

# Hindrances of Scientific Research Cultures: A Study of University Faculty Members at Al-Madinah International University (MEDIU)

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To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v13-i1/20889>

DOI:10.6007/IJARPED/v13-i1/20889

*Published Online:* 27 February 2024

## Abstract

The research aims to identify the hindrances of scientific research cultures at Al-Madinah International University in Malaysia from the faculty members' perspectives. This study used a mixed method approach to gather the data related to the hindrances of research culture among the academic staff in Al-Madinah International University. The sample size consisted of 50 faculty lecturers from the faculty education, Islamic science and faculty of languages. The data was collected using questionnaire and open-ended interview. The statistical analysis was done using the statistical packages program (SPSS). The scientific meaning of Al-Madinah International University from the faculty members' perspective where the mean averages of the dimensions ranged between ( $\bar{x}$ ) = (4.950) to (21.99) and a standard deviation = (.907) and (.728) as well as each of the two terms (obstacles). Related to working conditions on an arithmetic average of ( $\bar{x}$ ) = (25.05). Furthermore, barriers related to the field of professional growth related to scientific research for a faculty member) with a mean average of ( $\bar{x}$ ) = (25.07), with the highest score in the mean averages of faculty members' responses on the questionnaire items. Followed by the order of the degree of material and moral obstacles, obstacles related to administration, ( $\bar{x}$ ) = (24.78 and 24.90), respectively. The results also showed that there are no statistically significant differences in the obstacles to scientific research attributable to all demographic variables of the faculty members by the value of ( $p$  = .801) and ( $f$  = (.223) for years of experience, with a value of (.789  $p$ ) and  $f$  = (.237), the value of variables according to academic rank ( $p$ ) .450 and ( $f$  = (.803) all > Indication level. (0, 05). The researchers recommend the dissemination of the research culture through the internal grants and research training programs.

**Keywords:** Hindrances, Scientific Research, Faculty Members, Al-Madinah International University

## Introduction to Research

Undertaking research holds great importance in enhancing the standard of living. It helps us to find and test new information, create new tools, and resolve difficult issues. It is the responsibility of researchers to write up and disseminate their findings for the scientific

community. An English novelist was quoted as saying, "We write because we have to, not because we want to" (Monteiro et al., 2012). The results of research are not publicized until they are published. When research is effectively published, it is seen by most scientists, students, and researchers worldwide.

Awareness of the importance of scientific research to achieve innovation in the civilizational and scientific process increases daily. Scientific research is essential in that it is a means that contributes to the quality of decisions and methods that are followed in confronting societal problems and providing workers in institutions with urgent solutions to their immediate problems, which leads to adjusting the course according to the current and future requirements of the era, and this is the goal of scientific research, and developed countries adopt scientific research as a means of developing policies, strategies, and plans; To develop its programs, targeting and investing in strengths and weaknesses, diagnosing and treating them, and developing new policies to meet society's requirements (Abusharekh et al., 2019).

Researcher evaluation is rightly preoccupied with the achievements of individuals, but increasingly, individual researchers are working within teams and collaborations. The average number of authors per paper has been increasing steadily since 1950 (Mestri, 2020). Teamwork is essential to solve the most complex research and societal challenges, and is often mentioned as a core value in mission statements, but evaluating collaborative contributions and determining who did what remains challenging. In some disciplines, the order of authorship on a publication can signal how much an individual has contributed; but, as with other proxies, it is possible to end up relying more on assumptions than on information about actual contributions.

This is particularly due to the mystery prevailing across data practices (Boyd and Crawford 2012; Kitchin, 2014; Tufekci, 2014). Until there is transparency in data practice, culture and potential impact, implementable regulation cannot be set with confidence. This transparency will allow citizens to engage practically with data and best practice. Many nations have realized that their existence, development, and strength are all dependent on what they achieve in the field of scientific research, so they began drawing plans for that, establishing research centers and institutions, and allocating large financial allocations, realizing that investing in scientific research is one of the most profitable types of investment. Higher education institutions constitute the most important scientific centers entrusted with scientific research. Universities have played this role in all countries that have achieved progress in scientific research.

These universities contribute to achieving comprehensive development requirements, especially in raising the effectiveness of planning in developing human resources, on the basis that the human element and the creative energies it possesses are factors no less important than the material capital. Much of scientific progress and development is due to the efforts of researchers, as scientific research is defined as "an organized intellectual process by the researcher to investigate the truth of a problem or problem called the research problem by following an organized process called" appropriate treatment solutions or results that are generalizable to similar problems (Noor et al., 2014).

The goal of scientific research is to acquire knowledge and use it, usually for the benefit of society at large. Therefore, the growth of communities can benefit greatly from high-quality research. This survey's primary goal was to examine the current issues that scientific research is facing and offer some solutions to help get past these barriers.

The faculty member at the university is the center of the department or the driving force of the university institution. Despite the development and progress in the university's mission and missions, the university faculty member, with his method and scientific ability, remains the focus of its mission and the focus of its activities. As everyone knows, the university faculty member's mission contains three essential elements: teaching, scientific research, and service to the university and society. Therefore, the tasks of a faculty member cannot be viewed separately from the functions of the academic department and college to which it belongs and the university's mission that includes it and the community that embraces this university. Most of the internal regulations for organizing Arab and Islamic universities stipulate that one of the duties of a faculty member is "to contribute to the advancement of science, literature, and the arts, to enrich the Arab library with research and studies, to participate effectively in applying the results of research and studies in the fields of social and economic life, and to work regularly to Improving his knowledge and scientific experience and raising his level in his fields of specialization."

### **Research Problem**

Considering the result of the research, the major challenges that facing research include scarcity of resources and funding, lack of motivation, lack of training, guidance and supervision, organizational obstacles and difficulties of collecting data which accompanied by low demand for research by policymakers. Research capacity building courses, collaboration and networking opportunities are urgently needed. A faculty member at Al-Madinah International University is exposed to many hindrances that stand in the way of conducting his research, which negatively affects the university's achievement of its goals, including scientific research. The current study seeks to answer the main research question.

The following research questions branch out from this question:

1. What are the hindrances to scientific research do faculty members face and which ones have the most significant impact on them based on the classification: personal, material, administrative?
2. Are there any statistically significant differences in faculty members at Al-Madinah International University in the hindrances in terms of different faculties, year of experience and academic level?
3. What are the ways to overcome these obstacles from the point of view of faculty members?

### **Research Objectives**

The current research aims to achieve the following objectives

1. To determine the hindrances to scientific research among the faculty members and which ones have the most significant impact on them based on the classification: personal, material, administrative?
2. To determine whether there are statistically significant differences in faculty members at Al-Madinah International University in the hindrances in terms of different faculties, year of experience and academic level?
3. To explore the ways to overcome hindrances of scientific research cultures at Al-Madinah International University in Malaysia from the point of view of faculty members?

