for internal consistency.

Table 2: Values of the Coefficients of Retest and Internal Consistency for Each Area of the Questionnaire

No.	Domains	Number of Items	Values of the Reliability Coefficients	
			Test and Retest	Cronbach's alpha
1	The Principal-Employee Relationship	11	0.88	0.90
2	Work Environment	7	0.82	0.83
3	Innovative Behavior	7	0.83	0.82
4	Decision-Making	6	0.80	0.79
Overall Instrument			0.90	

Table (2) illustrates that the value of the reliability coefficient for the instrument measuring the degree of innovative leadership practice among school principals, where Pearson correlation coefficients were calculated between the results of the two applications. The reliability coefficients for the domains ranged between (0.80) and (0.88), and the value of the overall correlation coefficient was (0.90). The Cronbach's Alpha method was also used to identify the internal consistency of the items, where the values of the reliability coefficients for the two domains ranged between (0.79-0.90) and (0.93) for the domains as a whole, which are acceptable values for conducting such a study.

Internal Consistency Validity

A five-point Likert scale was adopted for the questionnaire, as five levels were specified for the first questionnaire, as follows: (5) very high, (4) high, (3) medium, (2) low, (1) very low. The following statistical gradation was used to distribute the means, according to the following equation:

$$\text{Length of Category} = \text{Length of the Period} \div \text{Number of Categories} = (5-1) \div 5 = 0.80$$

Therefore, the distribution of categories is now as follows:

- * (1.00-1.80) is very low.
- * (1.81-2.60) is low.
- * (2.61-3.40) is medium.
- * (3.41-4.20) is high.
- * (4.21-5.00) is a very high.

Research Variables

1. Independent Variables

Gender: Female and Male

Academic Qualification: Bachelor's Degree and Postgraduate Degree.

Number of Years of Experience: Less Than (5) Years, From (5) to (10) Years, and (10) Years and Above.

2. Dependent Variables

It is the degree of innovative leadership practice among school principals from the perspective of teachers in Irbid Governorate.

Statistical Processing

The following statistical methods are used to answer the research questions and process the data statistically.

1. Means, standard deviations, ranks, and degrees are used to answer the first
2. Multivariate analysis of variance (MANOVA) is also used to answer the second research question.

RESULTS AND DISCUSSION

First: Results related to the First Research Question

1. What is the degree of innovative leadership practice among public school principals in Irbid Governorate from the teachers' perspective?

To answer this question, the means and standard deviations of responses of research sample participants to the questionnaire on the domains of the degree of innovative leadership practice among school principals from the perspective of teachers in Irbid Governorate are calculated. Table (3) illustrates those results.

Table 3: Means, Standard Deviations, Degrees, and Rank of the Participants' Responses to the Degree of Innovative Leadership Practice among School Principals from the Perspective of Teachers in Irbid Governorate Arranged in Descending Order

Rank	No.	Domains	AM*	SD	Degree
1	1	The Principal-Employee Relationship	3.39	0.51	High
2	2	Work Environment	3.11	0.45	Medium
3	4	Decision-Making	2.72	0.57	Medium
4	3	Innovative Behavior	2.46	0.46	Low
Overall Research Instrument			2.99	0.27	Medium
*Maximum score of (5)					

As indicated in Table (3), the overall mean of the research sample participants' responses to the degree of innovative leadership practice among school principals from the perspective of teachers in Irbid Governorate is (2.99) with a standard deviation of (0.27) and a medium degree. Table (3) showed that the domain of "The Principal-Employee Relationship" is ranked first with a mean of (3.39), a standard deviation of (0.51) and a high degree, while the domain of "Work Environment" is ranked second with a mean (3.11) and a standard deviation (0.45) and with a medium degree.

However, the domain of “Innovative Behavior” is ranked last with a mean of (3.46), a standard deviation of (0.46) and a low degree.

This result is due to the principal’s relationship with the employees having a high degree of harmony at work, participation in decision-making with the employees, and the awareness of school principals in the Irbid Governorate of the importance of innovative leadership and moving away from the traditional management style. This result agrees with the results of Ghoneim’s study (2018), Al-Juman & Matar’s study (2018), and Soemartono’s study (2014). Also, the degree was medium for the work environment and decision-making. This result is in line with the results of Al-Tarawneh’s study (2022) and Al-Shahrani’s study (2017). Regarding innovative behavior, the degree was low due to the lack of effective application of innovative behavior in our schools by school principals. The means and standard deviations of responses of research sample participants to the questionnaire on the domains of the degree of innovative leadership practice among school principals from the perspective of teachers in Irbid Governorate are calculated, as follows:

First: The Principal-Employee Relationship

The means and standard deviations of responses of research sample participants to the questionnaire on this domain are calculated, as shown in Table (4).

