



Available online freely at www.isisn.org

Bioscience Research

Print ISSN: 1811-9506 Online ISSN: 2218-3973

Journal by Innovative Scientific Information & Services Network



RESEARCH ARTICLE

BIOSCIENCE RESEARCH, 2020 17(2): 842-854.

OPEN ACCESS

Obstacles to research conduction and publication from the perspective of the faculty members at Shaqra University

Atallah Khalaf Alenezi¹, Reda Mohamed-Nabil Aboushady², Hanan Fawzy Abbas Soliman³ and Reda Mohamed El-sayed Ramadan⁴

¹Mental Health Nursing, Applied Medical Science at Shaqra University. **Kingdom of Saudi Arabia**

²Maternal and Newborn Health Nursing, Faculty of Nursing, Cairo University, **Egypt**

³Maternity and Gynecological Nursing, Faculty of Nursing, Ain Shams University, **Egypt**

⁴Medical –Surgical Nursing, Faculty of Nursing, Ain Shams University, **Egypt**

*Correspondence: raboushady@su.edu.sa Received 11-03-2020, Revised: 26-04-2020, Accepted: 02-05-2020 e-Published: 07-06-2020

Conducting the research by the staff member is one among the foremost basic ways of developing educational quality and, therefore, the development of countries. To further improve the quality of scientific research, it's necessary to acknowledge the obstacles to undertaking research and how to overcome it. Aims 1) Explore the obstacles to research conduction and publishing from the perspective of the faculty members view at Shaqra University, 2) Investigate the effect of obstacles on research outcomes, and 3) Identify the participants' suggestions to overcome on these obstacles. Setting: The study was carried out at different colleges at Shaqra University in the Kingdom of Saudi Arabian. A total of 172 faculty members were recruited in the study. Tools 1) demographic characteristics, 2) A 5-points Likert- scale on the obstacles, and 3) An open-ended question on the suggestion to overcome obstacles. Results: Many obstacles were reported to conducting and publishing research in the areas of "facilities, management, organization, personal traits, and research procedures," which affected research outcomes. Furthermore, there was a statistically significant difference between the obstacles and the academic staff title except for personal traits. Several suggestions were reported to overcome research obstacles. Several obstacles for conducting scientific research at University were reported, which action needs the plan to overcome them and facilitate the research conduction and publication at universities. An action plan should be formulated at universities focus on the research conduction and publication aligned with the kingdom of Saudi Arabia vision 2030.

Keywords: Obstacles, research conduction, research publication, perspective of the faculty members, university

INTRODUCTION

Scientific research is one of the most important tools for implementing the 2030 Vision in the Kingdom of Saudi Arabian. The University's success in achieving its objectives depends on what's available from its good elements of the college members, where faculty members at the University considered because the mechanic of the muse and therefore the axis of its

massage and driving force of the university institution (Hatamleh, 2016). The need for scientific research has increased now more than ever, to realize a competitive advantage, institutional accreditation, and to advise new applications and innovations (Messerli et al., 2019).

Research may be a systematic process to come up with knowledge. Worldwide, there are a

growing number of articles being published because of the worldwide approach of scientific research (Memarpor, Fard and Ghasemi, 2015). It is the base in the progress of nations and therefore the flourishing of civilizations. It is one of the key functions for university education sideways with the two functions of education and community service, which is the most prominent topics that the educational and developmental policies planners care about in various developed and developing countries alike (Memarpor, Fard and Ghasemi, 2015).

The need for scientific research has increased now over ever, and therefore the world is witnessing frantic races among states to succeed in the most important amount of accurate knowledge that achieve well-being, comfort, and progress, that may help them to attain a competitive advantage. It is the creative works that is undertaken on systematic basis with the purpose of gaining knowledge and understand concepts in major subject areas of specialization, and includes the generation of ideas and data resulting in new or substantially improved scientific insights with relevance to the wants of society (Balakumar, Inamdar, and Jagadeesh, 2013).

The research was made a university function in addition to the task of teaching in the late 19th century after the first academic revolution. Since then, attention to research is one of the most important issues in scientific communities. In recent years, research output emanating from academics has been assessed and want to rank universities against one another (Hegde et al., 2017). Publishing of research work is evidence to justify support of research investigations and guarantee of subsequent research funding for the sustainability of the institute's mandate and organizational goals (Hegde et al., 2017).

The universities are the foremost important social institutions that bear the rehabilitation and development of human resources within the community to be able to achieve economic, social, and political development. For universities to be able to achieve this, we must provide financial and moral support to their management to try to do different roles appropriately. The University's success in achieving its objectives depends on what's available from its good elements of the college members, where faculty members at the University considered because the mechanic energy of the inspiration and also the axis of its message (Alamaireh and Alsrabi 2008).