**Significance of the Research**

The focus on this research is crucial to create the awareness of scientific research among the academic staff and professional researchers. Scientific research competence today is important for many professions and activities: it is necessary not only to creatively apply the obtained knowledge but also to create new knowledge, to carry out the applied researches. Therefore, during the bachelor studies already, the student has to obtain scientific research competence. Scientific research activity becomes the teacher's educational practice realia as well, allowing the analysis of concrete learning situations, forming the assumptions to think over one's actions, pedagogical interaction with pupils, allowing making sure of the effectiveness of the applied teaching methods. Constantly changing pedagogue's activity requires research activity competences. Teacher-researcher - is constantly thinking over his activity, organizing pedagogical activity researches, applying various research methods, creatively applying the research results. It is obvious that there is evidence that teacher researcher contributes to teachers' professional dispositions, learning, and growth.

The current research stems from the importance of scientific research in bringing about the desired progress and development of nations and societies. No matter how much potential and natural resources it possesses, society cannot enter the doors of progress and civilization unless it pays attention to scientific research and invests in it. Developed countries are the best example of how they have achieved progress due to their interest in scientific research, such that the economies of these countries now exceed the economies of the Arab and Islamic countries combined in terms of the oil and gas they possess. Accordingly, the current research derives its importance from the following points:

- Identify the obstacles facing scientific research in general and the barriers faced by a faculty member at Al-Madinah International University in Malaysia when conducting scientific research.
- This research may help improve the appropriate conditions for a faculty member at Al-Madinah International University to conduct more scientific research and facilitate all means.
- Benefiting from the results of this research in achieving one of the university's most essential functions, scientific research, which contributes to achieving the university's goals and functions to serve society.
- Benefiting from this research's recommendations and suggestions in removing obstacles facing scientific research or reducing them as much as possible.

In this research, what is meant is all the financial, administrative, and moral obstacles and difficulties that prevent a faculty member at Al-Madinah International University in Malaysia from completing scientific research or engaging in scientific research or that constitute an obstacle in their scientific activity.

**Literature Review**

The formation of scientific research activity (SRA) abilities in comprehensive school is, undoubtedly, a very important sphere, having not received a proper attention yet. Hatamleh (2016) aimed to diagnose the obstacles facing scientific research and faculty members at Al-Quds Open University. The researchers used the descriptive analytical method applied in the questionnaire prepared by Sameh Muhafza and Mahmoud Al-Miqdadi after codifying it and make The researchers chose a sample appropriate to the nature of human boundaries to study, considering the original community's representation. They also used it to analyse data and appropriate statistical methods. The researchers reached a set of results, the most

important of which were the obstacles facing the university researcher in the administrative and financial aspects of publishing and distribution. The study recommended a set of recommendations, including providing modern databases for researchers and removing obstacles to attending conferences and seminars.

**Study by Muhammad Hassan Al-Ammara and Siham Muhammad Al-Sarabi (2008)**

This study aimed to identify the obstacles to scientific research among faculty members at Al-Isra Private University and to find out whether there are statistically significant differences in the degree of their appreciation of the challenges to scientific research according to the variables of the study (gender, academic qualification, type of college, experience). The study tool was a questionnaire consisting of (36) items distributed among the university's seven colleges. The study resulted in several results, the most important of which were that faculty members suffer from problems that hinder their carrying out scientific research, and their percentage of appreciation for the existence of the issues that impede scientific research reached (79.54%). The study recommended several recommendations, including that the Deanship of Scientific Research works with the university administration to create two peer-reviewed journals affiliated with Al-Isra University, one for the humanities and social sciences and the second for applied sciences.

**Study by Abdullah Al Majidel and Salem Mustahil Shammass (2010)**

This research aims to investigate the obstacles facing faculty members at the College of Education in Salalah that prevent them from completing and engaging in scientific research, as well as ways to overcome them. The researchers relied on an initial exploratory questionnaire, which monitored the most significant barriers facing faculty members in scientific research. The researchers reached several results, the most important of which are: The research results showed that most faculty members agreed at a rate of approximately (60%) on all questionnaire items. The research also showed that administrative obstacles were the most severe for faculty members in scientific research. The researchers also concluded several recommendations emerging from the results of the research, the most important of which are the necessity of monitoring the financial budgets necessary for scientific research, freeing them from excessive routine procedures in controlling them, and establishing a view of spending on scientific research that it is not a waste of money, but rather the most profitable type of investment.

Study by Al Abri et al (2022) the searched the study in Perceptions Teachers around Share in search on Teachers (TR) and within it in Sultanate Oman. Reveal data that was completed. Collect it from Interviews and questionnaires that TR has Not practiced Commonly until now in Schools in Omani. To make TR Active Major Sustainable inside Environments school, the researcher should that entails to improve the Concepts of Teachers and their positions and understand the role of TR in the development of the Educational and The professional. System He should also supply Teachers with requirements, Logistics, And circumstances. The operation that Helps them become Researchers and Practitioners We are active and competent.

**Study Al-Sharman and Wael Muhammad (2016)**

The research aimed to know the obstacles to scientific research among faculty members in the applied scientific colleges at Sana'a University, as perceived by faculty members. To find out whether there are statistically significant differences between faculty members'

estimates of the obstacles to scientific research depending on the variables (nature of work, college, academic rank), the research community may consist of all Yemeni faculty members in the applied scientific colleges at Sana'a University (science, medicine, and health sciences). (Engineering, Agriculture), numbering (535) members who hold the rank of professor, associate professor, and assistant professor, according to Sana'a University statistics for the academic year (2006/2007 AD). The research sample consisted of (251) members, representing (47%) of the original population of the study. The sample was selected by a stratified random method. The researcher constructed a questionnaire consisting of (56) items distributed over five axes: legislative and administrative obstacles, obstacles to the infrastructure of scientific research, barriers to spending on scientific research and its funding sources, obstacles related to faculty members, and obstacles to the climate of scientific research). When presented to many arbitrators, the instrument validity and reliability using "Cronbach's alpha" coefficient for all axes of the tool and the tool as a whole. To analyze the data and answer the research questions, the researcher used the arithmetic mean, standard deviation, t-test, one-way analysis of variance, and the Scheffé test. Schfee," and the significance level was adopted at (0.05). The research reached several results, the most notable of which are the following: All axes of the research tool represented an obstacle to faculty members in scientific research to varying degrees, whereas the most prominent axes of obstacles were the axes of obstacles. Spending on scientific research and its sources of funding, represented as a (huge) obstacle, then the axis of legislative and administrative barriers, defined as a (significant) obstacle, then the axis of the challenges to scientific research infrastructure, represented as a (substantial) obstacle, then the axis of obstacles to the climate of scientific research, defined as a (significant) obstacle, and lastly, the axis of private relations with members. The teaching staff represented a (moderate) handicap, and the average of the tool as a whole was (4.03%) and it represented a (significant) handicap. Faculty members agreed about the obstacles to scientific research, whether they were academics or academic administrators (D'este & Perkmann, 2011). Why do academics engage with industry? The entrepreneurial university and individual motivations Participation in Activity Research from before Academics in the university. Directed toward search in Vietnam, check universities on Importance Resurrection Academics with research and publish results of their research. He confesses that sharing in search is an effective means to this fantastic study approach qualitatively to explore possibilities and motivations toward sharing in search from before academics in one leading university Was completed Procedure nine ten interviews Same organized with academics different arrange them academy and their discipline and their qualifications and their age and their gender. Discover analysis objective for data, four Factors Institutional Hinder Share in Research Academics: Support Financial for activities search (cost); Pregnancy teaching (barrier); cooperation Research (motivation); And settings and practices Policy Search (motivation). Revealed Results: Most respondents were knowledgeable about necessary searches, but their productivity research was still low because of problems related to these institutional factors. Results are Useful in helping Leaders of the university in complete Investigation to understand Motives Research for academics and also making sure the Obstacles that He faces in Academics may be Overcome during Intervention.