Table 4 : Means, Standard Deviations, Degrees, and Rank of the Participants’ Responses to the Items of Domain of the Principal-Employee Relationship Arranged in Descending Order

Rank	No	Text of Item	AM*	SD	Degree
1	5	The school principal encourages teachers to plan for new problems.	3.68	0.97	High
2	2	The school principal is interested in teachers' innovative ideas.	3.56	0.95	High
3	9	The school principal reduces supervision over teachers at work.	3.55	0.92	High
4	11	The school principal encourages creative ideas at work.	3.54	0.95	High
5	4	The school principal encourages teachers to present their ideas to solve problems.	3.51	1.03	High
6	6	The school principal encourages staff to find creative ways to solve problems.	3.43	1.11	High
7	10	The school principal provides incentives to teachers during work.	3.35	1.19	Medium
8	1	The school principal encourages teachers to carry out their job tasks in a renewed manner.	3.27	0.87	Medium
9	3	The school principal directs teachers to avoid imitating others.	3.19	1.07	Medium
10	8	The school principal supports innovative methods that help facilitate work.	3.15	1.10	Medium
11	7	The school principal enhances teachers' self-confidence.	3.07	1.11	Medium

Rank	No	Text of Item	AM*	SD	Degree
Overall Domain			3.39	0.51	Medium
*Maximum score of (5)					

As shown in Table (4), the overall mean of the research sample participants' responses on the items in this domain is (3.39) and a standard deviation (0.51), with a medium degree. Table (4) showed that item (5) stipulating "The school principal encourages teachers to plan for new problems" is ranked first with a mean (3.68) and a standard deviation (0.97) with a high degree. Also, item (2), which reads, "The school principal is interested in teachers' innovative ideas," is ranked second with a mean of (3.56) and a standard deviation of (0.95), with a high degree. However, item (7) stipulating "The school principal enhances teachers' self-confidence," is ranked last with a mean (3.07) and a standard deviation (1.11) with a medium degree. This result is attributed to school principals' interest in teachers' innovative ideas, as the school principal provides incentives during work and encourages teachers to perform their job tasks in a renewed manner, as in Al-Tarawneh's study (2022), which agreed with the current research result. The school principal also directs teachers to avoid imitating others and supports innovative methods that help facilitate work and enhances teachers' self-confidence, as in the Al-Bana's study (2020) and Al-Shahrani's study (2017), which agreed with the results of this research study.

Second: Work Environment

The means and standard deviations of responses of research sample participants to the questionnaire on this domain are calculated, as shown in Table (5).

Table 5: Means, Standard Deviations, Degrees, and Rank of the Participants' Responses to the Items of Domain of the Work Environment Arranged in Descending Order

Rank	No	Text of Item	AM*	SD	Degree
1	12	The principal participates with teachers in setting the school's vision.	3.53	1.02	High
2	13	The principal participates with teachers in setting the school's mission.	3.47	0.85	High
3	14	The principal promotes teamwork in the school.	3.41	1.16	High
4	15	The school principal encourages human relations between teachers.	2.91	0.93	Medium
5	16	The school principal works to create an encouraging climate for work in the school environment.	2.88	1.05	Medium
6	18	The school principal delegates powers to teachers in the school.	2.76	0.89	Medium
7	17	The school principal supports teachers' efforts in performing their duties.	2.74	1.01	Medium
Overall Domain			3.11	0.45	Medium
*Maximum score of (5)					

As shown in Table (5), the overall mean of the research sample participants' responses on the items in this domain is (3.11) and a standard deviation (0.45), with a medium degree. Table (4) showed that item (12) stipulating "The principal participates with teachers in setting the school's vision" is ranked first with a mean (3.53) and a standard deviation (1.02) with a high degree. Also, item (13), which reads, "The principal participates with teachers in setting the school's mission," is ranked second with a mean of (3.47) and a standard deviation of (0.85), with a high degree. However, item (17) stipulating "The school principal supports teachers' efforts in performing their duties," is ranked last with a mean (2.74) and a standard deviation (1.01) with a medium degree. This result is attributed to school principals' interest in the school environment and encouraging teamwork, which supports teachers' efforts in performing their duties. This result is also attributed to the school principal's encouragement of human relations between teachers and the school principals' delegation of powers to teachers. It is also due to the school principal's support for the teachers' efforts in performing their duties and the principals' ability to create an encouraging climate for work in the school environment, as this result agreed with the results of Al-Shahrani's study (2017), Al-Bana's study (2020), and Al-Tarawneh's study (2022), which indicated an medium degree in the domain of work environment.

