The Jordanian Association for Educational Sciences, Jordanian Education Journal, Vol (10), No (1), 2025
DOI: https://doi.org/10.46515/jaes.v10i1.1331

The Degree of Practicing Creative Leadership by Academic Leaders of Jordanian and American Universities: A comparative study

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Received 15/2/2023 Accepted 8/2/2023

Abstract:

This study aimed at finding out the level of academic leaders' practice of creative leadership in the Jordanian and American universities by studying the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities from faculty members' point of view. The purposive randomly selected study sample consisted of (405) faculty members from Jordanian Universities and (506) of faculty members from American universities. A 53-item Likert Scale format questionnaire was developed on practicing creative leadership by academic leaders with four dimensions (Problem sensitivity, Fluency, Originality and Flexibility).

The findings of the study showed that the total degree of the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities was in the high level in all dimensions. Whereas there were no statistically significant differences at the level of (0.05) about the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the gender and academic rank variables, the findings of the study showed significant differences at the level of (α=0.05) about the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the experience.

Keywords: Leadership, creative leadership, Academic leaders, Jordanian Universities, American universities.

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درجة ممارسة القيادات الأكاديمية في الجامعات الأردنية والأمريكية للقيادة الإبداعية: دراسة مقارنة

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ملخص:

هدفت هذه الدراسة للتعرف إلى درجة ممارسة القيادات الأكاديمية للقيادة الإبداعية في الجامعات الأردنية والأمريكية من خلال دراسة واقع ممارسة القيادات الأكاديمية للقيادة الإبداعية في الجامعات الأردنية والأمريكية من وجهة نظر أعضاء هيئة التدريس. تكونت عينة الدراسة التي تم اختيارها بطريقة قصدية عشوائية من (405) أعضاء هيئة تدريس من الجامعات الأردنية و (506) أعضاء هيئة تدريس من الجامعات الأمريكية. وقد طور الباحثان استبانة مكونة من 53 فقرة حول ممارسة القادة الأكاديميين للقيادة الإبداعية مقسمة إلى 4 أبعاد: (الحساسية للمشكلات، الطلاقة، الأصالة، والمرونة).

وأظهرت نتائج الدراسة أن درجة واقع ممارسة القيادات الأكاديمية للقيادة الإبداعية في الجامعات الأردنية والأمريكية جاءت بدرجة مرتفعة في جميع المجالات. كما وأظهرت النتائج وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ($\alpha = 0.05$) في الدرجة الكلية لتصورات أفراد عينة الدراسة تعزى لمتغير الخبرة. في حين لا توجد فروق ذات دلالة إحصائية ($\alpha = 0.05$) لواقع ممارسة القيادات الأكاديمية للقيادة الإبداعية في الجامعات الأردنية والأمريكية تعزى لمتغيري الجنس والرتبة الأكاديمية.

الكلمات المفتاحية: القيادة، القيادة الإبداعية، القيادات الأكاديمية، الجامعات الأردنية، الجامعات الأمريكية.

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Introduction

Contemporary organizations are characterized by being obsessed with competition, whether internally or externally, and the organizations' need for creativity has become an urgent and important requirement. The concept of creative organizations must have an appropriate regulatory environment for creativity.

Considering the scientific and technological progress that the world is facing, and the accompanying results and social, economic, political, and educational changes, after revealing and investing creativity is one of the most important goals that nations must strive for to confront this progress. Organizational structures of institutions will change as creativity emerges as a new factor (Eid, 2015).

In addition, to develop creativity the organization must follow a flexible organizational structure that encourages creativity. The organization needs to capture an organizational culture that is receptive to change and to motivate staff to innovate and to take the initiative to achieve the organization's goals. So, it is difficult to move from a traditional institution to an entrepreneurial one; it demands significant tactics and unique procedures. (Organization for Economic Cooperation and Development, 2012)

Universities need more than ever creative leaders that look forward to the future to achieve their goals of development, innovation, and the achievement of highly competitive advantage to lead the world to leadership (Hofer, & Potter, 2010). This study aims to shed light on the extent of creative leadership employed by academic leaders at Jordanian and American universities.