Okoduwa et al (2018) aimed to study the attitudes and barriers to transformation without searching and publishing between members' bodies. the instrument was self-administration on 130 of members teaching and search in different directorates in NILEST. complete an offer data in duplicate and lineage centenary for answers on the questionnaire.



result: verification from 93.85 % correct questionnaires to study, which included 81.15% males and 18.85% females. participants in the study were researchers (26.23%), lecturers (31.15%), and technical (staff 20.49%). i agree. most participants in that search were important to the institute (90.98%). 81.15% thought that the procedure search should be mandatory for all members of body teaching. only 44.26% reported that they have an ongoing search. included some obstacles that it was completed reporting about her which prevented without activities search what the following: deficiency finance (72.13%), and a shortage guidance professional (84.43%) and non- professional adequacy amenities search (89.34%). he was a participant without paper one and published 54.545%. some of the reasons that gave for not publishing research it was " no existence expertise in writing (95.65%), fees to publish high (79.71%) and period waiting long review peers (97.10%)." included suggestions to improve condition search from before respondents ' provision grants / funding research (92.62%), and saving amenities internet (95.10%), and publishing compulsory (26.23%) and guidance appropriate (34.43%). conclusion: most respondents believe that the search dhu link has a partner number a little just in search active and articles published as evidence. so recommend necessarily, the put makers policies strategies to focus on activities search active from okay investigation a task search and a goal institution in development economy.

Generally, the current research is complementary to some previous studies, especially those that touched on the obstacles and problems that hinder faculty members in universities from practicing research activity. It goes more in-depth in trying to investigate these obstacles by asking faculty members in an academic institution, namely the International City University in Malaysia, concerned with Scientific research is included in its internal regulations, and it is considered one of the tasks of the faculty member in addition to his teaching work. It is similar to most institutions of higher education in Islamic countries in terms of adopting research activity as one of the tasks of the faculty members in addition to the teaching work assigned to them. It can be done by analysing the faculty members' answers to all aspects of the questionnaire to identify the fundamental obstacles that hinder the faculty member from practicing scientific research and measure the severity of each of these obstacles, which opens new horizons for researchers interested in studying this problem, as it constitutes, from the point of view of many researchers The main obstacle to the development of Arab and Islamic countries in various fields, and that overcoming the stage of backwardness and joining the ranks of civilized countries depends on the successes we achieve in the field of scientific research, and that it is the only survival vehicle for our countries. The current research has benefited from previous studies in terms of the educational literature they contain related to the subject of the study, and it has also benefited from the questionnaires used in earlier studies in constructing the questionnaire for the current research.

### **Research Methodology**

Williams (2011) describes the research methodology as the comprehensive steps the researcher uses to initiate research. Therefore, quantitative research deals with quantitative variables and analyses them to obtain results. Involves using and analysing numerical data using specific statistical techniques to answer questions such as who, how much, what, where, when, how much, and how. Based on this, this research used the descriptive analytical method, as it is the appropriate method for this type of research, which is classified as descriptive analytical survey research, which is conducted according to the field research method, which proceeds from observation to questioning, and from there to hypothesis, and

then testing the hypothesis according to the steps. In this study, the researcher used a quantitative research methodology to collect and analyse the data obtained in the study.

### The Research Population and Sample size

The study population for the current research was determined by the faculty members at al-Madinah International University in Malaysia and those working in the direct education system in each of the following faculties (education - languages - Islamic sciences) as stated in (Hamed et al., 2024). Their number reached (50) faculty members for the April semester 2021 ad according to statistics from the academic administration department of the academic affairs agency at al-Madinah international university in Malaysia. due to the small research population, the sample included faculty members at al-Madinah international university. all faculty members constituted the research sample. the questionnaire was sent to each college faculty member referred to above via (google form). the researcher retrieved a number (43) completed questionnaires with data, constituting 86% of the total number of faculty members. statistical analysis was conducted on (38) questionnaires, and (5) were excluded. questionnaires were used either for lack of response or for lack of suitability for statistical analysis. The following table explains that.

Population of the Study	Distributed questionnaires		Retrieved questionnaires		Non-refundable questionnaires		Questionnaires were excluded		Sample of study	
	n	%	n	%	n	%	n	%	n	%
50	50	100	43	86%	7	14%	5	10%	38	76%

It is noted from the previous table (1) that the number of members of the research community reached (50) faculty members, and that the total number of questionnaires distributed to members of the research population amounted to (50) questionnaires, and this number represents the entire members of the research community at a rate of (100%), meaning the questionnaires were distributed. On all members of the research community, and the number of questionnaires returned from all members of the research community after distributing them to them amounted to (43) questionnaires, i.e. (86%). This percentage is considered good for the response and cooperation of members of the research community with the researchers in responding and answering the questionnaire items. As for the number of questionnaires The un-retrieved questionnaires amounted to (7) questionnaires, representing (14%) of the total number of questionnaires distributed. As for the questionnaires that were excluded due to incomplete information, they amounted to (5) questionnaires, meaning (10%) of the total number of questionnaires distributed. Thus, the questionnaires that were eligible for statistical analysis became (38). A questionnaire with a percentage of (76%) of the number of questionnaires, and this number represents the number of individuals in the research sample out of the total number of individuals in the study population, which in turn represents the original population of the research. The following is a description of the research sample after transcribing the data contained in the questionnaires answered by the study sample members according to the study variables. Tables (2), (3), (4), and (5) show the distribution of the study sample according to its independent variables.



***Distribution of members of the research sample according to the faculties.***

Table (2) shows the distribution of members of the research sample according to the faculty variables

College	Number	Percentage
Education	3	7.9 %
Islamic sciences	27	71 %
Languages	8	21.1 %
<b>Total</b>	<b>38</b>	<b>100%</b>

It is clear from Table (2) the frequencies and percentages of the distribution of the research sample after application according to the college type variable, as the application was limited to colleges that offer their programs in the Arabic language. The percentage of faculty members affiliated with the College of Education reached (7.9%) of the total research sample, as the study programs in it are limited to the graduate level (bachelor's, master's, doctorate), while the percentage of faculty members affiliated with the College of Languages reached (21.1%). When the College of Islamic Sciences obtained the largest percentage of the sample of faculty members, at a rate of (71%), as it serves as the university's mother college, and has the largest number of academic programs at the level of the university's faculty.