Third: Innovative Behavior

The means and standard deviations of responses of research sample participants to the questionnaire on this domain are calculated, as shown in Table (6).

Table 6: Means, Standard Deviations, Degrees, and Rank of the Participants' Responses to the Items of Domain of the Innovative Behavior Arranged in Descending Order

Rank	No.	Text of Item	AM*	SD	Degree
1	19	The school principal introduces new methods to complete work as quickly as possible.	2.83	1.08	Medium
2	20	The school principal promotes new ideas at work.	2.61	1.13	medium
3	24	The school principal helps those with creative and innovative ideas implement their ideas.	2.46	0.77	Low
4	25	The school principal has the ability and courage to do creative work.	2.43	1.09	Low
5	23	The school principal encourages employees to submit innovative proposals at the school.	2.38	0.98	Low
6	21	The school principal bears responsibility for important and vital decisions at work.	2.31	0.78	Low
7	22	The school principal has the ability to make the appropriate decision.	2.19	1.12	Low
Overall Domain			2.46	0.46	Low
*Maximum score of (5)					

As shown in Table (6), the overall mean of the research sample participants' responses on the items in this domain is (3.46) and a standard deviation (0.46), with a medium degree. Table (6) showed that item (19) stipulating "The school principal introduces new methods to complete work as quickly

as possible” is ranked first with a mean (2.83) and a standard deviation (1.08) with a medium degree. Also, item (20), which reads, “The school principal promotes new ideas at work,” is ranked second with a mean of (2.61) and a standard deviation of (1.13), with a medium degree. However, item (22) stipulating “The school principal has the ability to make the appropriate decision,” is ranked last with a mean (2.19) and a standard deviation (1.12) with a low degree. This result is due to the principal’s inability to implement creative ideas, the school principal’s lack of ability and courage to carry out creative work, and the school principal’s inability to encourage workers to submit innovative proposals at the school. It is also attributed to the inability of school principals to help teachers implement their creative ideas, as there are no studies in this study that agreed with this result.

Fourth: Decision-Making

The means and standard deviations of responses of research sample participants to the questionnaire on this domain are calculated, as shown in Table (7).

Table 7: Means, Standard Deviations, Degrees, and Rank of the Participants’ Responses to the Items of Domain of the Decision-Making Arranged in Descending Order

Rank	No	Text of Item	AM*	SD	Degree
1	31	The school principal makes the decision to encourage innovation.	3.13	1.16	Medium
2	30	The school principal participates with the teachers in implementing the work.	3.08	1.02	Medium
3	29	The school principal distributes work according to specialization.	2.69	0.99	Medium
4	27	Teachers participate in decision making.	2.67	0.94	Medium
5	28	The school principal makes the decision collectively.	2.44	1.19	Low
6	26	The school principal makes the decision to encourage innovation.	2.31	0.87	Low
Overall Domain			2.72	0.57	Medium
*Maximum score of (5)					

As shown in Table (7), the overall mean of the research sample participants’ responses on the items in this domain is (2.72) and a standard deviation (0.57), with a medium degree. Table (7) showed that item (31) stipulating “The school principal makes the decision to encourage innovation” is ranked first with a mean (3.13) and a standard deviation (1.16) with a medium degree. Also, item (30), which reads, “The school principal participates with the teachers in implementing the work” is ranked second with a mean of (3.08) and a standard deviation of (1.02), with a medium degree. However, item (26) stipulating “The school principal makes the decision to encourage innovation,” is ranked last with a mean (2.31) and a standard deviation (0.87) with a low degree. This result is attributed to the ability of school principals to make decisions, implement work, and distribute work according to specialization. The participation of teachers in the decision-making process also played a role in this result, as this result agreed with Al-Shahrani’s study (2017), Al-Bana’s study (2020), and Al-Tarawneh’s study (2022), which indicated a medium degree in the domain of decision-making.

Second: Results related to the Second Research Question

2. Are there statistically significant differences at the significance level ($0.05 \geq \alpha$) between the responses of the research sample participants in their responses of the degree of innovative leadership practice among public school principals in Irbid Governorate according to the variables "gender, academic qualification, number of years of experience?"