Statement of the Problem

According to Frey & Osborne (2013), creative leadership has become an urgent necessity for its great contribution to supporting and achieving creativity and innovation. It helps educational institutions, especially universities, to reinvent their roles, to absorb unemployment, care for gifted people, and to encourage independence and creativity. As noted in Kuratko & Morris (2018), it is a critical need for each academic leader to use modern methods and creative leadership as a part of the international classification of universities and to move toward productive universities. It is therefore imperative that we consider the creative practices of academic leaders in Jordanian and American universities. Consequently, the researchers have investigated the level of creative leadership practiced

by academic leaders in Jordanian and American universities.

Questions of the study

By responding to the following questions, this study aims to investigate and examine how much academic leaders apply creative leadership at Jordanian and American universities:

What is the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities from the faculty members' point of view?

1. Are there any significant statistical differences at the level of (α=0.05) about the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the variables: (sex, experience, and academic rank)?

Significance of the study

The significance of this study stems from its subject, creative leadership; it is hoped that the following parties benefit from its results:

1. The Jordanian and American universities, where the results may help increase the quality of the offered services, and it may help achieve effectiveness and efficiency.
2. Decision-makers and decision-takers in university education, reform the process of change leadership to apply creative leadership.
3. The faculty members, where the administrative process may be more smooth and more satisfaction and creativity.

Study Limitations

The following are some of the limitations identified in the study:

- **Time:** This research study is conducted in the second semester of the academic yeart 2021-2022 at the university.
- **Location:** This research study is investigated creative leadership in the Jordanian public universities in the Hashemite Kingdom of Jordan and The American universities in the United States of America.

Definition of Terms

The terms used in this study are defined conceptually and operationally as the following:

- **Leadership**

Leadership is the strength of an individual or a group of individuals to guide and influence the other teams or members of an institution (Yukl, 2013). The researchers defined leadership operationally in this study as addressing the personal characteristics of an individual in terms of the

personal abilities and skills of a leader that makes him or her ability to influence others and guide a group to achieve the desired goals.

- **Creative leadership**

Creative leadership is the potentail of revealing new facts, producing a several number of thoughts and the managements' ability to carry out various administrative processes and functions in non traditional ways, motivating workers and guiding their efforts to achieve institutional objectives with minimal time, effort and money while ensuring the required quality.(Al-Soud, 2021). The researchers defined creative leadership as an administritive style for adopting new and creative ideas and creative leadership, namely, the ability of a person to make creative decisions, solve problems, make improvements in organizational policy, and make optimal use of the capabilities available to achieve the best with the least amount of time and cost.

- **Academic leaders**

The researchers define academic leaders operationally represented in this study as deans, their deputies, and department heads in Jordanian and American universities.

Literature Review and Related previous studies

In this section, the researchers presented the related literature as follows:

Creative leadership

Amabile (1987) creative leadership adopts an interactional perspective to comprehend creativity and can be seen to support the creative activities of associates.

Al Hussein (2018) identified four areas to assess the degree of possibility of practicing creative leadership, including (originality, flexibility in leadership, problem sensitivity, and fluency). There are also intellectual skills in creative leadership in terms of judging things and building the intellectual self in leadership to give the leader thinking. Logical when making the right decisions while judging things correctly and enhancing the forecasting capabilities of the leader. According to Qaraeen (2000) ambition and creativity are typical leadership qualities effective for improving education in universities, the presence of which may improve learning capabilities in universities. Al-Serafy (2003) mentioned the different characteristics of creative leadership and stated that innovative leader must emerge.

- Problem sensitivity: the sensitive aspect of admitting and controlling issues.
- Fluency: The ability to trigger thinking and the liberation of mind to come up with several options and new concepts.
- Originality: the capacity to generate novel discoveries and unfamiliar ideas.
- Flexibility: Quick transformation, transition, and adaption one's thoughts to diverse and multiple directions and to alter one's mental state in response to changing circumstances.