According to, Ministry of Economy and

Planning (2005) developed and developing countries specialize in scientific research because of its pivotal role in modernizing societies, the premise of national development and its vehicle for progress, solving persistent problems, and producing theoretical knowledge and practical applications that promote development and progress. Research in science and medical education plays a big role within the country's economic process together with long-term sustainable development and eventually contributes to the advance of living standards and quality of life (Meo et al., 2013). Investment in research is more vital for progress and prosperity. To quantify the research progress of a country in any subject, bibliometric indicators are essential tools to know the expansion and global spread of research. These indicators are mainly supported the quantity of research documents published and their visibility in global science (Durieux & Gevenois, 2010).

Moreover, the Kingdom of Saudi Arabia has considered scientific research within the main policies of its Eighth Development Plan so as to market scientific innovation, similarly as develop universities and other research and development centers (Alshayea, 2013). According to Sereshti, Kazemian, Daris (2010). Financial problems as the most important research barrier. Other barriers, too, are as follows: external-organization barriers, low research funding, inequality of research and education hours, lack of interest for research results among national managers and policymakers, lack of professionalism, incompatibility of research priorities and need assessments, long-duration for approval of research proposals, poor knowledge on research skills, heavy workload, and not having enough English writing skills (Sereshti et al., 2010).

Significance of the Study

In the Arab world, the scientific research is suffering from variety of obstacles, made it away from the sphere of cognitive, global and scientific competition and described because the weaker in terms of scientific productivity and human-based energies, but still, higher education institutions within the Arab world aren't located on the scientific world map. Therefore, the first steps in establishing efficient scientific research are to motivate faculty members to conduct research, determine the strength and weaknesses of previous research works identify the research-related facilities and equipment, and identify obstacles to conduct scientific research (Zhang,

2014).

In the academic arena, there is a broad inconsistency in the research productivity among faculty members (Dakik, Kaidbey, and Sabra, 2006). The low rate of research productivity among academicians was linked to several barriers, including their involvement in administrative work that might negatively affect their productivity (Alghanim and Alhamadi, 2011). Traditionally, academic colleges used to have an interest in faculty members' performance assessment in terms of teaching performance. However, things are changed, and evaluation of research performance is becoming a part of performance assessment for faculty members that ought to be reflected in their actual research performance (De Witte & Rogge, 2010). A recent study shows the obstacles as; lack of adequate facilities, skills, and personal interest (Hegde et al., 2017).

In particular, results from one large scale survey in India done by Bishen and his colleges (2015) suggest that meager college funding, lack of your time, and insufficient infrastructure pose substantial barriers to student participation in research. In step with, Alghanim and Alhamadi (2011) explored the most important obstacles that impeded research productivity among faculty members in 10 health colleges and concluded that lack of your time, absence of research assistance, unavailability of the fund, and crowded teaching load were the foremost outlined obstacles. Additionally, they reported that only 38.6% of respondents declared that they had published research add the past two years. Therefore, this study contributes to a greater understanding to work out the research obstacles from the purpose of view of the college members at Shaqra University and to produce suggestions to overcome these obstacles to facilitate the research conduction and publication.

MATERIALS AND METHODS

Aim of the study:

This study aimed to 1) Explore the obstacles to research conduction and publishing from the perspective of the faculty members at Shaqra University, 2) Identify the differences between their viewpoints by gender, professional variables, and 3) Identify the participants' suggestions to overcome on these obstacles.

Research questions:

1. What are the main inter-university obstacles to research conduction and publishing, as seen by faculty members?
2. Do the viewpoints of faculty members about obstacles affect the quantity of their research?
3. Are there differences in the viewpoints of faculty members associated with gender, scientific rank, and field of study, executive responsibilities, and duration of work experience regarding these obstacles?
4. What is the faculty members' suggestion to overcome the research obstacles?

Research Design:

An exploratory, descriptive - methodological design was utilized to achieve the purpose of the study.

Setting:

The study was carried out in different colleges (Shaqra city – Quwiyah city) at Shaqra University in the Kingdom of Saudi Arabian (KSA).

Sampling:

A total of 180 faculty members from different colleges at Shaqra University were recruited by a convenient sampling technique. Eight of the members did not answer the rest of the questionnaire items, so the final sample size reached 172 (74 males and 98 females). The inclusion criteria included being faculty member, with different educational levels, within the college for a minimum of one year, and accept to participate.

Sample size:

A total of (180) participants were selected according to the following statistical formula $n = Z^2p(1-p)/d^2$, where z = level of confidence according to the standard normal distribution (for a level of confidence of 95%, $z = 1.96$). p = estimated proportion of the population that presents the characteristic (when unknown we use $p = 0.5$), d = (d is considered 0.05).

Tools for data collection:

Data pertinent to the study variables were collected by self-administered questionnaire and opinionative questionnaire. The self-administered questionnaire is designed by the researcher after extensive literature reviews. The questionnaire was created under the supervision of the faculty

senior staff members with experience in nursing research.