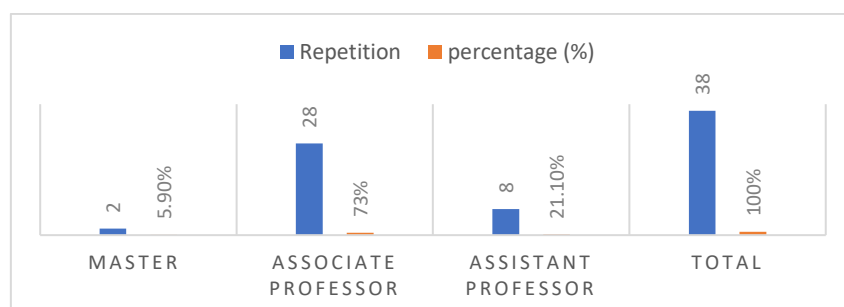
Distribution of members of the research sample according to academic rank

***Table (3)***

*Shows the distribution of members of the research sample according to academic level*

Academic Level	Repetition	percentage (%)
Master	2	5.9%
Associate Professor	28	73%
Assistant Professor	8	21.1%
Total	38	%100

Table 3 shows the frequencies and percentages of the distribution of individuals in the research sample according to academic rank. The percentage of faculty members affiliated with the rank of professor reached (5.9%) of the total research sample, while the percentage of faculty members affiliated with the rank of associate professor reached (21.1%), while the rank of associate professor received the largest percentage of the sample, with a percentage of (73%). The findings are depicted in the below chart:



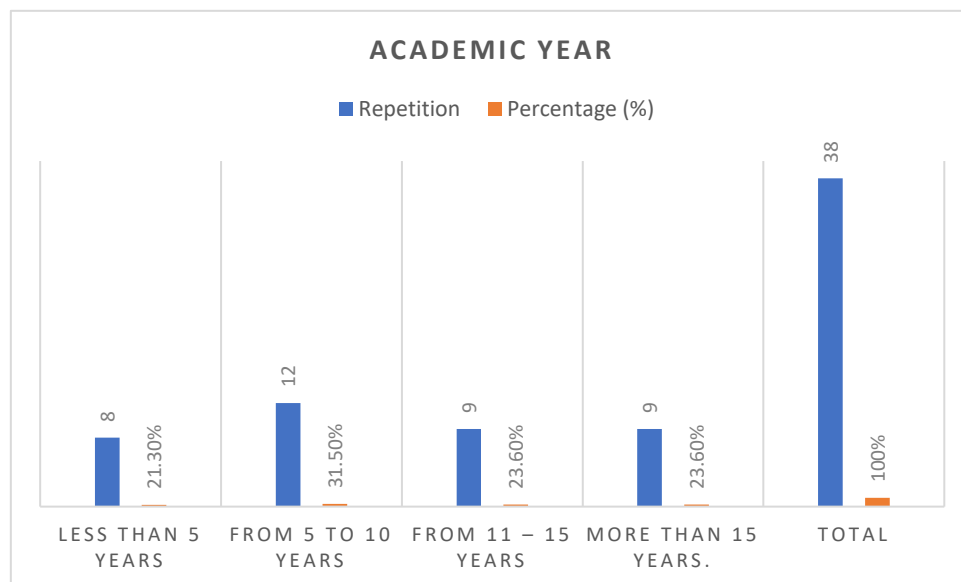
**Academic Experience Variable**

*Table (4)*

*Shows the distribution of members of the research sample according to academic experience*

Academic experience	Repetition	Percentage (%)
Less than 5 years	8	21.3 %
From 5 to 10 years	12	31.5 %
From 11 – 15 years	9	23.6 %
More than 15 years.	9	23.6 %
Total	38	100 %

Table 4 shows the frequencies and percentages of the distribution of members of the research sample according to academic experience. The percentage of affiliated faculty members with less than 5 years of academic experience was (21.3%) of the total research sample, while the percentage of affiliated faculty members with academic experience from 5 to 10 years was (31.5%), while there is no difference in the percentage of faculty members. Teaching associates with academic experience from 11 to 15 years or more out of a sample, with a percentage of (23%), as shown in the following graph.



**Instrumentation**

- The researchers first defined the study tool in the form of a questionnaire. Because it is the most widely used research tool, and because it is the most appropriate for current research.
- The objectives of the questionnaire were set to identify the viewpoint of faculty members at Al-Madinah International University on the obstacles to scientific research there. As well as learning about their proposals related to developing the field of scientific research at the university.
- The sources that the researcher resorted to build the research tool were identified, and they are as follows

Reviewing a number of research tools in a number of educational periodicals, magazines, research, and previous studies related to the current research problem. Including meeting with a group of specialists in this field to benefit from their expertise.

### Validity of the Instrument

After completing the preparation of the questionnaire and building its paragraphs, and to ensure the apparent validity of the questionnaire, it was presented in its initial form to a group of arbitrators with expertise and experience in the field of educational sciences. A letter was addressed to the arbitrators explaining the problem of the research, its questions, and its objectives. The number of arbitrators reached (11). tight; This is to ensure the degree of appropriateness of the statement, its clarity, its belonging to the axis, and the soundness of the linguistic formulation, as well as to consider the gradation of the scale and its suitability. Based on the opinions of the arbitrators about the suitability of the questionnaire for the objectives of the research, and in accordance with their directions and suggestions, the wording of some phrases was modified linguistically, some phrases were added, and some were deleted. The number of statements in the questionnaire became (47) instead of (50) statements distributed among (6) items.

### Reliability of Instrument

To verify the reliability of the instrument of the tool, it was applied to an exploratory sample from the research community consisting of (13) individuals from the teaching staff in the colleges of education, languages, Islamic sciences, and computer, including (3) from the College of Education, (4) from the College of Languages, and (5) from Islamic Sciences, and (1) from the College of Computer and Information Technology. These were not included in the original study sample, and the researcher used the "Cronbach's alpha" equation to extract reliability, as shown in Table (5) below

Domains	Reliability coefficient
Obstacles related to working conditions.	0.86
Material and moral obstacles.	0.89
Obstacles related to the field of professional growth related to scientific research for a faculty member.	0.84
Management-related obstacles.	0.91
Obstacles related to the equipment, facilities, and information necessary for scientific research.	0.87
Obstacles related to publishing and distribution.	0.90
Total	0.91
Overall Reliability	0.88

Table (7) shows that the reliability coefficients for the areas of obstacles ranged between (0.84 - 0.91), while the overall reliability for the obstacles reached (0.91), while the value of the coefficient for the field of development proposals reached (0.88). These values are high and indicate that the study tool has with a high degree of stability, the results can therefore be relied upon and trusted.

### Data Analysis Procedure

In order to process the data, the researcher used the Statistical Package for the Social Sciences (SPSS) program, using the following statistical treatments: arithmetic means, percentages, and standard deviations to answer the first and fourth questions, and a statistical t-test for two independent groups (Independent T-test) to answer the questions: Questions (second and fifth) with one-way analysis of variance (One Way Anova). Finally, the (Cronbach's alpha) equation to calculate the reliability coefficient of the instrument.