Creativity in higher education

Creativity occupies the interests of scientists and specialists recently. Where it was observed an increasing growth in intellectual creations in various fields. This is why creativity has wide importance in educational fields and the world of business and diversification, and creativity is also considered a key factor for innovation, organizing the work, and the success of diverse organizations (Bruno, 2013). It also confirms that the leadership of higher education significantly needs continuous consideration of the importance of creativity in planning to build and prepare a new creative generation of young people for practical life. Where the new young employees can use their exemplary creativity in working life. For these reasons, the university focuses on enhancing the conditions including requirements, educational methods, inclusive instructions, and strategies to develop students' creativity based on excellence (Heye, 2006).

It is necessary to promote a culture of organized creativity to give the best levels of creativity and cultural innovations in educational institutions, and this is to facilitate fostering creativity in higher education. This also includes traditional forms of developing academic fields. As well as the importance of the role of teachers in developing creativity for students within the educational institution through the creative and professional development of the academic leader (Silvia, 2008).

The following tactics are recommended by (Mccluskey, 2013) to assist university faculty in creating an environment that fosters student and academic leaders' innovation in educational institutions.

- Enough opportunity and flexibility in the syllabus for students to advance their academic abilities and skills.
- Students should not be exposed to any kind of criticism, only constructive criticism.

- Building new ideas for students and encouraging them to express thought.
- Positive by asking provocative questions.
- Strengthening and maintaining relationships by building a positive relationship between students.
- Stimulating psychological confidence where students are not afraid to expose themselves by promoting a safe psychological environment.
- Ensuring intellectual diversity sufficient to encourage creativity among all students.

The reserchers presented the related previuos studies as follows:

Qu et. al (2015) discussed in their study the link between the leaders and the innovations in the institutions, which aimed at research the role of leadership in stimulating innovation at work. The resolution was used as a means for data gathering and (420) organization workers in China were chosen as a sample, where the study's findings revealed a significant link between creative leadership and staff motivation and visits by increasing their creative expectations.

Ghada Al-Boushi (2018) discussed in her research the extent to which creative leadership skill is used and ways to improve them by academic leaders in Saudi universities. This study used descriptive methodology and a questionnaire that has (46) items was designed. The findings showed that academic leaders at Saudi universities had a high level of innovative leadership practice. The results also showed that the level of creative leadership exhibited by academic leaders varied statically significantly depending on the “gender” variable. On the other hand, there were no significant statistical differences in the amount of creative leadership practiced by academic leaders according to the "type of faculty" and " service year " variables.

AL-Shurafa (2019) carried out a study titled "The degree of practicing creative leadership by basic school principals in Gaza governorates and its relationship with professional competence of their teachers" The study was carried out to figure out how much the heads of elementary schools in Gaza practice creative leadership. Additionally, how far this is related to the professional competence of teachers. The questionnaire has been used for measuring the extent of creative leadership as practiced by the Governorates of the Gaza Strip's elementary school principals, and which consisted of 21 items covering four dimensions (authenticity and innovation; flexibility; sensitivity to problems and initiative). Based on the

survey, the heads of elementary schools exhibited a high degree of creative leadership, with a relative weight of (79.97%). And there were major variations at the scale of (a 0.05) between the average replies of the study sample participants regarding the degree to which the principals of basic schools in Gaza Governorates practice creative leadership, differences which are attributable to the variable of "gender" to the benefit of females; even so there were no discernible differences discovered that were attributable to the variables of experience and academic qualifications.

Al-Khathami, M (2020) conducted in his research with the goal of ascertaining, from the viewpoint of the teachers, the degree of creative leadership applied by school administrators in the Khamis Mushait governorate. This study used descriptive methodology and a questionnaire for the study, which included a comprehensive description of the data from the sample consisting of (356) female teachers. In this study, there were (42669) teachers. The survey showed high results in the degree of creative leadership practiced. Also, the findings indicate that no statically significant variances exist, which explain the lack of experience and prior training, but the differences were according to the factor of the educational level of the primary level, according to the statistical indications.

