

Organizational Improvisation among Heads of Academic Departments: Yarmouk and Ajloun University Faculty Members' Perspective

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Abstract: The current study aims at pinpointing the degree of organizational improvisation among the heads of academic departments from the perspective of the faculty members at Yarmouk and Ajloun Universities according to gender, university, faculty, academic rank, and the number of years of experience. To achieve the objectives of the study, the descriptive approach is used. The data is collected by applying a questionnaire to a sample of (280) faculty members selected by a random sampling method. The findings indicate that the degree of organizational improvisation practiced by the heads of academic departments is medium with a mean (3.36). The results also show that there are no statistically significant differences due to the variables of gender, university, and years of experience. Besides, the findings demonstrate that there are differences due to the variables of faculty and academic rank in favor of scientific faculties and associate professors, respectively. In light of the findings, the study recommends meeting emergency and modern needs through organizing the procedures and means of providing service and giving significance to the tools of strategic analysis for their ability to discover the surrounding opportunities and threats.

Keywords: Ajloun National University, faculty members, heads of academic departments, organizational improvisation, Yarmouk University.

1 Introduction

The work environment in various institutions, together with educational institutions, is unstable, as it is affected by various internal or external variables. External variables have a significant impact on the performance of institutions, as this effect reaches a state of uncertainty and risk in decision-making. For the university to ensure its continuity and progress, it must possess a high ability to respond to these variables in a flexible manner, which increases its chance of maintaining its performance level and moving forward with development. Hence, universities needed to follow methodologies that would achieve this, as organizational improvisation is one of these methodologies.

According to Frykmer, Uhr, & Tehler (2018), organizational improvisation is an effective tool for dealing with emergencies unaddressed in the organization's prior planning. Improvisation is linked to creativity in reaching solutions that suit work situations in institutions, having a positive impact on the level of performance (Najafi, Rasli, & Baker, 2017). Turning improvisation into an official tool in institutions entails a recent development in the form of management for the benefit of institutions (Lowe, 2001).

In the same context, (Najafi, Rasli, & Baker, 2017) assert that organizational improvisation has a clear impact on what is known as the competitive advantage of institutions. As put by Al-Enezi (2007), there is a meeting point between innovation and improvisation, as both concentrate on an unfamiliar idea with a difference between them, which is that innovation is a tangible result of improvisation, while improvisation cannot be realized through innovation because innovative works are the product of organized and planned work. Also, Arshad & Hughes (2009, p. 949) indicate "An improvisation is a form of intuition that directs action to do something instantaneously and not based on a prior thinking and planning process, requiring insight, quick intuition and technical abilities".

Likewise, the basis for the institutions' creativity is based on providing an environment that will develop the most

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important element in institutions, namely the workers, calling for a flexible system away from unproductivity and traditional thinking, especially in highly competitive environments (Al-Fahd, 2020). Organizational improvisation seeks to achieve a set of objectives such as helping leaders to have a set of abilities to seize opportunities and avoid threats, creating value for the organization in terms of managing responsibility for change, enabling the organization to adapt to the requirements of a rapidly changing environment, and finding creative solutions to problems based on the appropriate time (Abd Ali & Lafta, 2021). However, this paper is divided into 11 main sections apart from the introductory section, and the next section presents the literature review.

2 Literature Review

Organizational improvisation plays an important role in making strategic decisions, as planning must be specific, especially in changing environments. Also, the organization must be aware of the possibility of reformulating plans and modifying them in the form of the dynamism inherent in the external environment (Scaglione, Meyer, & Mamédo, 2019). Understanding and success of the process of organizational improvisation include four important aspects. Firstly, improvisation is directed towards a goal to meet specific challenges or pursue given opportunities. Secondly, it occurs when thought and action meet simultaneously, i.e. the temporal convergence of design and implementation. Third, it includes a deviation of the organization organized such as a new shift away from a plan or routine work, where the novelty of work distinguishes improvisation from repetitive or routine behaviors), and finally improvisation is not valuable (Fultz & Hmieleski, 2021).