The self-administered questionnaire consisted of 49 closed-ended items, demographic and occupational items, research obstacles, and suggestions to overcome the obstacles. The questionnaire sheet consisted of 49 items categorized into three parts; Part I: Designed to gather data about the demographic characteristics of the faculty members. It included personal data as age, sex, nationality, academic title of the college, number of researches that achieved, and years of experience (6 items). Part II: Designed to collect data about the obstacles to conducting and publication a research from the faculty members' perspectives, it included 41 items constitute four sub-items related to a) Obstacles related to facilities (15 items), b) Obstacles related to administration and Organization (12 items), c) Obstacles related to personnel traits (5 items), and d) Obstacles related to scientific research procedures (9 items). Part III: An open-ended question designed to collect data related to the suggestion to overcome these obstacles (1 item). responses to the closed-ended items were chosen from a 5-point Likert scale where 5= strongly agree, 4= agree, 3= natural, 4= strongly disagree, and 1 = disagree.

Scoring System:

The scores of the items were summed-up and the total divided by the number of the items, giving a mean score for the part. These scores were converted into a percent score. The total score was graded as (presence of obstacles "yes" $\geq 60\%$, absence of obstacles "no" $<60\%$).

Tool Validity and Reliability :

Tools of data collection were submitted to and reviewed by a panel of experts in the fields of nursing, to test the face and content validity. Each of the experts was asked to examine tools for content coverage, clarity, wording, length, format, and overall appearance. Modifications were done according to the panel's judgment on the clarity of sentences and content appropriateness as "rephrasing and canceling for four questions" were done. Reliability analysis was conducted to investigate the internal instrument consistency, which used in the study; Cronbach's alpha coefficients were calculated to examine the measurement reliability with multipoint items ($r = 0.92$).

Pilot Study :

A pilot study was conducted on 10% of the sample (20 faculty members) to estimate the needed time for data collection and test the feasibility, objectivity, validity, and applicability of the study tools. The needed modifications were done, and the samples included in the pilot study were excluded from the final study sample.

Procedure

Official approval and permission were obtained from the administrative authority, the vice dean of scientific research Shaqra University, then from the deans of the different Shaqra colleges before starting the study, which was intended to be done in November 2018. The letters explained the aim of the study. The researchers explained the aim of the study and guaranteed confidentiality. Data were collected by a self-administered questionnaire.

Questionnaires were distributed to all staff participants by one of the researchers who explained the purpose of the study to them. A structured self-administered questionnaire was distributed among 178 teaching staff at the various branches in Shaqra University. Data collection was carried out within a duration of two months from the first of November 2018 to January 2019. The time needed for completing the questionnaire was ranged from 20 - 30 minutes for each staff member.

Statistical Analysis :

Upon completion of data collection by the previously mentioned tools, data were computed and analyzed. Data analysis was done using statistical package for social sciences (SPSS) version 23 The following statistical tests were used according to the number of participants: (a) Frequency distribution and percentage, (b) Arithmetic mean as an average that describes the central tendency of observations, and (c) Standard deviation as a measure of dispersion of results around the mean.

Ethical consideration :

Permission to conduct the study was requested and obtained from the authoritative committee personal. The staff member who voluntarily agreed to be involved in the study; following a thorough explanation of the aim of the study. Informed oral consent was obtained from the participants to be interviewed. Also, the staff member was assured that they could withdraw

from the study at any time, without penalty, if they so wished. Assigning codes instead of participants' names and allowing participants to fill the questionnaire privately at their offices. The participants were allowed to ask questions. It absolutely was also explained that the study findings would be disseminated within the kind of presentations at conferences and publication in an accredited journal.

RESULTS

shows that over than half of the college teaching staff their age ranged from 31-40 years, and about the same percentage is from the health colleges. In addition to about two-thirds of the staff are non-Saudi. Regarding their academic title, more than half of the faculty male staff were lecturers, while about half from the female faculty staff were assistant professors. Also, about two-thirds of the members published researches less than 3. In relation to their academic experiences, more than half of them have academic experiences from 3 to 8 years. Table (1)

This figure illustrates that most of the obstacles to conducting scientific research are related to facilities, administrative and Organization, and scientific research procedures, while less than half of the obstacles are related to personality traits. Figure (1):

This figure shows that two-fifths of the faculty members conducted less than three published papers, while less than one-fifth of them conducted more than three researches and less than eight. Figure (2)

This table reveals that there are no statistically significant differences between obstacles to conducting scientific research such as facilities-related obstacles, administrative and organizational obstacles, personal traits constraints, research publication related obstacles from faculty members' perspectives, and their gender. Table (2) This table reveals that there are statistically significant differences between the barriers to conducting scientific research, such as those related to facilities, administrative and organizational obstacles, and obstacles related to research publications and the academic title of faculty members; meanwhile, there is no statistically significant difference between the Personal traits constraints and the academic title of faculty members. Table (3):

Table (4) As regards the following table findings, it was found that there are no statistically significant differences between obstacles to conducting scientific research from faculty members' perspectives and their colleges except between personal traits constraints and their colleges.