Al-Shammari & Al-Enezi (2021) aimed in their study of some the various universities in Saudi Arabia, they aimed to assess the amount of inventive leadership among university administrators, through the basic relationships with methods of thinking. The study also found variances between the rates of innovation and thinking styles depending on the sort of university and gender. The analytical description was adopted in the curriculum for the targeted sample of (60) university leaders. The study discovered that leaders of Saudi Arabian universities had high levels of creative leadership and that this leadership had a direct relationship to thinking patterns. Between the mean ranks of the respondents in the flexibility domain, statically significant variations were discovered. The remaining components of the creative leadership scale do not differ statistically significantly by university type. The study discovered some variations in the degree of creative leadership among Saudi Arabia's university administrators, especially in their high level of relationship to their creative thinking methods. At the same time, According to statistics, there are no distinctions by type of university in some other domains of the creative leadership ability scale.

Al-Zoubi et. al (2023) conducted a study entitled "The degree of practicing creative leadership by academic leaders at 'Jordanian universities and its relationship to the level of teaching performances.". The researchers employed descriptive methodology to assess the effectiveness of creative leadership and instruction. and to examine the relationship between teaching performance and the practice of creative leadership they used the correlation method. A statistical analysis of (362) faculty members from Jordanian universities was conducted using a stratification random selection technique. Academic leaders at Jordanian university and faculties had a high level of innovative leadership practice. They also demonstrated excellent teaching abilities. This research revealed that the quality of creative leadership exhibited by academicians at Jordanian public institutions was unaffected statistically by the factors of faculty or experience.

What is new in this study?

Similar to other relevant studies, this study underlines the value of creativity in educational organizations. It also shares other studies the assurance of the crucial part played by academic leaders in achieving the necessary creativity for the benefit of organizations and educational institutions. However, this investigation aims to assess the extent of innovation leadership used by university administrators in Jordan versus the United States.

Research Design and Methodology

To accomplish the goals of the study, the descriptive survey methodology has been followed.

Population of the study

Faculty members from Jordanian and American universities formed the study's population, which were (12337), The study population is considered one of the large populations.

Sample of the study

The research sample was chosen by stratified sampling method from the faculty members from Jordanian Universities (University of Jordan, Yarmouk University and Al Hussein Bin Talal University) and the faculty members from American Universities (Florida International University, Michigan State University and University of Virginia). The researchers distributed (1000) questionnaires on the sample based on sample selected table for (Krejcie & Morgan, 1970; Sekeran & Bougie, 2010). (550)

questionnaires for American Universities and (450) questionnaires for Jordanian Universities by On-Line (Google Survey, The link for English language survey is https://docs.google.com/forms/d/e/1FAIpQLSd4aFRgRxNhik9ndxWshJMCDMCyfEf2OZAVWTZql8XZmkTnjQ/viewform and the link for Arabic language survey is https://docs.google.com/forms/d/e/1FAIpQLSd-bKRh7OgppQflUCWs6NtFnUAKXsXpFjul7kkgJwwsyvXitQ/viewform?usp=sf_linkand directly, (911) questionnaires were returned which represented (91.1%) from the main sample, and The research sample consisted of (506) from American academic staff with percent of (92%) from the main sample for the American Universities, on the other side the Jordanian questionnaire were returned with of (405) with percent of (90%) from the main sample. Tables (1 and 2) showed the demographical data for the participants.

Table (1) Demographical data for the academic leaders in the American and Jordanian Universities as a whole.

Variables		Frequency	Percent
University	American Universities	506	55.5
	Jordanian Universities	405	44.5
	Total	911	100.0
Gender	Male	497	54.6
	Female	414	45.4
	Total	911	100.0
academic rank	Professor	302	33.2
	Associate Professor	391	42.9
	Assistant Professor	218	23.9
	Total	911	100.0
Experience	5 years or less	194	21.3
	More than 5 years	345	37.9
	More than 10 years	168	18.4
	10.0	204	22.4
	Total	911	100.0
University's Name	University of Jordan	184	20.2
	Yarmouk university	146	16.0
	Al-Hussein bin Talal university	75	8.2
	Florida International university	181	19.9
	Michigan State University	203	22.3
	University of Virginia	122	13.4
	Total	911	100.0

Study Instrument

To accomplish the study's goals, the researchers created the study instrument with assistance from the study's literature. A 31-item 5-point Likert Scale format questionnaire was developed, consisting of four dimensions: problem sensitivity, fluency, originality, and flexibility.