**Research results and discussion of Findings**

This part includes a presentation of the results reached by the research, and the following is a presentation of those results. First: Results related to the first question: What type of hindrances to scientific research face faculty members? Which ones have the greatest impact on them, according to their classification: personal, material, administrative, or other hindrances?

To answer the first question about the type of obstacles to scientific research facing faculty members and which ones have the greatest impact on them by classifying them as personal, material, administrative, or other obstacles, the descriptive analytical approach was used, and the answers were as follows in the first table

Table 6

*Means and standard deviations of faculty members' responses*

		(% ) percentage				
		Standard deviation	Means	Totally disagree and disagree	To some extent	Totally agree and agree
1	The teaching load of the faculty member has increased.	.746	2.607	15.7%	28.6%	55.8%
2	Lack of appropriate amenities for faculty members, such as: suitable desks, computers...	.711	2.635	13.6%	9.3%	77.1%
3	Lack of clarity of roles at the university and duties required of a faculty member.	.681	2.550	10.7%	23.6%	65.7%
4	The large number of tasks required of a faculty member.	.851	2.328	25.0%	17.1%	57.9%
5	Lack of computer services that contribute to scientific research.	.720	2.328	13.6%	15.0%	71.4%
6	Lack of assistants and technical specialists.	.722	2.578	13.6%	27.9%	58.6%
7	Losing benefit from the results of scientific research.	.787	2.428	18.6%	20.0%	61.4%
8	Failure to recognize some peer-reviewed journals.	.830	2.450	30.0%	3 1. 1 %	39.3%
9	Lack of sufficient time to conduct scientific research.	.820	2.428	23.6%	25.7%	50.7%
10	Poor availability of research skills among the faculty member.	.732	2.092	14.3%	15.7%	70.0%
11	Lack of cooperation between the university and entities benefiting from the results of scientific research.	.831	2.401	15.7%	28.6%	55.8%
12	Decrease in the number of faculty delegates to attend	.852	1.992	13.6%	9.3%	77.1%

	scientific conferences outside Malaysia.					
13	Lack of references and sources of knowledge required for scientific research.	.728	2.435	10.7%	23.6%	65.7%
14	The researcher does not feel that the results of his research are being cared for at the university.	.844	2.300	25.0%	17.1%	57.9%
15	Lack of cooperation from colleagues in conducting joint research.	.888	2.135	13.6%	15.0%	71.4%
16	Inefficiency of the monthly salary received by a faculty member.	.883	2.387	13.6%	27.9%	58.6%
17	There is no connection between the promotion system in place at the university and the level of competence and excellence in scientific research.	.802	2.342	18.6%	20.0%	61.4%
18	The university is not willing to pay any amount - even if it is symbolic - to serve scientific research.	.882	2.278	30.0%	30.9%	39.3%
19	Lack of participation in scientific courses specialized in scientific research.	.880	3.071 –	23.6%	25.7%	50.7%
20	Lack of university encouragement to participate in scientific conferences.	.907	3.128 –	14.3%	15.7%	70.0%
21	Lack of faculty member's knowledge of computer science and how to use it in scientific research.	.831	2.401	15.7%	28.6%	55.8%
22	Lack of interest in holding specialized scientific conferences, according to different specializations.	.852	1.992	13.6%	9.3%	77.1%
23	There are no incentives or financial rewards for researchers.	.728	2.435	10.7%	23.6%	65.7%
24	Referees' delay in evaluating the research and returning it.	.844	2.300	25.0%	17.1%	57.9%
25	Delayed procedures for publishing scientific research in peer-reviewed journals.	.888	2.135	13.6%	15.0%	71.4%
26	Difficulty in printing and photocopying procedures at the university.	.883	3.387 –	13.6%	27.9%	58.6%

27	The large number of hours scheduled for teaching per week.	.802	2.342	18.6%	20.0%	61.4%
28	Lack of a suitable scientific climate for scientific research.	.882	2.278	30.0%	3 1.9%	39.3%
29	There is no peer-reviewed journal in the college.	.880	2.071	23.6%	25.7%	50.7%
30	The faculty member does not want to research and prefers additional teaching to research.	.907	4.128 –	14.3%	15.7%	70.0%
31	Not releasing a faculty member to conduct research (sabbatical) while continuing the salary.	.831	2.401	15.7%	28.6%	55.8%
32	The influence of personal relationships between those responsible for evaluating and arbitrating research.	.884	1.950	13.6%	9.3%	77.1%
33	Poor communication between faculty members in one specialty.	.849	2.200	10.7%	23.6%	65.7%
34	Lack of procedures to stimulate scientific research at the university.	.835	2.121	25.0%	17.1%	57.9%
35	Not holding training courses to learn about the general uses of computers in scientific research.	.852	1.992	13.6%	15.0%	71.4%
36	Failure to provide computer programs to assist in conducting scientific research.	.884	1.950	13.6%	27.9%	58.6%
37	Failure to provide accommodation and travel expenses for the researcher participating in a conference or symposium inside or outside the country.	.849	2.200	18.6%	20.0%	61.4%
38	The university follows strict policies in sending researchers to attend conferences and seminars.	.835	2.121	30.0%	3 2. 0 %	40.3%
39	Lack of availability of research information bases and research centers at the university.	.852	1.992	23.6%	25.7%	50.7%
40	Lack of adequate availability of periodicals and magazines in the university library.	.884	4.950 –	14.3%	15.7%	70.0%
41	The university does not have statistical programs suitable for statistical analysis.	.849	2.200	15.7%	28.6%	55.8%



42	The university does not have a measurement and statistics center to analyze research and results.	.888	2.135	13.6%	9.3%	77.1%
43	The lack of reward for evaluating and arbitrating research and its impact on the speed of research evaluation.	.883	2.387	10.7%	23.6%	65.7%
44	Preferring publishing books over publishing research in publishing institutions.	.802	2.342	25.0%	17.1%	57.9%
45	Studies and research carried out by faculty members are theoretical and not applicable.	.882	2.278	13.6%	15.0%	71.4%
46	Weakness of the promotion system in place at the university in the field of encouraging scientific research.	.880	2.071	13.6%	27.9%	58.6%
47	There is no budget allocated for scientific research at the university.	.901	2.128	18.6%	20.0%	61.4%

Based on the table (6) that the arithmetic means and standard deviations for the viewpoints of the research sample members regarding their opinions about the type of scientific research obstacles facing faculty members and which ones have the greatest impact on them through their classification, as personal, material, and administrative obstacles, ranged between an arithmetic average ( $\bar{x}$ ) = (4.950) to (21.99) and standard deviation = (.907) and (.728). That is, it ranges between (completely agree and agree) and (to some extent) and (totally disagree and disagree) according to the scale on which the current research relied, which is a five-point graded Likert scale. There is a difference in the response of the research sample to the listed phrases. Below is an interpretation of the results obtained, and they will be displayed according to their arithmetic averages, starting at the top.