Among the studies conducted on organizational improvisation is (Ibrahim, Mahmoud, & Bakar, 2008) investigating the relationship between strategic improvisation, organizational culture, and the performance of higher education institutions. To achieve the objectives of the study, partial least squares path modeling is used to test the hypotheses, along with the descriptive approach. The study sample, a questionnaire, is applied to a sample of (229) academic leaders in Kano State, Nigeria. The findings indicate that both strategic improvisation and organizational culture dimensions are directly related to the performance of higher education institutions. However, only innovative culture manages the relationship between strategic improvisation and higher education institutions while bureaucratic culture and supportive culture fail to support the proposed hypothesis.

Likewise, Al-Dhabawi and Shalan's study (2019) aims at studying the role of organizational improvisation in achieving the effectiveness of work teams in a sample of private banks in Najaf. The study sample consists of (31) individuals from managers and employees, where the process of data collection is carried out by preparing a 35-item questionnaire covering the dimensions of organizational improvisation. The findings show that improvised work does not require the provision of additional resources, but rather it is possible to perform improvised work in light of the available current resources.

Besides, Limon & Dilekci's study (2020) aims to adapt a Scale of Organizational Improvisational Capability (SOIC) in cumulative culture and identify organizational improvisation for schools. To achieve the objectives of the study, the descriptive approach is used. The study sample consisted of (366) school principals and teachers in Batman in the Republic of Türkiye. The test model is used to determine the schools' organizational improvisation with its structural equation modeling tool. The findings indicate that the organizational improvisation capabilities of schools are revealed in various variables, with important implications for policymakers in general and school principals in particular.

Moreover, Al-Bashish's study (2021) aims to investigate the relationship between the degree of leadership practice and organizational improvisation among the heads of academic departments in Jordanian universities in Amman from the point of view of the faculty members and identify the differences in viewpoints according to the variables of gender, faculty, academic rank, and the number of years of experience. To achieve the objectives of the study, the descriptive correlational approach is used. The study instrument consists of a two-part questionnaire to measure the degree of leadership practice and the level of organizational improvisation. The study sample comprises (350) faculty members randomly selected by the clustering method. The findings indicate that the degree of leadership practice among the heads of academic departments in Jordanian universities in Amman from the point of view of the faculty members is high. The results also show that there are statistically significant differences at the level ($\alpha < 0.05$) in the responses of faculty members towards the degree of leadership practice among the heads of academic departments due to the variables of gender, faculty, academic rank, and the number of years of experience in favor of males, humanities faculties, the academic rank of the faculty member, and the category of 10 years and above, respectively. The findings also show that the level of organizational improvisation among the heads of academic departments is high. The findings also indicate that there are no statistically significant differences at ($\alpha < 0.05$) in their responses to the level of organizational improvisation due to the gender variable, while there are statistically significant differences for the variables of faculty, academic rank, and the number of years of experience in favor of scientific faculties, the rank of the associate professor, and the category of 5 years to less than 10. The study also demonstrates a high positive correlation between the degree of leadership practice and organizational improvisation among the heads of academic

departments.

Additionally, Ali's study (2022) aims to investigate the relationship between organizational improvisation and change management for hybrid learning and identify the effect of organizational improvisation as a leadership skill for deans of private higher institutes on managing the change necessary to confront the emerging COVID-19 represented in implementing the hybrid learning system combining distance learning and face-to-face learning. To achieve the objectives of the study, the descriptive analytical method is used. The questionnaire used as a study instrument is also applied to (127) deans. The findings indicate that there is a significant effect relationship between organizational improvisation and hybrid learning, which is a direct and positive relationship. Based on the previous analysis of the related literature review, the problem of the study is presented in the next section.

3 Problem Statement

Organizational improvisation is one of the modern terms emerging as an inevitable result of the rapid changes facing universities nowadays. These rapid changes can be the cause of the emergence of some problems, prompting universities to search for creative ways to find solutions within a limited timeframe away from re-planning, and hence, organizational improvisation is the best way to achieve this. Since universities are one of the institutions with an active role in the society like other institutions in terms of their exposure to various variables, this obliges them to find creative ways to confront these changes in a way, ensuring their continuity in achieving their goals.