Table1: Demographic characteristics of the faculty teaching staff at Shaqra University

Characteristics	Male (74) (43.1)		Female (98) (56.9%)	
	No.	%	No.	%
<i>Age:</i>				
21-30 years	14	18.9	18	18.4
31-40 years	44	59.5	54	55.1
41-50 years	13	17.6	21	21.4
> 50 years	3	4.1	5	5.1
<i>Nationality:</i>				
Saudi	27	36.5	35	35.7
Non-Saudi	47	63.5	63	64.3
<i>Name of the college:</i>				
Colleges of Basic Studies & Humanities	24	32.4	36	36.7
Health Colleges	40	54.1	56	57.1
Colleges of Engineering & Computer	10	13.5	6	6.1
<i>Scientific Rank:</i>				
Instructor	10	13.5	1	1.0
Lecturer	42	56.8	18	18.4
Assistant professor	21	28.4	47	48.0
Associate professor	1	1.4	29	29.6
Professor	0	0	3	3.1
<i>Duration of Work Experience (in years):</i>				
< 3 years	10	13.5	14	14.3
3-8 years	44	59.5	52	53.1
> 8 years	20	27.0	32	32.7

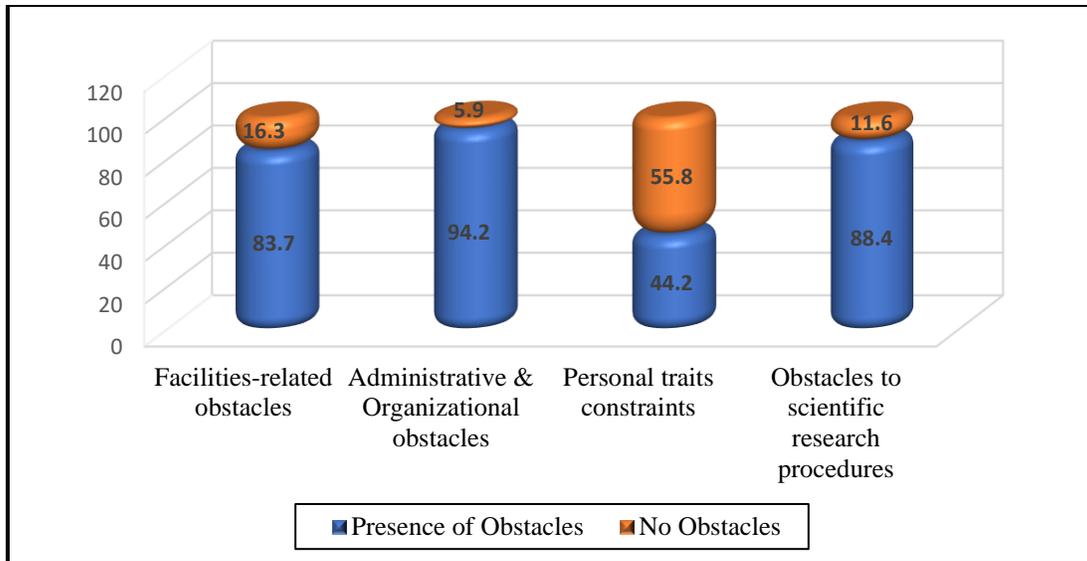


Figure 1: Obstacles to conducting scientific research from faculty members' perspectives

Table 2: The Relationship between obstacles to Conducting Scientific Research from faculty members' perspectives and their gender

Obstacles	Male (74) No %	Female (98) No %	χ^2	P-value
Facilities-related obstacles				
Yes	58 (78.4)	86 (87.8)	2.7	.075
No	16 (21.6)	12(12.2)		
Administrative and Organizational obstacles				
Yes	67 (90.5)	95(96.9)	3.15	0.075
No	7 (9.5)	3(3.1)		
Personal traits constraints				
Yes	33(44.6)	43 (43.9)	0.009	0.52
No	41(55.4)	55(56.1)		
Research publication related obstacles				
Yes	63 (85.1)	89 (90.8)	1.3	0.18
No	11 (14.9)	9 (9.2)		

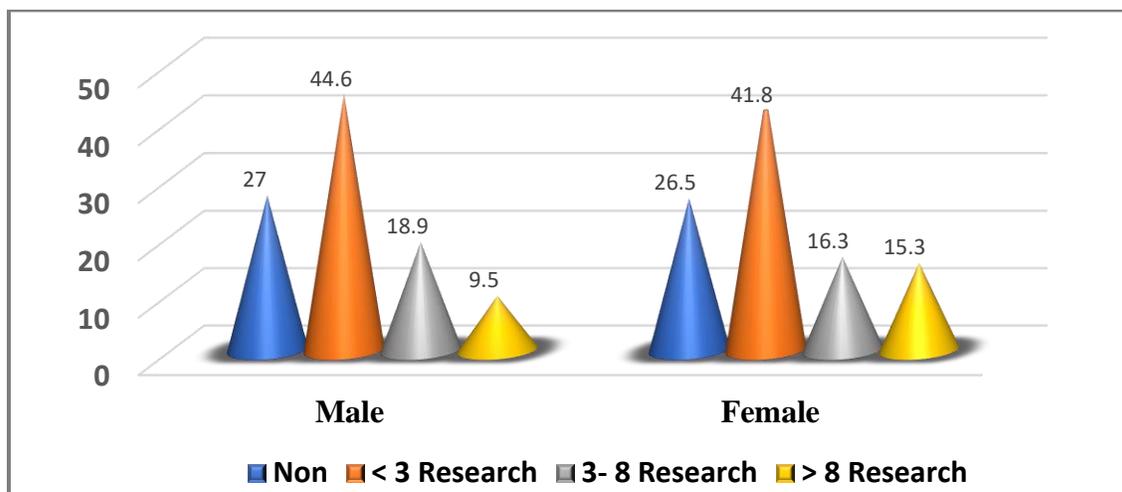


Figure 2: The faculty members' research outcomes

Table 3: The relationship between obstacles to conducting scientific research from faculty members' perspectives and their scientific rank