To answer this question, the means and standard deviations of responses of research sample participants to the questionnaire on the domains of the degree of innovative leadership practice among school principals from the perspective of teachers in Irbid Governorate are calculated. Table (8) illustrates those results.

Table 8: Means, Standard Deviations of the Research Sample Participants' Responses to the Overall Score and Degree of Innovative Leadership Practice among School Principals from the Perspective of Teachers in Irbid Governorate According to the Research Variables "Gender, Academic Qualification, Number of Years of Experience"

Variable	Levels	Domains					Total Score
			Principal- Employee Relation- ship	Work Environm ent	Decesion -Making	Innovative Behavior	
Gender	Males N=164	AM	3.23	2.94	2.39	2.44	2.93
		SD	0.53	0.46	0.42	0.45	0.27
	Females N=180	AM	3.45	3.25	2.52	2.98	3.04
		SD	0.50	0.44	0.50	0.54	0.26
Academi c Qualifica tion	Bachelor e's Degree N=203	AM	3.43	3.08	2.37	2.77	2.98
		SD	0.51	0.42	0.48	0.55	0.26
	Postgra duate N=141	AM	3.34	3.14	2.59	2.65	2.99
		SD	0.51	0.48	0.40	0.58	0.29
Experie nce	Less than (5) Years N=84	AM	3.43	3.02	2.30	2.79	2.96
		SD	0.59	0.36	0.33	0.49	0.29
	From (5) To (10) Years N=138	AM	3.38	3.11	2.56	2.67	2.99
		SD	0.54	0.52	0.39	0.56	0.29
	Above (10) Years N=122	AM	3.38	3.17	2.46	2.73	3.00
		SD	0.41	0.41	0.58	0.62	0.23

As indicated in Table (8), there are apparent differences between the means of responses of the research sample participants on the total score of the scale and the domains of innovative leadership among school principals from the perspective of teachers in the Irbid Governorate. According to the independent research variables “gender, academic qualification, and experience”, and to reveal the significance of these differences in the means, a multivariate analysis of variance (MANOVA) was used using the Wilk's Lambda test at the significance level ($0.05 \geq \alpha$). Table (9) illustrates the results of the Wilks' Lambda test and the results of the multivariate analysis of variance (MANOVA).

Table 9: Results of a Multiple Analysis of Variance Test for differences between the Research Sample Participants' Responses to the Domains of the Innovative Leadership Practice among School Principals from the Perspective of Teachers in Irbid Governorate According to the Difference of the Research Variables “Gender, Academic Qualification, Number of Years of Experience

Variables	Domains	Sum Squares	of FD	Mean Squares	F-Value	Statistical Sig.
Gender Wilk's Lambda Value= 0.754 H=0.000	The Principal-Employee Relationship	0.939	1	0.939	3.536	0.041*
	Work Environment	1.824	1	1.824	9.048	0.003*
	Decision-Making	1.424	1	1.424	7.065	0.008*
	Innovative Behavior	25.034	1	25.034	99.261	0.000*
	Total Score	0.988	1	0.988	13.543	0.000*
Academic Qualification Wilk's Lambda Value =0.956 H=0.025	The Principal-Employee Relationship	0.634	1	0.634	2.386	0.123
	Work Environment	0.029	1	0.029	0.143	0.706
	Decision-Making	0.428	1	0.428	2.104	0.148
	Innovative Behavior	0.173	1	0.173	0.684	0.409
	Total Score	0.001	1	0.001	0.011	0.916
Experince Wilk's Lambda Value = 0.961 H=0.101	The Principal-Employee Relationship	0.476	2	0.238	0.897	0.409
	Work Environment	1.232	2	0.616	3.030	0.050
	Decision-Making	0.873	2	0.436	2.164	0.116
	Innovative Behavior	0.230	2	0.115	0.456	0.634
	Total Score	0.076	2	0.038	0.521	0.595
Error	The Principal-Employee Relationship	89.999	339	.265		
	Work Environment	68.938	339	.203		
	Decision-Making	68.349	339	.202		
	Innovative Behavior	85.496	339	.252		

	Total Score	24.730	339	.073	
Total	The Principal-Employee Relationship	4048.744	344		
	Work Environment	3388.878	344		
	Decision-Making	2154.122	344		
	Innovative Behavior	2654.139	344		
	Total Score	3093.240	344		

***Statistically significant at the level of statistical significance ($\alpha \leq 0.05$)**

As indicated in Table (9), there are statistically significant differences at the level of statistical significance ($\alpha \leq 0.05$) between the degrees of practicing innovative leadership among secondary school principals in favor of females on one hand. On the other hand, the results showed no statistically significant differences in the level of innovative leadership practice in Irbid Governorate due to the variables of experience and academic qualification.