As organizational improvisation is a conscious choice and not something that happens by chance, it can add value to the university, adopting better practices and adding flexibility and innovation. Therefore, it is in the interest of the university to understand how improvisation occurs and how to use it in daily activities. The highly formal regulatory environment that adheres to the literal rules of procedures and texts considers organizational improvisation as a violation of the rules and therefore the improvised can be liable to legal accountability under penalty of non-compliance. Hence, the phenomenon of improvisation is unavailable to all leaders or workers (Hussein, 2015).

Organizational improvisation is a way to avoid the traditional methods of facing emergency changes in work in an attempt to help organizations make decisions bearing the resulting risks (Hadida & Tarvainen, 2014). The significance of organizational improvisation is evident in the performance of work teams in the face of changes, pushing these institutions to work in a state of uncertainty when making a decision, which necessarily requires the ability to see the future, which highlights the role of organizational improvisation (Al-Dhabawi & Al-Shalan, 2019). Saeed (2021) emphasizes that the significance of organizational improvisation rests in work environments that tend to take decisions in a state of uncertainty resulting from the disruption of the work environment, which prompts organizations to try to adapt to changes to avoid failure. Several studies, such as the studies (Al-Dhabawi & Shalan, 2019; Al-Bashish, 2021; Ali, 2022) show the need to conduct studies on organizational improvisation, addressing different variables. Accordingly, the statement problem lies in identifying the degree of organizational improvisation among the heads of academic departments from the point of view of the faculty members at Yarmouk and Ajloun Universities.

3.1 Research Objectives

The objectives of this study are to:

1. Pinpoint the degree of organizational improvisation among the heads of academic departments from the point of view of the faculty members at Yarmouk and Ajloun Universities.
2. Identify the existence of any statistically significant differences at the level ($\alpha \leq 0.05$) between the mean of the responses of faculty members to the degree of the practice of organizational improvisation among the heads of academic departments due to the variables of gender, faculty, university, academic rank, and the number of years of experience.

3.2 Research Questions

1. What is the degree of organizational improvisation among the heads of academic departments from the point of view of the faculty members at Yarmouk and Ajloun Universities?
2. Are there any statistically significant differences at the level ($\alpha \leq 0.05$) between the mean of the responses of faculty members to the degree of the practice of organizational improvisation among the heads of academic departments due to the variables of gender, faculty, university, academic rank, and the number of years of experience?

3.3 Significance of the Study

The significance of the study lies in dealing with a contemporary and up-to-date topic of great importance to universities, which is organizational improvisation thanks to its positive results on the performance of institutions and their ability to face changes and find creative solutions to the problems they face. Hopefully, this study helps faculty members in Jordanian

universities to identify organizational improvisation to contribute to developing the university education management system in Jordan, enriching Arab libraries in general and Jordanian libraries in particular.

It is also hoped that this study helps officials at the Ministry of Higher Education and those in charge of the educational development process to identify the extent to which the heads of academic departments practice organizational improvisation to contribute to increasing the effectiveness of education. This study is new in the area of educational administration, hoping that this study will benefit academic leaders in making decisions that allow activating the practice of organizational improvisation in universities. Hopefully, this study will be a starting point for other studies in which other variables are added. Importantly, it is hoped that this study will employ the study instrument in selecting department heads in Jordanian universities.

3.4 Limitation of the Study

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

1. Objective Limitations: They represent the organizational improvisation among the heads of academic departments from the point of view of the faculty members.
2. Human Limitations: This study is limited to a sample of faculty members at Yarmouk University and Ajloun National University.
3. Spatial Limitations: This study is conducted at Yarmouk University and Ajloun National University.
4. Temporal Limitations: This study is conducted in the second semester of the academic year 2021/2022.

3.5 Research Terms and Definition

In this study, the term “organizational improvisation” is mentioned, and its procedural definition is as follows:

Organizational improvisation: It is defined as "A rational and deliberate skill that leads to useful decision-making in the absence of time and resources (Hamzeh, 2019, p. 62). It is also defined as "The process of timely decision-making in a flexible work environment outside the framework of the routine contexts in place in the organization in special circumstances." exceptional to confront a threat or exploit an available opportunity” (Al-Balaghi & Al-Zubaidi, 2021, p. 314). Procedurally, it is defined as the degree obtained by the heads of departments at the universities of Yarmouk and Ajloun through the response of the faculty members to the items of the 5- item questionnaire related to organizational improvisation, namely: intuition, innovation, adaptation, opportunity, and risk management.