Content validity

Academic reviewers from the University of Jordan and other institutions who specialize in the educational leadership section accurately completed a macro review that covered all the research constructs in order to assess the degree of creative leadership practiced by academic leaders of Jordanian and American universities for clarity and to produce a coherent research questionnaire, The questionnaire was distributed to eleven (11) different reviewers in order to check the validity of its questions and get their input on what could be changed. The experts and reviewers were asked by the researchers to suggest any modifications that might be required for each dimension. The researchers then considered the comments and viewpoints of each arbitrator before selecting the language that had at least 80% of the arbitrators' support.

Reliability of the Instrument

To calculate the reliability of the instrument study, the researchers used the equation of internal consistency using Cronbach's alpha formula , the test results where the values of Cronbach's alpha for all variables of the scale and identification of generally higher (0.60%) which is acceptable in the research and studies (Hair et al., 2010), which gives the questionnaire as a whole the reliability coefficient ranged between (0.933 – 0.980) and its very closed with value of (1.00), as shown in (Table 3).

Table (2) Cronbach's alpha coefficient for all the dimensions and total score of the scale:

Dimension	Statements	Internal consistency by using Cronbach Alpha
Problem Sensitivity	1-8	0.933
Fluency	9-17	0.946
Originality	18 – 23	0.937
Flexibility	24-31	0.951
Creative Leadership	1-31	0.980

Findings and Discussion

Results Related to the First Question:

What is the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities from the faculty members' point of view?

To answer this question, the study used means, standard deviations, ranks and the level to show the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities from the faculty members' point of view as following:

Table (3) the level of Creative Leadership of Jordanian and American Universities

No.	Creative Leadership	N	Mean	Std. Deviation	Rank	Level
1	Problem Sensitivity	911	3.80	0.89	1	High
4	Flexibility	911	3.74	0.95	2	High
2	Fluency	911	3.73	0.92	3	High
3	Originality	911	3.70	0.96	4	High
	Total	911	3.74	0.86		High

Table (3) showed that the mean of creative leadership was of (3.74) with standard deviation of (0.86) which is of a high level in the Jordanian and American Universities as a whole.

Problem sensitivity ranked first with a mean of (3.80) and standard deviation of (0.89) which is of a high level, the flexibility dimension ranked second with a mean of (3.74) and standard deviation of (0.95) which is of a high level also.

Fluency ranked third with a mean of (3.73) and standard deviation of (0.96) and the originality ranked last with a mean of (3.70) and standard deviation of (0.96) and these dimensions were of a high level also.

The researchers attribute these results to the following:

- There is very clear interest by governments and academic leaders in both American and Jordanian universities to apply creativity in all fields of education.
- The need for creativity or creative leadership is one of the essential needs in educational organizations more time. And the ambitions of creative leaders and creative institutions also grow and expand. According to (Feldman and Benjamin, 2006) study, that the relationship between curriculum and creativity has reached a high level of public policy in countries such as the US, UK, France, Sweden, Australia and Germany.
- The general behavior in American and Jordanian universities is dominated by the spirit of innovation, creativity, and cooperation through the permanent stimulation of all employees within the academy.
- The researchers also believe that creative leadership denotes university academic leaders adapting to new styles of creativity that will benefit

and support the educational process.

The findings of this research agree with the studies of Al-Khathami, M (2020), Al -Zoubi et al. (2023) and AL-Shurafa (2019) which reveal that academic leaders exercised creative leadership to a very high degree. On the other hand, this study disagrees with Qu et. al (2015) which implies that the level of innovation among educational institutions was medium.

Results Related to the Second question:

Are there any significant statistical differences at the level of (α=0.05) about the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the variables: (gender, experience, and academic rank)?