9. CONCLUSION

In a nutshell, this current research paper identifies the degree of innovative leadership practice in the Irbid Governorate among the principals from the viewpoint of teachers according to gender, academic qualifications, and number of years of experience. The findings indicate that the degree of school principals' practice of innovative leadership from the perspective of teachers in Irbid Governorate was medium. The results show statistically significant differences between the degrees of practicing innovative leadership among secondary school principals due to the gender variable in favor of females. The results also demonstrate no statistically significant differences due to the variables of number of years of experience and academic qualification.

10. Recommendations

Given the previous results and discussion, this article recommends conducting more studies on innovative leadership among school principals in academic communities in other areas in the Hashemite Kingdom of Jordan and linking it to variables such as the quality of job creativity and holding training courses for managers on innovative leadership style. Another key recommendation is reflected in making positive interaction with teachers, involving them in innovation, and identifying their innovative ideas. One important recommendation is to create opportunities for innovative ideas to emerge, accept them, coordinate them for discussion, and then adopt them in educational institutions.

REFERENCES

- Abbas, S. (2018). *Innovative Leadership and Outstanding Performance*, Jordan: Amman: Dar Wael for Publishing and Distribution, first edition.
- Abu Ajwa, H. (2018). Innovative leadership and its role in reducing resistance to organizational change, [Unpublished Master's Thesis]. Islamic University, Gaza, Palestine.
- Abu Trieh, J. (2022). The degree to which basic school principals in Zarqa First Education practice innovative leadership and its relationship to improving the performance of male and female teachers. *Middle East Journal of Humanities and Cultural Sciences*, 2(1), 1-10.
- Albadarneh, A, Daradkah, A, Telfah, E, AlKhatib, F, Mahmoud, A, Altaha'at , E, Al-Shunnaq, Y, Tawalbeh, M, Ali. S(2024). Green Transformational Leadership as an Approach to Achieving

- Sustainable Environmental Development in Arab Universities. *Pakistan Journal of Life and Social Sciences*, 22(2): 53-66.
- Al-Bana, M. (2020). The degree to which school principals practice innovative leadership and its relationship to the quality of school performance from the point of view of teachers. [Unpublished Master's Thesis]. College of Educational Sciences, Jordan: Al-Bayt University, Mafraq.
- Al-Dweik, G. (2020). Innovative leadership among government secondary school principals in the Hebron Governorate and its relationship to the quality of teachers' performance from the point of view of the teachers themselves. [Unpublished Master's Thesis]. College of Graduate Studies, Palestine: Al-Quds University, Hebron.
- Al-Hajjaj, H. (2019). The degree of practicing innovative leadership among secondary school principals in university education from their and their teachers' point of view. *Journal of the Islamic University for Educational and Psychological Studies*, 2(27), 216-239.
- Al-Jarayda, M & Al-Jhouri, B. (2018). The degree to which administrative leaders in the General Directorates of Education in the Sultanate of Oman practice innovative leadership. *Journal of Educational and Psychological Studies*, 8(3), 571-586.
- Kanval, N., Ihsan, H., Irum, S., & Ambreen, I. (2024). Human Capital Formation, Foreign Direct Investment Inflows, and Economic Growth: A Way Forward to Achieve Sustainable Development. *Journal of Management Practices, Humanities and Social Sciences*, 8(3), 48-61.
- Al-Jarbini, H. (2018). The degree of innovative leadership practice among educational leaders and its relationship to the effectiveness of decision-making from the point of view of college deans and academic department heads in Palestinian universities. [Unpublished Master's Thesis]. Palestine, Nablus, An-Najah National University.
- Al-Juman, S & Matar, D. (2018). Innovative features of counselors from the point of view of school principals. *Journal of Basra Studies*, 10(19), 126-127.
- Al-Kassab, A. (2018). The effectiveness of using the learning cycle strategy in developing creative thinking skills and academic achievement at the social and national studies headquarters among third-year secondary school students in Al-Qunfudhah Governorate. *Journal of the Islamic University for Educational and Psychological Studies*, 25(2), 1-16.
- Alqudah, R., Daradkah, A., Alotaibi, T., Awais, B., AL_Ruheel, A., AL-Momani, M., Alqsaireen, E., Ashour, M., AlKhatib, F., Badarneh, H., AL Shannaq, R., Alkenan, R., Albadarneh, A., Alsadi, M., Donkol, A., Mahmoud, A., & Mahmoud, S. (2024). Proposed Vision for Enhancing Psychological Capital Management as a Gateway to Achieving Competitive Advantage in Arab Universities. *Journal of Statistics Applications & Probability*, 13(2), 761- 787
- Al-Shahrani, A. (2018). The degree to which academic leaders at Bisha University practice innovative leadership from the point of view of faculty members. *International Journal of Educational and Psychological Studies*, 2(3), 61-584.
- Al-Sulami, R. (2012). Creative leadership and its relationship to the organizational climate in public middle schools in Jeddah. [Unpublished Master's Thesis]. Kingdom of Saudi Arabia.
- Altarawneh, M & Al-Ghammaz, S. (2023). The Journey of e-learning technology from application to challenges: Evidence from Jordan. 11th International Conference on Information Technology: Cybersecurity Challenges for Sustainable Cities, ICIT-Proceeding, 531-536.
- Al-Tarawneh, M. (2022). The level of innovative leadership among Arabic language teachers in the Southern Mazar District from their point of view. *Scientific Journal, Research and Scientific Publishing Administration*, 9(38), 1-23.
- Al-Zanoun, M & Mazhar, A. (2019), Innovative leadership practices and their impact on achieving organizational leadership from the point of view of employees at Al-Quds Bank in the governorates of the Gaza Strip, published research. *Al-Quds Open University Journal for Administrative and Economic Research*, 4(12), 80-96.