Obstacles	Instructor (28)	Lecturer (89)	Assistant professor (50)	Associate professor (4)	χ^2	P-value
Facilities-related obstacles						
Yes	28 (100)	78(87.6)	34 (68)	3(75)	15.9	0.003**
No	0	11(12.4)	16 (32)	1(25)		
Administrative and Organizational obstacles						
Yes	28(100)	89 (100)	40(80)	4(100)	25.9	0.000**
No	0	0	10(20)	0		
Personal traits constraints						
Yes	18 (64.3)	39(43.8)	18(36)	1(25)	7.3	0.11
No	10 (35.7)	50(56.2)	32(64)	3(75)		
Research publication related obstacles						
Yes	26 (92.9)	84(94.4)	38(76)	3(75)	11.9	0.01*
No	2(7.1)	5(5.6)	12(24)	1(25)		

Table 4: The relationship between obstacles to conducting scientific research from faculty members' perspectives and their colleges (field of study)

Obstacles	Colleges of Basic Studies & Humanities No (%)	Health Colleges No (%)	Colleges of Engineering & Computer No (%)	χ^2	P-value
Facilities-related obstacles:					
Yes	46(76.7)	84(87.5)	14(87.5)	3.36	0.186
No	14(23.3)	12(12.5)	2(12.5)		
Administrative & Organizational obstacles:					
Yes	56(93.3)	90(93.8)	16(100)	1.1	0.57
No	4(6.7)	6(6.3)	0		
Personal traits constraints:					
Yes	22(36.7)	42(43.8)	12(75)	7.5	0.02*
No	38(63.3)	54(56.3)	4(25)		
Research publication related obstacles:					
Yes	52(86.7)	84(87.5)	16(100)	2.3	0.3
No	8(13.3)	12(12.5)	0		

Table (5): The relationship between obstacles to conducting scientific research from faculty members' perspectives and duration of work experience

Obstacles	< 3 year	3-8 year	> 8 year	χ^2	P-value
Facilities-related obstacles (yes)					
Yes	22	82	40	3.0	0.21
No	2	14	12		
Administrative & Organizational obstacles					
Yes	22	92	48	1.0	0.58
No	2	4	4		
Personal traits constraints					
Yes	22	42	12	8.8	0.01*
No	38	54	4		
Research publication related obstacles					
Yes	52	84	16	5.0	0.07
No	8	12	0		

Table 6: The relationship between obstacles to conducting scientific research from faculty members' perspectives and their research output

Obstacles	Non	< 3 articles	3-8 article	>8 article	χ^2	P-value
Facilities-related obstacles						
Yes	42	58	26	18	3.7	0.29
No	4	16	4	4		
Administrative and Organizational obstacles						
Yes	44	68	28	22	2.2	0.5
No	2	6	2	0		
Personal traits constraints						
Yes	16	38	14	8	3.8	0.28
No	30	36	16	14		
Research publication related obstacles						
Yes	40	64	30	18	5.2	0.15
No	6	10	0	4		

Table 7: Suggestions to Overcome the Research Obstacles as Viewpoint of Faculty Members

Suggestions	Response n=172	
	No.	%
Providing the good environment for scientific research, as laboratories and electronic, traditional information resources.	87	48.6
Decrease the academic load for the faculty members who participate in scientific research within the university.	119	66.5
Encourage faculty member to participate in national and international conferences.	95	53
University motivates the faculty members to develop research by giving financial funding.	150	83.8
Encourage faculty member by financial support to publish in high ranked journal.	83	46.4
Give incentives and rewards for the researchers who conducting a scientific research.	78	43.6
Develop unit in university which, responsible for follow-up the process of scientific research publication.	94	52.5
Others	49	27.4

Table (5) According to our findings in this table, there are no statistically significant differences between obstacles to conducting scientific research from faculty members' perspectives and their academic experience except between personal traits constraints and their academic experience.

Table (6) This table illustrates that there are no statistically significant differences between obstacles to conducting scientific research from faculty members' perspectives and their research output (number of published articles). Table (7) This table shows that the view of the faculty member regarding obstetrical for conducting and publish scientific research as; the majority of the sample needs financial funding, and more than two thirds of them need to decrease the load of the work (83.8% & 66.5%) respectively

DISCUSSION

The scientific research is one in every of the key functions for university education together with the two functions of education and community service, which is that the most prominent topics that the tutorial and developmental policies planners care about in various developed and developing countries alike. that's for the importance of scientific research role in speeding up the achievement of the development demands, where it became a key means to occupy any country a prominent place during this world, which also became one in every of the standards that advancement and progress of nations measured (Mesleh and Nada, 2007).