The result of the response of the research sample members was that they chose “totally agree” and “agree” for the phrases more than other phrases (totally disagree and disagree) and for the (neutral) clause in (2) the phrase above, for example (lack of availability of appropriate amenities for faculty members, such as: suitable offices, and computers, with a percentage of (77.1%), with a mean of (2.135) and a standard deviation of (.888), and the lowest was the phrase (non-recognition of some peer-reviewed journals) with a percentage of (39.3%), with a mean of (2.121) and a standard deviation of (.835). This result is due to the feeling of the sample members that the scientific research they are facing still needs to introduce further improvements and development to ensure that the different needs of learners are met and to ensure the development of their scientific research skills.

It is also clear from the previous table that many of the research sample were neutral in the statement. (The university is not willing to pay any amount - even if it is symbolic - to serve scientific research) in terms of a percentage of (30.1%), an arithmetic mean of (2.278), and a standard deviation of (.882). This result may be due to the sample members' feeling that scientific research is not The university is willing to pay any amount - even if it is symbolic

- to serve scientific research. This result is consistent with the study of researcher Aziz and Bouzghaya (2015) on the obstacles and difficulties facing scientific research in the Arab world, and these obstacles are taken seriously by officials. In order to develop scientific research procedures and provide the necessary support for it, these obstacles are mentioned: A - Underestimating the value of scientific research and considering it an intellectual luxury. B - Lack of funding. T - Administrative corruption. D - Confidentiality of numbers and data. C - Difficulty in obtaining information. H - Field difficulties. D - Lack of scientific sources. I - Lack of serious research. T - Lack of clarity of the research objective. S - for the shelves. S - Pay any amount to publish. While the results of the response of the research sample members towards their selection were the most influential, and it was confirmed by the largest percentage of approval from faculty members in their answers to "There is a shortage in the number of delegates from faculty members to attend scientific conferences outside Malaysia" "The university does not have a measurement and statistics center for analysis Research and results" and "lack of interest in holding specialized scientific conferences, according to different specializations" with "the university does not have a measurement and statistics center to analyse research and results" (77.1%) and these phrases received the highest percentage of approval from faculty members in their answers to the questionnaire, which are: In agreement with the study of Abdullah Al-Majid and Shammass (2010), and the study of (Ahmed, 2015).

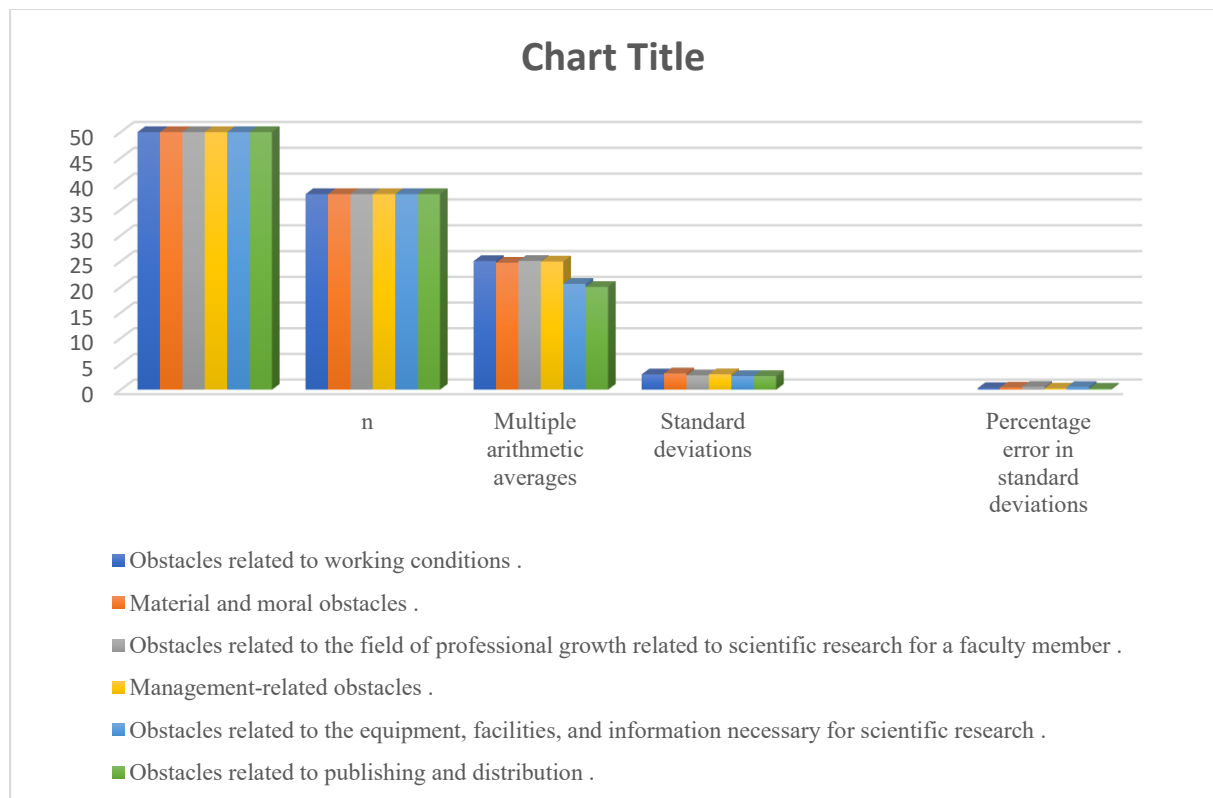
This result indicates that approximately 60% of faculty members suffer from the obstacles mentioned in the questionnaire, which expresses the magnitude and seriousness of the obstacles that scientific research at the university suffers from. In answering the second research question: "which of hindrances have the greatest impact on hindering scientific research from the point of view of faculty members. The second question was answered using the compare the researchers conducted a comparison of the results of the multiple arithmetic means and standard deviations in order to identify the items that had the greatest influence on them. The researchers used the arithmetic averages as basic statistics used in tests comparing the averages of the coefficients using multiple comparison methods as well as independent comparison methods orthogonal comparisons. As in the following table

Table 7

*Results of multiple arithmetic means and deviations Standard, in order to identify more influential items*

Dimensions of the questionnaire	n	Multiple arithmetic averages	Standard deviations	Percentage error in standard deviations	
Obstacles related to working conditions .	50	38	25.0526	2.97639	.30537
Material and moral obstacles .	50	38	24.7288	3.16135	.41157
Obstacles related to the field of professional growth related to scientific research for a faculty member .	50	38	25.0769	2.78457	.54610
Management-related obstacles .	50	38	24.9500	2.99958	.22358
Obstacles related to the equipment, facilities ,and information necessary for scientific research .	50	38	20.6154	2.65446	.52058
Obstacles related to publishing and distribution .	50	38	20.0056	2.64997	.19752