4 Method and Procedures

4.1 Research Approach

To achieve the objectives of the study, the descriptive analytical method is used, as it is the most appropriate method for such a study, along with the use of a questionnaire as a means of collecting data related to the study.

4.2 Population & Sample Study

The study population consists of all (975) faculty members at Yarmouk University and Ajloun National University with the rank of professor, associate professor, and assistant professor. A random sample consisting of (280) is selected by the random sampling method, and it is distributed as shown in table (1).

4.3 Study Instrument

A study instrument is developed for the study by reviewing the theoretical literature and related studies such as (Al-Dhabawi & Shalan, 2019; Al-Bashish, 2021; Ali, 2022). The study instrument includes two domains:

1. Personal data: It includes gender, faculty, academic rank, and the number of experience years.
2. The degree of organizational improvisation prepared for this analysis consists of organizational improvisation and 5 areas (intuition, innovation, adaptation, opportunity, and risk management). The 5-level Likert scale is adopted, as five levels are identified: (5) very high, (4) high, (3) medium, (2) low, and (1) very low.

Table 1: Distribution of Study Sample Members According to Study Variables

Variable	Categories	Number	Total
Gender	Female	60	280
	Male	220	
University	Yarmouk	215	280
	Ajloun National	65	
Faculty	Scientific	95	280
	Humanities	185	
Academic Rank	Professor	35	280
	Associate Professor	55	
	Assistant Professor	190	
Number of Experience Years	1 to Less Than 5 Years	140	280
	5 to Less Than 10 Years	75	
	10 Years and Above	65	

4.4 Content Validity of Study Instrument

To check the content validity of the study instrument, content validity is used to present the items of the questionnaire in their initial form to a group of (10) experienced and specialized faculty members at Jordanian Universities. The observations and recommendations suggested by the validators are taken into consideration by retaining the items and obtaining an approval rate of (80%) or more. Also, the necessary procedures are done with the items proposed to be deleted, modified, or reformulated to obtain the questionnaire in its final form.

4.5 Reliability of Study Instrument

To check the instrument validity, a sample survey of (280) faculty members is adopted, and then an internal-consistency approach (Cronbach's Alpha) is used to compute the reliability coefficient to all domains, as it measures the consistency in the respondents' answers for all the items in the questionnaire as shown in table (2).

Table 2: The Reliability Coefficients of the Questionnaire of the Organizational Improvisation Measured by the Internal Consistency Method.

Domain	Reliability Coefficient Value (Cronbach's Alpha)
Intuition	0.82
Innovation	0.80
Adaptation	0.83
Opportunity	0.76
Risk Management	0.85
Overall Organizational Improvisation	

As shown in Table (2), the values for the reliability coefficient of the questionnaire on the organizational improvisation for the heads of academic departments at Ajloun National University have ranged from (0.76) to (0.85), where the highest reliability coefficient is for risk management and the least is for the opportunity.

4.6 Study Variables

4.6.1 Independent Variables

- a) Gender: It includes: (Males and females).
- b) University: It includes: (Yarmouk and Ajloun)
- c) Faculty: It includes: (Humanities and scientific).

- d) Academic rank: It includes: (Professor, Associate Professor, and Assistant Professor).
- e) The number of Experience Years: It includes (1 to less than 5 years, 5 to less than 10 years, and 10 years and above).

4.6.2 Dependent Variables

The organizational improvisation among the heads of academic departments at Yarmouk University and Ajloun National University from the point of view of the faculty members.

4.7 Statistical Processing

To answer the research questions and statistically process the data, the following statistical methods are used:

1. To answer the first question, means and standard deviations of individual responses to each item of the study instrument, rank, and degree are used .
2. To answer the second question, Five-Way ANOVA Scheffé's post-comparison test is also used to determine the significance.
3. The Cronbach's Alpha coefficient is used to find out the internal consistency coefficient of the study instrument.
4. The degree of implementation is classified into three levels (Low, Medium, and High) by calculating the mean, using the following formula:

(The Highest Value of the Alternative - the Minimum Value of the Alternative) ÷ Number of Levels = $(5-1) \div 3 = (4-3) \div 3 = 1.33$, and by adding (1.33) to the Minimum Value of the alternative (the minimum); the criterion for expressing those levels is: the Mean ranging between (1-2.33) indicates a Low Degree, and the Mean ranging between (3.67-2.34) indicates a Medium Degree, and the Mean ranging between (5-3.68) indicates a High Degree.