The scientific research within the Arab world is suffering variety of obstacles, made it way from the sphere of cognitive, global and scientific competition and described because the weaker in terms of scientific productivity and human-based energies, but still, higher education institutions within the Arab world don't seem to be located on

the scientific world map (Ma'adan, 2012). Therefore, the aim of this study was to (1) Determine the scientific research obstacles from the viewpoints of the faculty member at Shaqra University, and 2) Develop a suggested plan of action to facilitate the publication.

Part I: Demographic characteristics of participants under the study.

The findings of this study revealed that more than half of the study participants were female. This finding is not corresponding with Hatamleh (2016), who found that females represented less than one quarter in his study about obstacles of scientific research. This might be due to that most of the participants who agreed to participate in this study were females.

In the present study, more than half of the participants under the study were from 31 to 40 years old. This is similar to Pho & Tran (2016), who mentioned that less than half of the participants in his study about obstacles to scholarly publishing in the social sciences and humanities were from 30–40 years old. This might be related to that more than one-quarter of males, and less than half of females under study were Ph.D. holders (assistant professor at University).

One of the noticeable findings in this study is that less than two-thirds of the sample were non-Saudis. This finding agreed with Darawad et al., (2018), who mentioned that non-Saudis represented less than three quarters in their study. This might be due to the fact that Shaqra University recruited vast numbers of foreign faculty members.

In relation to the academic rank of the participants, the results of the present study revealed that more than one-quarter of males and less than half of the female understudy were an assistant professor. This finding was in accordance with Darawad et al., (2018), who reported that assistant professors represented more than one quarter in their study about barriers toward conducting scientific research. This might be due to the fact that most of the faculty members who recruited for teaching students at Shaqra University were assistant professors.

Regarding years of experience of study participants, more than one-quarter of males and approximately one-third of female understudy have experience more than eight years. This finding agreed with Hatamleh (2016), who stated that years of experience were ten years and more

for more than one quarter in his study. This result might be related to that less than one-quarter of participants under the study were from 41 to 50 years old therefore have many years of experience.

Part II: Obstacles to Conducting Scientific Research from Faculty Members Perspectives and their published papers.

In the present study, the facilities-related obstacles were among the majority of faculty members under study. This finding agreed with Hosseini and Shmsaie (2007), who surveyed facility-related obstacles in agricultural research and reported that these obstacles were considerable. This might be due to that there is a lack of funding for libraries and a lack of resources and materials for research activities .

Concerning administrative–organizational obstacles, the finding of this study found that most of the faculty members under study reported it as obstacles for conducting research. This result is consistent with the study by Kazem and Algemali (2004), which identified organizational obstacles as the most common obstacles. Moreover, Smeby and Try (2005) found that organizational factors had a significant effect on research output, and this effect was even greater than that of the time devoted to research. This might be due to lack of time due to the burden of the educational workload for Saudi and non-Saudi faculty members, lack of encouragement, managerial roles demand, and the pressure made by the application of college terms of rules and laws.

Regarding personal traits, more than two-fifths of faculty members under study agreed that personal traits constraints obstacles to conducting scientific research. This finding was in accordance with Karimian et al., (2012), who found that the majority of the respondents in his study agreed that personal obstacles existed, and it is considered obstacles to undertaking research. This might be related to teaching workload and managerial roles, which hinder the faculty members from conducting research, and lack of engagement of faculty members in research projects and workshops, which helps to enhance the positivity of attitudes toward scientific research.

In relation to research publication obstacles, the present study results documented that, majority of faculty members under study mentioned it as obstacles for conducting scientific research. This finding is corresponding with

Hatamleh (2016), who found that obstacles related to the field of publishing of research had the fourth place. This might be due to that some journals, especially higher-ranked journals, take their rank as a license to be an asshole (asking for money, long review time, etc.).

One of the noticeable findings in this study is that more than two-fifths of the faculty members conducted less than three published papers, which indicate that there are many obstacles facing them in research conduction and publication as reported from them. This finding is not corresponding with Yadollahi et al., (2014), who reported that median published papers were eight in his study about obstacles to research in medical sciences in Iran.

Part III: The relationship between obstacles to conducting scientific research from faculty members' perspectives and their gender, academic rank, years of experience, research output, and colleges.

The findings of this study revealed that there were no significant differences between obstacles to conducting scientific research from faculty members' perspectives and their gender. This finding is not corresponding with Karimian et al., (2012), who found that women in his study identified research obstacles more frequently than men. This might be related to the keenness of both sexes on publishing research, especially that academic institutions and universities frequently use the quantity of publications to somebody's credit because the measure of competency. Administrators are increasingly using this because the criteria during recruitments.