The researchers compared the arithmetic averages to determine the extent of the impact of each type of obstacle (obstacles related to working conditions, material and moral obstacles, obstacles related to the field of professional growth related to the scientific research of the faculty member, obstacles related to management, obstacles related to the equipment, facilities, and information necessary for scientific research, and obstacles related to It is clear from Table 7 that there are results for comparing multiple arithmetic means and standard deviations in order to find out which items have a greater impact on faculty members at Al-Madinah International University. The results showed that there are obstacles related to working conditions ( $\bar{x}$ ) = (25.0526) and obstacles related to the field of professional growth related to research. The academic staff member ( $\bar{x}$ ) = (25.0769) received the highest arithmetic average score from the faculty members in their answers to the questionnaire items. They are followed in order of the degree of material and moral obstacles by the obstacles related to administration, and the obstacles related to administration ( $\bar{x}$ ) = (24.7288 and 24.9500). The ranking. As for the obstacles related to the equipment, facilities, and information necessary for scientific research, and the obstacles related to publishing and distribution, they are lower in the ranking compared to the others, and this is shown in the following graph:



To answer whether there is any statistically significant differences in faculty members at Al-Madinah International University in the hindrances in terms of different faculties, year of experience and academic level

Table 10

Done analysis variance One Way Anova was used to find statistically significant differences

		Sum of Squares	df	Mean Square	F	Sig.
Variables according to faculties (Education - Islamic Sciences and Languages)	Variation between groups	2.923	2	1.461	.223	.801
	Variation within groups	162.388	36	6.567		
	Total	165.311	38			
Variables according to years of experience (five years or more - less than five years)	Variation between groups	4.306	2	2.153	.237	.789
	Variation within groups	606.244	36	9.075		
	Total	610.550	38			
Variables according to academic rank	Variation between groups	311.303	2	5.652	.803	.450

(professor associate professor assistant professor)	- - - -	Variation within groups	245.691	36	7.038		
		Total	256.994	38			

It is clear from Table 7 that a one-way analysis of variance according to the responses of faculty members revealed statistically significant differences at the significance level (0.05) between the averages of the responses of the sample members of the faculty members at Al-Madinah International University. For the purpose of variance analysis, the researchers paid attention to the column labeled sig. Whereas the values obtained in all tested variables were greater than 0.05, which indicates that there are no statistically significant differences in the obstacles to scientific research attributed to all demographic variables for faculty members of different ages in terms of faculties of education - Islamic sciences and languages, with a value of (p) = .801) and (f = (.223), for years of experience (less than 5 years, from 5 to 10 years, then from 11 – 15 years, and more than 15 years.), with a value of (p (.789) and f = (.237). The value of variables according to academic rank (professor - associate professor - assistant professor) (p (.450) and (f = (.803) are all > significance level (0.05). Based on the result obtained, the current study failed to reject the hypothesis The null. Due to the absence of statistically significant differences at the level of significance (0.05) between the averages of the answers of the sample members of the teaching staff at Al-Madinah International University in the colleges of (Education - Islamic Sciences - Languages) with regard to the following variables: years of experience (five years or more - without Five years) and academic rank (professor - associate professor - assistant professor), so there is no need to conduct further multiple comparisons later.

This was confirmed by the study of Hassan and Muhammad (2008) that there are no statistically significant differences at the level of significance between the averages of the responses of the sample members of the teaching staff, as well as the study of Abdel Rahman (2003), that there are no statistically significant differences at the level of significance. (E = 0.05) in the objectives of scientific research in Palestinian universities as perceived by faculty members, due to university variables, academic qualification, overall academic rank, number of research papers, and years of experience. There are no statistically significant differences in scientific research due to university variables, academic qualification, academic rank, college, published scientific research, and years of experience.

The researchers attribute this result to the goals of scientific research from the point of view of all faculty members, regardless of the variables of the study. Promotion and obtaining an administrative position are unified, in addition to the social aspect. If there is a difference, the researchers explain it that it is due to the strong desire of recent graduates to complete scientific research because they need it to complete the academic promotion quorum of peer-reviewed and published research as one of the main conditions for promotion in their universities, but there are many obstacles. It prevents them from achieving their desire, which makes them more affected. Also, recent graduates are still motivated to complete research, and they have not suffered from frustrations and obstacles, as is the case with a number of experienced people who surrendered to the status quo and diverted their thoughts from scientific research.

### To answer the last question which looking to the methods to overcome these hindrances to the research culture among the Academic staff

To answer the last question with a text: What are the ways to overcome these obstacles, from the point of view of faculty members? The questionnaire was distributed to faculty members to know their answers Those who follow the function of the university historically will notice that this function has changed, changed, and developed with the development of society and science. The mission of the university over many centuries was limited to preserving knowledge and transmitting it from generation to generation. Its mission was not scientific research in its modern sense, which aims to grow and develop knowledge. Universities did not know such a mission until the early nineteenth century, following the tremendous development and discoveries that included all fields of knowledge .The table below shows the results to the last questions.

		SMA	%disagree	To some extent %	Totally agree and agree %	standard deviation
Proposals for developing scientific research						
1	The process of renewing a faculty member's contract should be linked to the production of scientific research	2.91	.370	2.8	3.3	93.9
2	The university encourages faculty members to participate in internal and external scientific conferences.	2.91	.348	2.2	3.9	93.9
3	Providing the faculty member with the necessary skills to conduct scientific research.	2.92	.288	.6	6.7	92.8
4	Reducing the number of weekly teaching hours.	2.88	.379	2.2	6.7	91.1
5	Accelerating the evaluation and arbitration of scientific research.	2.63	.576	5.0	26.1	68.9
6	Cooperation between the university and other universities in the field of scientific research.	2.89	.358	1.7	7.2	91.1
7	The university should hold mini-conferences to announce the results of good scientific research.	2.87	.358	6 3.3	5.6	91.1
8	Providing incentives and rewards to support scientific research.	2.86	.418	2.2	8.9	88.9



9	The researcher should feel that the university is utilizing the results of his research.	2.88	.4370	1.7	16.1	82.2
10	Building relationships with international, Arab and local organizations; In order to benefit from what you provide to support scientific research.	2.75	.437	5.0	14.4	80.6
11	Encouraging faculty members to conduct joint scientific research.	2.63	.568	4.4	27.8	67.8
12	Providing the financial and moral support necessary to conduct research.	2.89	.358	1.7	7.2	91.1
13	Communication and cooperation between the university and entities benefiting from the results of scientific research.	2.82	.433	2.2	12.3	85.0
14	Providing technical services, devices, computer and Internet services.	2.84	.420	2.2	11.1	86.7
15	More peer-reviewed journals.	2.61	.627	7	22.8	69.4
16	Develop a comprehensive strategy for scientific research at the college and university levels.	2.74	.540	5.0	15.6	79.4

It is clear from Table (8) that the arithmetic means and standard deviations for the viewpoints of the research sample members on ways to overcome these obstacles to scientific research from the viewpoint of faculty members at Al-Madinah International University in Malaysia ranged from (.627) to (.288). That is, it ranges between (strongly agree) and (disagree) on the scale on which the current research relies, which is the five-point Likert scale. It is noted that there is a difference in the response of the research sample to the statements listed under this axis. Below is an explanation of the results obtained on this axis, and they will be presented according to their arithmetic averages, starting at the top.