5 Results & Discussion

Findings related to the First Research Question:

What is the degree of organizational improvisation among the heads of academic departments from the faculty members point of view at Yarmouk and Ajloun Universities?

To answer this question, means, and standard deviations of faculty members' responses to the questionnaire domains related to the organizational improvisation among the heads of academic departments from the faculty members point of view are calculated. Table (3) illustrates these findings.

Table 3: Means, Standard Deviations, Rank, and Degree of the Organizational Improvisation among the Heads of Academic Departments from the Faculty Members Point of View at Yarmouk and Ajloun Universities.

Organizational Improvisation Domains	Mean	Standard Deviation	Rank	Degree
Adaptation	3.71	0.81	1	High
Intuition	3.52	0.77	2	Medium
Risk Management	3.68	0.76	3	High
Opportunity	3.36	0.74	4	Medium
Innovation	3.31	0.84	5	Medium
Total	3.53	0.58	=	Medium

Table (3) shows the degree of organizational improvisation among the heads of academic departments from the point of view of the faculty members at Yarmouk and Ajloun Universities is medium, as the mean is (3.53) and the standard deviation is (0.58). The domains' means of the study instrument ranged between (3.31 – 3.71) are also ranged between (Medium - High) degrees. The order of the domains in terms of the means is as follows: adaptation, risk management, intuition, opportunity, and innovation. The reason for this order is attributed to recent technological developments and the lack of studies for the beneficiaries about the services provided, and the lack of follow-up of complaints from students and parents. The result of this study differs from the study of Al-Bashish (2021).

Findings related to the Second Research Question

Are there any statistically significant differences at ($\alpha \leq 0.05$) between the mean of the responses of faculty members to the degree of the practice of organizational improvisation among the heads of academic departments due to the variables: gender, faculty, university, academic rank, and number of years of experience?

To answer this question, means, and standard deviations of faculty members’ responses to the questionnaire domains related to the organizational improvisation among the heads of academic departments from the faculty members point of view are calculated according to the study variables, as follows:

1. According to the gender variable:

Means and standard deviations of faculty members’ responses to the questionnaire domains related to organizational improvisation according to the gender variable are calculated. Table (4) shows these findings.

Table 4: Means and Standard Deviations of the Faculty Members’ Responses of the Questionnaire of the Organizational Improvisation According to the Gender Variable.

Domain	Gender	No.	Means	Standard Deviation
Adaptation	Male	220	3.69	0.83
	Female	60	3.78	0.76
Intuition	Male	220	3.49	0.73
	Female	60	3.63	0.78
Risk Management	Male	220	3.66	0.79
	Female	60	3.75	0.70
Opportunity	Male	220	3.35	0.72
	Female	60	3.40	0.81
Innovation	Male	220	3.26	0.81
	Female	60	3.49	0.73
All Domains	Male	220	3.50	0.64
	Female	60	3.64	0.72

2. According to the University Variable:

Means and standard deviations of faculty members’ responses to the questionnaire domains related to organizational improvisation according to the university variable are calculated. Table (5) shows these findings.

Table 5: Means and Standard Deviations of the Faculty Members’ Responses of the Questionnaire of the Organizational Improvisation According to the university Variable.

Domain	University	No.	Means	Standard Deviation
Adaptation	Yarmouk	215	3.74	.79
	Ajloun	65	3.61	.86
Intuition	Yarmouk	215	3.55	.71
	Ajloun	65	3.42	.77
Risk Management	Yarmouk	215	3.65	.78
	Ajloun	65	3.78	.69
Opportunity	Yarmouk	215	3.34	.70
	Ajloun	65	3.43	.74
Innovation	Yarmouk	215	3.32	.76
	Ajloun	65	3.28	.87
All Domains	Yarmouk	215	3.55	.62
	Ajloun	65	3.46	.51

3. According to the Faculty Variable:

Means and standard deviations of faculty members' responses to the questionnaire domains related to organizational improvisation according to the faculty variable are calculated. Table (6) shows these findings.