The present study finding reported that there were highly statistically significant differences between facilities-related obstacles, administrative & organizational obstacles to conducting scientific research, and their scientific rank, and there was a statistically significant difference between research publication obstacles and scientific rank of faculty members under study. This finding is not corresponding with Algadheeb and Almeqren (2014), who found that there are no statistically significant differences in the sample responses about the impediments to scientific research that are related to the differences in the academic ranks of the study sample. This might be due to the actual fact that frequent publication is one in every of the few powerful methods at researcher's disposal to demonstrate academic talent to peers and researchers, who publish infrequently or who

specialize in activities that don't lead to publications like instructing undergraduates, may find themselves out of contentions for several teaching positions.

According to our findings, there were no significant differences between obstacles to conducting scientific research from faculty members' perspectives and their duration of work experience except with personal traits constraints. This finding is not corresponding with Hosseini and Shmsaie (2007), who stated that agricultural science researchers, those with more teaching experience, identified obstacles less frequently than other respondents. This might be related to that all faculty members in the college have nearly the same duties, so academic experience no effect on the conduction of scientific research, but their personality traits reflect their keenness to publish research to upgrade their position.

Results showed that there were no significant differences between obstacles to conducting scientific research from faculty members' perspectives and their research output, which might be attributed to This finding was supported by Algadheeb and Almeqren (2014), who mentioned that there are no statistically significant differences in the sample responses about the impediments to scientific research that are related to the differences in the number of studies completed by the study sample. This might be attributed to that the current trend is forcing researchers to publish research, and most of them publish research to improve their curriculum vitae and to upgrade their academic level.

In this study, there were no significant differences between obstacles to conducting scientific research from faculty members' perspectives and their colleges except with personal traits constraints. This finding is not corresponding with Karimian et al., (2012), who mentioned that researchers in basic medical science had the lowest score for scientific obstacles, whereas clinicians in surgery and nonsurgical specialties had the highest scores. In the same context, Algadheeb and Almeqren (2014), mentioned that there are no significant differences in the sample responses about the impediments to scientific research that are related to the differences in the academic disciplines of the study sample. This might be related to the fact that publishing has now become not just optional but obligatory in colleges, University increasingly looks at the publications to one's credit during

recruitment of faculty, and also some researchers consider publication is a stepping stone for one's carrier.

Part IV: Suggestions to overcome the research obstacles as the viewpoint of faculty members.

As doing research is the best indicator of academic excellence, the obstacles on the path to academic research should be removed, and special attention should be paid to managing demand-driven academic and research activities so, this study represents suggestions to overcome the research obstacles. University motivates the faculty members to develop research by giving financial funding is a suggestion to overcome the research obstacles in majority of faculty members under study mentioned, followed by decreasing the academic load for the faculty members who participate in scientific research within the University which represents two-thirds of faculty members, then encouraging faculty member to participate in national & international conferences and develop unit in University responsible for follow-up process of scientific research publication represent in more than half of faculty members under study

CONCLUSION

Our findings show that faculty members in our University consider there are several obstacles to conducting scientific research. The study found that the administrative and organizational obstacles had the first place, followed by the obstacles of research publication, then facilities-related obstacles, and personal traits' constraints are the last obstacle to conducting scientific research. In addition, the current study showed obstacles effect on published papers.

In addition, the current study showed viewpoint of faculty members for suggestion to overcome obstacles as; University motivates the faculty members to develop research by giving financial funding, decreasing the academic load for the faculty members who participate in scientific research within the University, and encouraging faculty member to participate in national & international conferences and develop unit in University responsible for follow-up process of scientific research publication.

RECOMMENDATIONS

In the light of the study results, the researchers recommend the following suggestions to improve the Status of Research and Publishing:

Implement a plan of action to facilitate the conducting research should be achieved and practice in line with 2030 vision to all Universities, reviewed, revised, and updated periodically as appropriate and as necessary .

The university administration should facilitate scientific research publications in highly classified scientific journals.

Decrease the academic load for the faculty members who participate in research projects within the University.

We are providing the basic environment for scientific research, such as laboratories equipped with equipment and supplies, as well as the availability of various electronic and traditional information resources.

Higher ranked journals facilitate the terms of accepting the research for publishing to the extent that does not prejudice the level of scientific research, reduce the length of arbitration period and facilitate the procedures through which publication process.

Further studies are therefore recommended at different research institutions on larger sample size.

CONFLICT OF INTEREST

The authors declared that present study was performed in absence of any conflict of interest.

ACKNOWLEDGEMENT

We would like to thanks all staff members at Shaqra University, KSA for valuable help during carrying out the study.

AUTHOR CONTRIBUTIONS

AA, RA, HA, and RR designed and performed the study and wrote the manuscript. AA, RA, HA, and RR performed tools, data collection, and data analysis. AA, RA, HA, and RR reviewed the manuscript. All authors read and approved the final version.

Copyrights: © 2020@ author (s).