It appears from Table (8) that the statements that obtained the highest arithmetic averages and which fell under the paragraph (completely agree and agree) are more and much higher than (completely disagree and disagree). The majority of the study sample completely agreed that "the process of renewing a faculty member's contract should be linked to the production of scientific research" and that the university encourages faculty members to participate in internal and external scientific conferences with a high percentage (93%) for each, and the arithmetic means and standard deviations range between (.370) and (2.91) (.348) and (2.91), respectively. The results of strengthening the faculty member's acquisition of the necessary skills to conduct scientific research, cooperation between the university and other universities

in the field of scientific research, reducing the number of weekly teaching hours, and then providing the necessary financial and moral support to conduct research “in second place in a row, out of (92.8%).” 91.1% (respectively as in Table 8)

While the phrase “providing incentives and rewards to support scientific research” and providing technical services, devices, computer services and the Internet ranked third with percentages of 88.9% and 86.7%, respectively. All of these answers and their ranks in terms of acceptance indicate the extent of accuracy of the faculty members at Al-Madinah International University in their diagnosis of obstacles, and also indicate the high professionalism with which the distinguished faculty members dealt with identifying obstacles and ranking the importance of their impact and priorities in treatment, based on the public interest, as It is noted that personal issues that benefit the faculty member, such as compensation, incentives, and rewards, and their role in encouraging scientific research, do not occupy advanced positions in the percentage of answers. Meanwhile, the responses of faculty members about not agreeing at all, not agreeing, and neutral to the statements of proposals for developing scientific research are very low, at 26%. To 3% “neutral” while “totally disagree and disagree.” The results showed a low percentage as shown in Table (8), and this is a result that may benefit the faculty member, such as compensation, incentives, rewards and their role in encouraging their scientific research.

#### **Summary of the Way forward to solve the Hindrances of Research Academic Culture**

- Supporting faculty members with a financial and moral incentive for researchers
- Balance between teaching and administrative tasks and scientific research and encourage it.
- Paying more attention to scientific publishing, exchanging it with other universities, and holding more scientific conferences and seminars
- Providing sufficient time for the faculty member and financial and academic support
- Conducting periodic changes in academic positions to eliminate the phenomenon of monotony - Listening to faculty members’ concerns within the university - Establishing specific rules for sanctions and punishment - Creating permanent harmony between the bodies entrusted with responsibilities within the university - Finally, creating a specific mechanism for the duration of positions, as some positions are surprisingly fixed.
- The university should work to reduce the teaching burden on the faculty member and provide financial rewards for research work
- Many courses and workshops, incentives for distinguished students, good follow-up, and reducing steps for researchers
- Considering the salary appropriately for a faculty member and linking it to academic promotions - in addition to providing appropriate time for academic research by reducing teaching hours to an appropriate extent.
- Full publicity for the university’s programs and scientific journals as well - conducting joint cooperation between the university and other electronic universities - working to increase the material, moral and electronic capabilities of the faculty member
- Support researchers financially
- Organizing tasks... improving income
- Balance between tasks, costs and scientific research

### Conclusion

The current research reached a number of results regarding the responses of the research sample members towards the obstacles to scientific research at Al-Madinah International University from the point of view of the faculty members, and the proposals for developing it were as follows

1. The response of the members of the study population sample to the items of all the axes (Obstacles to scientific research at Al-Madinah International University from the point of view of faculty members) was either agreement or complete agreement, as the general percentage for the axes as a whole ranged from an arithmetic mean ( $\bar{x}$ ) = (4.950) to (21.99) and standard deviation = .907 and .728).
2. The results of the response of members of the study sample showed that obstacles related to working conditions ( $\bar{x}$ ) = (25.0526) and obstacles related to the field of professional growth related to scientific research for the faculty member ( $\bar{x}$ ) = (25.0769) received the highest mean scores from faculty members in Their answers to the questionnaire items, followed in order of the degree of material and moral obstacles by the obstacles related to administration, and the obstacles related to management ( $\bar{x}$ ) = (24.7288 and 24.9500), respectively. As for the obstacles related to the equipment, facilities, and information necessary for scientific research, and the obstacles related to publishing and distribution, they are lower in rank compared to the others.
3. The response of the members of the study population sample to the research hypothesis was that there were no statistically significant differences in the obstacles to scientific research attributed to all demographic variables for faculty members of different ages in terms of colleges of education - Islamic sciences and languages, with a value of ( $p = .801$ ) and ( $f$ ) = (.223, for years of experience (less than 5 years, from 5 to 10 years, then from 11 – 15 years, and more than 15 years.), with a value of (.789  $p$ ) and  $f = (.237$ , the value of variables according to academic rank (Professor - Associate Professor - Assistant Professor ( $p = .450$ ) and ( $f = (.803$ ) are all  $>$  the significance level (0.05).

### Recommendation for Future Research

The current research reached a number of results, and therefore the researchers recommend a number of recommendations that could contribute to the development of scientific research at Al-Madinah International University in Malaysia. These recommendations are as follows:

- Working to increase the budget allocated to scientific research at the university
- Facilitating the procedures for obtaining internal research grants, and freeing them from excessive routine procedures in controlling them.
- Working to link educational institutions at Al-Madinah International University with society and its institutions, and the participation of these institutions in financing scientific research, whether it is related to studying problems related to them, including the private sector, investing companies, and individuals with grants, gifts, endowments, and other sources of funding.
- Providing a database and facilitating access to data through coordination with Al-Madinah International University, the Malaysian Ministry of Higher Education, and the rest of the ministries and institutions.
- Working on the system of full-time scientific research for faculty members, in effect in universities around the world, which provides faculty members and researchers the opportunity to interact with research and university institutions, enhances their

launch of research, enriches their experiences, and introduces them to new research horizons.

- Providing scientific research supplies from specialized research centers, researchers, books and references, materials, laboratories, technicians, and other supplies.
- Working to adopt the promotion system in effect in various institutions of higher education, to encourage faculty members to pursue scientific research. This also provides an academic climate in which faculty members feel that they are working in an academic institution that gives them their full rights, does not deprive them of anything, and that it reinforces the principle Justice in theory and practice, as a sublime value reflected in the behaviour of professors and students.
- Facilitating the participation of faculty members in scientific conferences and seminars inside and outside Malaysia, and considering it as a scientific mission, if he has a participation in a working paper that has been accepted by the party that organized the conference. Because participation and scientific communication raises the efficiency of the faculty member and gives him the opportunity to learn about what is new, which is reflected in his performance.
- Working on the system of full-time scientific research for faculty members, in effect in universities around the world, which provides faculty members and researchers the opportunity to interact with research and university institutions, enhances their launch of research, enriches their experiences, and introduces them to new research horizons.
- Working to increase the current contract period, so that the faculty member feels financially and psychologically stable, which is reflected in an increase in his research production.
- Working to consolidate the view that spending on scientific research is not a waste

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