To answer this question, the study used descriptive analysis (Mean and Standard deviation), A Three-Way ANOVA was utilized in the study to demonstrate statistically significant differences between Jordanian and American institutions' current practices of creative leadership among academic leaders at the level of(α=0.05) due to the variables: (gender, experience, and academic rank) as following:

Table (4) Descriptive analysis to show the differences about status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the variables: (gender, academic rank and experience)

Gender	Mean	N	Std. Deviation
Male	3.76	497	0.86
Female	3.72	414	0.87
Total	3.74	911	0.86
Academic Rank	Mean	N	Std. Deviation
Professor	3.84	302	0.87
Associate Professor	3.73	391	0.83
Assistant Professor	3.64	218	0.89
Total	3.74	911	0.86
Experience	Mean	N	Std. Deviation
5 years or less	3.52	194	0.84
More than 5 years	3.86	345	0.85
More than 10 years	3.07	168	0.67
10.0	4.32	204	0.54
Total	3.74	911	0.86

The results in table (4) showed that there were variations about status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the variables: (gender, academic rank and experience)

Three Way ANOVA test used to show the statistically significant differences as following.

Table (5) Three Way ANOVA test to show significant statistical differences at the level of (α=0.05) about the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the variables: (gender, experience, and academic rank)

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Gender	.058	1	.058	.100	.751
Experience	153.681	3	51.227	89.439	.000*
Academic rank	.481	2	.241	.420	.657
Error	517.775	904	.573		
Total	13442.053	911			
Corrected Total	676.571	910			

Table (5) showed that there were a statistically significant differences at the level of (α=0.05) about the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the experience, (F) value = (89.439) and its significant at level of (0.05). Scheffé test was used to show the source of the differences as shown in table (6) below.

And the results showed that there were no statistically significant differences at the level of (0.05) about the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the gender and academic rank, (F) values = (0.100 and 0.420) and it's not significant at level of (0.05).

Table (6) Scheffe test to show the source of the statistically significant differences in the level of the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities due to the experience.

(I) experience		Mean Difference (I-J)	Sig.
5 years or less	More than 5 years	-.3362*	.000
	More than 10 years	.4548*	.000
	10.0	-.7962*	.000
More than 5 years	5 years or less	.3362*	.000
	More than 10 years	.7910*	.000
	10.0	-.4600*	.000
More than 10 years	5 years or less	-.4548*	.000
	More than 5 years	-.7910*	.000
	10.0	-1.2510*	.000

10.0	5 years or less	.7962*	.000
	More than 5 years	.4600*	.000
	More than 10 years	1.2510*	.000

The results in table (6) showed that the source of differences in the level of the status quo of academic leaders' practice of creative leadership in the Jordanian and American universities was in favor of (10 years), then the variance was in favor of (more than 10 years) followed by (more than 5 years).

The tables below show the results about the status quo of academic leaders' practice of sub-creative leadership in the Jordanian and American universities due to the variables: (gender, experience, and academic rank).

Table (7) Descriptive analysis to show the results about the status quo of academic leaders' practice of sub-creative leadership in the Jordanian and American universities due to the variables: (gender, experience, and academic rank)

Gender		**Problem Sensitivity**	**Fluency**	**Originality**	**Flexibility**
Male	Mean	3.83	3.74	3.71	3.75
	N	497	497	497	497
	Std. Deviation	.88	.91	.96	.94
Female	Mean	3.76	3.71	3.68	3.74
	N	414	414	414	414
	Std. Deviation	.90	.92	.96	.95
Total	Mean	3.80	3.73	3.70	3.74
	N	911	911	911	911
	Std. Deviation	.89	.92	.96	.95
Academic rank		**Problem Sensitivity**	**Fluency**	**Originality**	**Flexibility**
Professor	Mean	3.91	3.81	3.77	3.85
	N	302	302	302	302
	Std. Deviation	.89	.94	.96	.97
Associate Professor	Mean	3.78	3.71	3.67	3.74
	N	391	391	391	391
	Std. Deviation	.85	.90	.96	.92
Assistant Professor	Mean	3.67	3.64	3.63	3.62
	N	218	218	218	218
	Std. Deviation	.95	.92	.96	.95
Total	Mean	3.80	3.73	3.70	3.74
	N	911	911	911	911
	Std. Deviation	.89	.92	.96	.95
Experience		**Problem Sensitivity**	**Fluency**	**Originality**	**Flexibility**
5 years or less	Mean	3.60	3.53	3.46	3.49
	N	194	194	194	194
	Std. Deviation	.90	.90	.94	.95
More	Mean	3.91	3.84	3.82	3.85