Table 6: Means and Standard Deviations of the Faculty Members' Responses of the Questionnaire of the Organizational Improvisation According to the faculty Variable.

Domain	Faculty	No.	Means	Standard Deviation
Adaptation	Scientific	95	3.98	.76
	Humanities	185	3.57	.79
Intuition	Scientific	95	3.76	.81
	Humanities	185	3.40	.75
Risk Management	Scientific	95	3.92	.69
	Humanities	185	3.56	.78
Opportunity	Scientific	95	3.56	.65
	Humanities	185	3.26	.77
Innovation	Scientific	95	3.48	.85
	Humanities	185	3.22	.76
All Domains	Scientific	95	3.71	.51
	Humanities	185	3.44	.59

4. According to the Academic Rank Variable:

Means and standard deviations of faculty members' responses to the questionnaire domains related to organizational improvisation according to the academic rank variable are calculated. Table (7) shows these findings.

Table 7: Means and Standard Deviations of the Faculty Members' Responses of the Questionnaire of the Organizational Improvisation According to the Academic Rank Variable.

Domain	Academic Rank	No.	Mean	Standard
Adaptation	Professor	35	3.34	0.79
	Associate Professor	55	3.77	0.72
	Assistant Professor	190	3.76	0.69
Intuition	Professor	35	3.12	0.88
	Associate Professor	55	3.57	0.84
	Assistant Professor	190	3.58	0.75
Risk Management	Professor	35	3.37	0.72
	Associate Professor	55	3.74	0.64
	Assistant Professor	190	3.72	0.67
Opportunity	Professor	35	2.96	0.70
	Associate Professor	55	3.41	0.83
	Assistant Professor	190	3.42	0.72
Innovation	Professor	35	3.36	0.81
	Associate Professor	55	3.28	0.76
	Assistant Professor	190	3.31	0.70
All Domains	Professor	35	3.16	0.55
	Associate Professor	55	3.59	0.54
	Assistant Professor	190	3.58	0.50

5. According to Number of Experience Years Variable:

Means and standard deviations of faculty members’ responses to the questionnaire domains related to organizational improvisation according to the number of experience years variable are calculated. Table (8) shows these findings.

Table 8: Means and Standard Deviations of the Faculty Members’ Responses of the Questionnaire of the Organizational Improvisation According to the Number of Experience years Variable

Domain	Academic Rank	No.	Mean	Standard
Adaptation	1 to less than 5 years	140	3.66	0.76
	5 years to less than 10 years	75	3.73	0.74
	10 years and above	65	3.79	0.81
Intuition	1 to less than 5 years	140	3.46	0.66
	5 years to less than 10 years	75	3.57	0.69
	10 years and above	65	3.59	0.76
Risk Management	1 to less than 5 years	140	3.64	0.70
	5 years to less than 10 years	75	3.71	0.68
	10 years and above	65	3.74	0.78
Opportunity	1 to less than 5 years	140	3.32	0.72
	5 years to less than 10 years	75	3.37	0.77
	10 years and above	65	3.44	0.81
Innovation	1 to less than 5 years	140	3.27	0.79
	5 years to less than 10 years	75	3.35	0.74
	10 years and above	65	3.34	0.85
All Domains	1 to less than 5 years	140	3.47	0.64
	5 years to less than 10 years	75	3.57	0.68
	10 years and above	65	3.61	0.55

Tables (4, 5, 6, 7, 8) show that there are observed differences among the means of the degree of practicing organizational improvisation among the heads of academic departments according to the study variables. To test the significance of these differences, MANOVA test used to identify the existence of statistically significant differences. Table (9) illustrates the test results. Table (9) shows:

1. There are no statistically significant differences at ($\alpha \leq 0.05$) for the degree of practicing organizational improvisation among academic department heads, according to the gender variable. The reason is that both genders desire to change and stay away from routine. This result is consistent with the study of Al-Bashish (2021).
2. There are no statistically significant differences at ($\alpha \leq 0.05$) for the degree of practicing organizational improvisation among academic department heads, according to the university variable. The reason is attributed to the desire in both universities to apply and commit to organizational improvisation skills to achieve the desired goals to the fullest. The reason may be attributed to the geographical proximity and the recent establishment of Ajloun University, seeking to keep pace with modern developments to reach the ranks of universities and obtain academic credits and competitive advantage.
3. There are statistically significant differences at ($\alpha \leq 0.05$) for the degree of practicing organizational improvisation among academic department heads, according to the college variable in favor of scientific faculties. The reason is that the scientific faculties are more accurate and serious and that they deal with laboratories reflected positively. This result differs from the study of Al-Dhabawi and Shalan (2019) and is consistent with the result of the study of Al-Bashish (2021).
4. There are statistically significant differences in the degree of practicing organizational improvisation due to the academic rank variable, except for the domain of innovation. To test the sources of these differences, Scheffe' test was used as shown in Table (10).

Table 9: MANOVA test results for the differences among the means of the Faculty Members' Responses of the Questionnaire of the Organizational Improvisation According to the study variables.

Source	Domains	Sum Squares	df	Mean Squares	f-Value	Sig.
Gender Hotling Value=0.628 Sig=0.348	Adaptation	0.271	1	0.271	0.759	0.702
	Intuition	0.299	1	0.299	0.806	0.680
	Risk Management	0.347	1	0.347	0.850	0.672
	Opportunity	0.403	1	0.403	0.935	0.658
	Innovation	0.401	1	0.401	1.058	0.581
University Hotling Value=0.641 Sig=0.367	Adaptation	0.281	1	0.281	0.787	0.693
	Intuition	0.297	1	0.297	0.801	0.681
	Risk Management	0.372	1	0.372	0.912	0.663
	Opportunity	0.411	1	0.411	0.954	0.647
	Innovation	0.403	1	0.403	1.063	0.577
College Hotling Value=0.108 Sig=0.027	Adaptation	3.592	1	3.592	10.062	0.001*
	Intuition	3.157	1	3.157	8.509	0.001*
	Risk Management	3.007	1	3.007	7.370	0.018*
	Opportunity	3.548	1	3.548	8.232	0.001*
	Innovation	2.998	1	2.998	7.910	0.007*
Academic Rank Wilcks Value=0.957 Sig=0.038	Adaptation	8.43	2	4.215	11.807	0.001*
	Intuition	6.554	2	3.277	8.833	0.001*
	Risk Management	5.112	2	2.556	6.265	0.032*
	Opportunity	6.882	2	3.441	7.984	0.012*
	Innovation	0.834	2	0.417	1.100	0.571
Experience Wilcks Value=0.408 Sig=0.192	Adaptation	0.458	2	0.229	0.641	0.726
	Intuition	0.632	2	0.316	0.852	0.671
	Risk Management	0.836	2	0.418	1.025	0.589
	Opportunity	0.738	2	0.369	0.856	0.669
	Innovation	0.842	2	0.421	1.111	0.570
Error	Adaptation	97.104	272	0.357		
	Intuition	100.912	272	0.371		
	Risk Management	110.976	272	0.408		
	Opportunity	117.232	272	0.431		
	Innovation	103.088	272	0.379		

Significant at ($\alpha \leq 0.05$).

Table (10) shows that there are significant differences among the means of the degree of practicing organizational improvisation among the heads of academic departments according to the academic rank variable in favor of (Associate Professor and Assistant Professor). The reason is the two categories of associate professor and assistant professor are closer to decision-making to prove their merit and scientific standing. However, the category of professor has reached the point of being subservient to administrative practices. This study differs from the study of Al-Enezi and Al-Saadi (2007) and agrees with the study of Al-Bashish (2021).

There are no statistically significant differences at ($\alpha \leq 0.05$) for the degree of practicing organizational improvisation among academic department heads, according to number of years of experience variable.

Table 10: Scheffé's Test for Post-comparisons of the Degree of Practicing Organizational Improvisation among Heads of Academic Department heads According to the Academic Rank.