- Ariratana, W., Ngang, K., & Sirisooksilp, S. (2019). *The effect of innovative leadership on competency of creating high performance organization*. *Kasetsart Journal of Social Sciences*, 40(2), 311-318.
- Ayyad, H. (2019). The degree of innovative leadership practice among private secondary school principals in the Amman Governorate and its relationship to their organizational values from the point of view of supervisors and teachers. [Unpublished Master's Thesis]. Middle East University, Jordan.
- Chia, Jen C., Yang, Y. (2012). *The Effect of Organization Innovation Climate on Students Creative Self-Efficacy and Innovative Behavior*. *Business & Entrepreneurship Journal*, 1(1), 75-100.
- Daradkah, A. (2017). Administrative empowerment and its relationship to organizational excellence with academic leaders at Taif University from the faculty member's perspective. *An-Najah University Journal for Research: Humanities*, 31(8), 1257-1296.
- Daradkah, A., Alotaibi, T., Badarneh, H., Momani, K., Hamadin, K., Alqudah, R., AL-Momani, M., Allbrahim, A., Ashour, M., Almadwadeh, N. & Mahmoud, A. (2023). Proposed vision of the transformation of the Arab Universities into smart digital universities. *Information Sciences Letters*, 12(9), 2355- 2374.
- Ghoneim, H. (2018). A proposed vision for developing the performance of UNRWA school principals in Palestine in light of innovative leadership. [Unpublished Master's Thesis]. College of Education, Islamic University.
- Harzallah, M. (2018). The degree of practicing innovative leadership among private school principals in the Amman Governorate and its relationship to teachers' resistance to change from their point of view. [Unpublished Master's Thesis]. Middle East University.
- Morris, M, Kuratko, D., John, A, & Covin, J. (2010). *Corporate entrepreneurship & innovation*. Cengage Learning.
- Qandil, A. (2010). *Administrative Leadership and Innovation Management*, Amman: Dar Al-Fikr Publishers and Distributors, page 18.
- Rashid, A., Jehan, Z., & Kanval, N. (2023). External Shocks, Stock Market Volatility, and Macroeconomic Performance: An Empirical Evidence from Pakistan. *Journal of Economic Cooperation & Development*, 44(2), 1-26.
- Salem, Y. (2018). The impact of administrative leadership in empowering workers in non-profit institutions by application to the Ministry of Endowments and Islamic Affairs in the State of Qatar. *Journal of Economic, Administrative and Legal Sciences*, National Research Center Gaza.
- Soemartono, T. (2014). *Reconstruction of Education policy in Jembrana Bali ,Best Practices of Creative and Innovative Leadership Using Soft System s Methodology based Action Research* .procedia-Social and Behavaoral Sciences 115 , 269-282
- Zuraik A. (2016). *Effective Leadership for Innovation in Modern Organizations*. *International Conference on Business Research and Management Practices in Global Environment*, San Diego. California, USA, April 2016.