than 5 years	N	345	345	345	345
	Std. Deviation	.84	.90	.96	.93
More than 10 years	Mean	3.11	3.03	3.02	3.10
	N	168	168	168	168
	Std. Deviation	.79	.75	.77	.82
10.0	Mean	4.36	4.29	4.27	4.34
	N	204	204	204	204
	Std. Deviation	.54	.62	.65	.62
Total	Mean	3.8	3.7	3.7	3.7
	N	911	911	911	911
	Std. Deviation	.89	.92	.96	.95

results showed that there were a parent differences about the status quo of academic leaders' practice of sub-creative leadership (Problem sensitivity, Fluency and Originality) in the Jordanian and American universities due to the variables: (gender, experience, and academic rank), multiple analysis of variance (MANOVA) test was performed to show the statistically significant differences as show in table (8) below:

Table (8) MANOVA test to show the statistically significant differences in the level of sub-creative leadership (Problem sensitivity, Fluency and Originality) in the Jordanian and American universities due to the variables: (gender, experience, and academic rank)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Gender Hotelling's Trace = (0.003 sig. = 0.655	Problem Sensitivity	.081	1	.081	.130	.719
	Fluency	.054	1	.054	.080	.777
	Originality	.120	1	.120	.162	.687
	Flexibility	.483	1	.483	.663	.416
academic rank Wilks' Lambda = 0.991 sig = 0.397	Problem	.894	2	.447	.719	.488
	Fluency	.479	2	.239	.357	.700
	Originality	.826	2	.413	.556	.574
	Flexibility	.820	2	.410	.562	.570
Experience Wilks' Lambda = 0.763 sig = 0.0.00*	Problem Sensitivity	150.077	3	50.026	80.453	.000*
	Fluency	156.364	3	52.121	77.723	.000*
	Originality	157.573	3	52.524	70.694	.000*
	Flexibility	152.648	3	50.883	69.824	.000*
Error	Problem Sensitivity	562.110	904	.622		
	Fluency	606.221	904	.671		
	Originality	671.653	904	.743		
	Flexibility	658.772	904	.729		
Total	Problem	13855.844	911			

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
	Sensitivity					
	Fluency	13417.580	911			
	Originality	13270.194	911			
	Flexibility	13592.234	911			
Corrected Total	Problem Sensitivity	720.377	910			
	Fluency	766.350	910			
	Originality	832.129	910			
	Flexibility	817.833	910			

Table (8) showed that the level of creative leadership did not change statistically significantly. (Problem sensitivity, Fluency, Originality, and flexibility) due to gender (F) values = (0.130, 0.80, 0.162, 0.663) respectively Hotelling's Trace = (0.003 sig. = 0.655, and it is not significant at level of (0.05).

And (F) values were (0.719, 0.357, 0.556, 0.562) for the (problem sensitivity, fluency, originality and flexibility) due to the academic rank Wilks' Lambda = 0.991 sig = 0.397 and its not significant at level of (0.05).

And the results showed that there were statistically significant differences in the level of (problem sensitivity, fluency, originality, flexibility) due to work experience (F) values were (80.453, 77.723, 70.694, 69.824) respectively Wilks' Lambda = 0.763 sig = 0.0.00*and its significant at level of (0.05). Scheffe test was used to show the source of variance as shown in table (27) below.

Table (9) Scheffe test to show the source of variance in the level of (problem sensitivity, fluency, originality, flexibility) due to work experience.