Domain	Academic Rank		Professor	Associate Professor	Assistant Professor	
		Mean	3.34	3.77	3.76	
Adaptation	Professor	3.34		0.43*	0.42*	
	Associate Professor	3.77			0.01	
	Assistant Professor	3.76				
Domain	Academic Rank		Mean	3.12	3.57	3.58
Intuition	Professor	3.12		0.45*	0.46*	
	Associate Professor	3.57			0.01	
	Assistant Professor	3.58				
Domain	Academic Rank		Mean	3.37	3.74	3.72
Risk Management	Professor	3.37		0.37*	0.35*	
	Associate Professor	3.74			0.02	
	Assistant Professor	3.72				
Domain	Academic Rank		Mean	2.96	3.41	3.42
Opportunity	Professor	2.96		0.45*	0.46*	
	Associate Professor	3.41			0.01	
	Assistant Professor	3.42				

* Significant at $\alpha \leq 0.05$.

Also, the researcher computed Five - Way ANOVA test is also used to identify the existence of statistically significant differences in the responses of faculty members on the whole questionnaire. Table (11) illustrates the results of that test.

Table 11: Five-Way ANOVA test of the Faculty Members' Responses of the Questionnaire of the Organizational Improvisation According to the study variables

Variables	Sum Squares	df	Mean Squares	f-Value	Sig.
Gender	0.284	1	0.284	0.913	0.662
Faculty	0.327	1	0.327	1.051	0.582
University	2.277	1	2.277	7.322	0.001*
Academic Rank	5.632	2	2.816	9.055	0.001*
Number of experience years	0.518	2	0.259	0.833	0.518
Error	84.592	272	0.311		
Total	1854.816	279			

Significant at ($\alpha \leq 0.05$).

Table (11) shows:

1. There are no statistically significant differences at ($\alpha \leq 0.05$) for the degree of practicing organizational improvisation among academic department heads, according to the gender, university and number of experience years variables.
2. There are statistically significant differences at ($\alpha \leq 0.05$) for the degree of practicing organizational improvisation among academic department heads, according to the college variable in favor of scientific faculties.
3. There are statistically significant differences in the degree of practicing organizational improvisation due to the academic rank variable. To test the sources of these differences, Scheffe' test was used as shown in Table (12).

Table (12) shows that there are significant differences among the means of the degree of practicing organizational improvisation among the heads of academic departments according to the academic rank variable in favor of (Associate Professor and Assistant Professor).

Table 12: Scheffé's Test for Post-comparisons of the Degree of Practicing Organizational Improvisation among Heads of Academic Department heads According to the Academic Rank.

Academic Rank		Professor	Associate Professor	Assistant Professor
	Mean	3.16	3.59	3.58
Professor	3.16		0.43*	0.42*
Associate Professor	3.59			0.01
Assistant Professor	3.58			

* Significant at $\alpha \leq 0.05$.

6 Conclusion and recommendation

In a nutshell, this study aims at pinpointing the degree of organizational improvisation among the heads of academic departments from the perspective of the faculty members at Yarmouk and Ajloun Universities according to gender, university, faculty, academic rank, and the number of years of experience. The results also show that there are no statistically significant differences due to the variables of gender, university, and years of experience. Besides, the findings demonstrate that there are differences due to the variables of faculty and academic rank in favor of scientific faculties and associate professors, respectively. In light of the findings, the study recommends meeting emergency and modern needs through organizing the procedures and means of providing service and giving significance to the tools of strategic analysis for their ability to discover the surrounding opportunities and threats.

In light of the results and related discussion, the study recommends investing in opportunities that suit the university's current and future capabilities, meeting urgent and modern needs through organization, procedures, and means of providing service, and involving everyone in specialized meetings to discuss ideas and search for new opportunities, giving importance to the tools of strategic analysis as they work to discover the surrounding opportunities and threats, as well as conducting correlative studies to clarify the relationship between organizational improvisation, digital management, and strategic planning.

Ethical Approval

This study was a systematic review does not contain any studies with human or animal participants performed by the author.

Informed Consent

This was a systematic review for previously published studies no informed consent was needed in this study.

Conflict of Interests

The author has not any conflict of interests with the information presented within this article.

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