Dependent Variable			Mean Difference (I-J)	Sig.
Problem Sensitivity	5 years or less	More than 5 years	-.3109*	.000
		More than 10 years	.4921*	.000
		10.0	-.7635*	.000
	More than 5 years	5 years or less	.3109*	.000
		More than 10 years	.8030*	.000
		10.0	-.4526*	.000
	More than 10 years	5 years or less	-.4921*	.000
		More than 5 years	-.8030*	.000
		10.0	-1.2556*	.000
	10.0	5 years or less	.7635*	.000
		More than 5 years	.4526*	.000

Dependent Variable			Mean Difference (I-J)	Sig.
		More than 10 years	1.2556*	.000
Fluency	5 years or less	More than 5 years	-.3180*	.000
		More than 10 years	.4960*	.000
		10.0	-.7673*	.000
	More than 5 years	5 years or less	.3180*	.000
		More than 10 years	.8140*	.000
		10.0	-.4492*	.000
	More than 10 years	5 years or less	-.4960*	.000
		More than 5 years	-.8140*	.000
		10.0	-1.2633*	.000
	10.0	5 years or less	.7673*	.000
		More than 5 years	.4492*	.000
		More than 10 years	1.2633*	.000
Originality	5 years or less	More than 5 years	-.3593*	.000
		More than 10 years	.4324*	.000
		10.0	-.8151*	.000
	More than 5 years	5 years or less	.3593*	.000
		More than 10 years	.7916*	.000
		10.0	-.4558*	.000
	More than 10 years	5 years or less	-.4324*	.000
		More than 5 years	-.7916*	.000
		10.0	-1.2474*	.000
	10.0	5 years or less	.8151*	.000
		More than 5 years	.4558*	.000
		More than 10 years	1.2474*	.000
Flexibility	5 years or less	More than 5 years	-.3645*	.000
		More than 10 years	.3880*	.000
		10.0	-.8474*	.000
	More than 5 years	5 years or less	.3645*	.000
		More than 10 years	.7525*	.000
		10.0	-.4829*	.000
	More than 10 years	5 years or less	-.3880*	.000
		More than 5 years	-.7525*	.000
		10.0	-1.2353*	.000
	10.0	5 years or less	.8474*	.000
		More than 5 years	.4829*	.000
		More than 10 years	1.2353*	.000

The results showed that the variance in the level of problem sensitivity was in favor of experience category (10 years followed by more than 10 years).

And the variance in the level of fluency was in favor of experience category (10 years followed by more than 5 years).

On the other hand, the variance in the level of originality was in favor of experience category (10 years followed by more than 10 years).

Finally, the variance in the level of flexibility was in favor of experience category (10 years followed by more than 5 years).

The findings of this study are in agreement with previous investigations of Qu et. al (2015), that there were no differences for the variables due to gender. On the other hand, this study differed from other previous studies Al-Khathami, M (2020) Al -Zoubi et al. (2023) and AL-Shurafa (2019), it demonstrated that there are no statistically significant variations between the research factors in reference to the experience. These results can be attributed to many factors including the universities' keenness to support and develop academic leaders professionally during service and through conferences, courses and seminars to exchange experiences between different universities. Additionally, academic leaders view their profession as requiring a high- level; perform and a lot of effort to adapt environmental and global changes rapidly.

Recommendation

The researchers recommended the following:

1. Setting expectations to improve job satisfaction among university teachers and academic leaders, which can motivate academic leaders and faculty members to achieve an institution's objectives accurately.
2. Increasing collaboration and coordination among American and Jordanian universities to enhance their coherence and effectiveness.
3. Holding training courses, conferences, seminars and lectures for creative leaders and faculty members in creative leadership.
4. Raising awareness among academic leaders and faculty members to apply the concept of creative leadership.
5. Academic leaders at Jordanian universities ought to deal with problems according to priority and follow up problems that face faculty members constantly.
6. Academic leaders at Jordanian universities ought to encourage employees to use creative ideas.
7. Academic leaders at universities ought to adapt to development rapidly.
8. Conducting more qualitive and quantitative studies in the field of creative leadership and difficulties that are faced of academic leaders.

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