This is an open access article distributed under the terms of the [Creative Commons Attribution License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author(s) and source are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

REFERENCES

- Alamire, Mohammad Hasan Walsarabi, Seham Mohammad (2008), *Albahth Alelmu Lada A'da Hia'atAltadrees Bejame'at Alisra' Alkhasa –Jordan-(Mo'aweqatoh Wa Moqtrahat Tatweroh)*, Damascus University Journal, Folder 24, second edition, pp. 295-332
- Algadheeb, N. A., & Almeqren, M. A. (2014). Obstacles to scientific research in light of a number of variables. *Journal of International Education Research*, 2(10), 106 – 108.
- Alghanim, S., & Alhamali, R. (2011). Research productivity among faculty members at medical and health schools in Saudi Arabia. *Saudi Medical Journal*, 32(12), 1297-1303.
- Alshayea, A. (2013). Scientific Research in the Kingdom of Saudi Arabia: Potential for Excellence and Indicators of Underdevelopment. *Higher Education Studies*, 3(5), 47-51.
- Alzahrani, J. (2011). Overcoming barriers to improve research productivity in Saudi Arabia. *International Journal of Business and Social Science*, 2(19), 50-57.
- Ashtyani, S., & Shamsi, M. (2012). Comparison of barriers to research activities forms the point of view of normal and talented students at Arak University of Medical Sciences. *Edu Res Med Sci*, 1, 26-32.
- Balakumar, P., Inamdar, M. N., & Jagadeesh, G. (2013). The critical steps for successful research: The research proposal and scientific writing:(A report on the pre-conference workshop held in conjunction with the 64th annual conference of the Indian Pharmaceutical Congress-2012). *Journal of pharmacology & pharmacotherapeutics*, 4(2), 130.
- Bergquist, W., & Bland, C. (1997). The vitality of senior faculty members: snow on the roof—fire in the furnace. *ASHE-ERIC Higher Education Report*, 25.(7)
- Bishen, K. A., Chhabra, K. G., Sagari, S., & Gupta, P. (2015). Nationwide survey on barriers for dental research in India. *Journal of pharmacy & bioallied sciences*, 7(3), 201.
- Dadipoor, S., Ramezankhani, A., Aghamolaei, T., & Safari-Moradabadi, A. (2019). Barriers to research activities as perceived by medical university students: A cross-sectional study. *Avicenna journal of medicine*, 9(1), 8.
- Dakik, H., Kaidbey, H., & Sabra, R. (2006). Research productivity of the medical faculty at the American University of Beirut. *Postgraduate Medical Journal*. 82, 462–464.
- Darawad, M. W., Mohammad Abu Sa'aleek RN, M. S. N., Samarkandi, O. A., & Abdelrahman Al-Anati RN, M. S. N. (2018). Nursing Faculty Members' Attitudes and Perceived Barriers toward Conducting Scientific Research: A Descriptive Study from Saudi Arabia. *International Journal of Caring Sciences*, 11(2), 1192-1203.
- Durieux V, Gevenois PA. Bibliometric indicators: quality measurements of scientific publication. *Radiology*. 2010;255(2):342–51.
- Preis T, Moat HS, Stanley HE, Bishop SR. Quantifying the advantage of looking forward. *Sci Rep*. 2012;2(350):1–2.
6. Hatamleh, H. M. (2016). Obstacles of Scientific Research with Faculty of University of Jadara from Their Point of View. *Journal of Education and Practice*, 7(33), 32-47.
- Hegde, A., Venkataramana, G., Kulkarni, S. B., Bhaskar, N. N., Jacob, J., & Gangadharappa, S. K. (2017). Attitudes, experiences, and barriers to research and publishing among dental postgraduate students of Bengaluru City: A cross-sectional study. *Journal of Indian Association of Public Health Dentistry*, 15(2), 157.
- Hoseini, M., & Shamsaie, E. (2007). Research obstacles and bottlenecks from the perspective of faculty research departments of agriculture. In: *Proceedings of the First Seminar in Higher Education in Allameh Tabatabai University, Islamic Republic of Iran, 1997*. Tehran, Allameh Tabatabai University, 1997, 538-508.
- Johnson, R. B., & Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. SAGE Publications, Incorporated.
- Karimian, Z., Sabbaghian, Z., Salehi, A., & Sedghpour, B. S. (2012). Obstacles to undertaking research and their effect on research output: a survey of faculty members' views at Shiraz University of Medical Sciences. *Eastern Mediterranean Health Journal*, 11 (18), 1147- 1149.
- Kazem, A., & Algemali, F. (2004). Scientific research obstacles in Sultan Qaboos University and suggestions to solve them. *The Arab Magazine for Education*, 24, 45-84.

- Macilwain C. What science is really worth. *Nature News*. 2010; 465:682–4
- Med Sci. 2010;3(2):51-7.
- Me'dan, Shareefa (2012), Waqe' Albahth Alelmi Fe Alwatan Alarabi Fe Thel Alfajwa Alma'refia Ala'alemia, *Journal of Human Sciences*. Edition 38, December, pp. 65-85.
- Mehrdad, N., Salsali, M., & Kazemnejad, A. (2008). The spectrum of barriers to and facilitators of research utilization in Iranian nursing. *Journal of Clinical nursing*, 17(16), 2194-2202.
- Memarpour, M., Fard, A., & Ghasemi, R. (2015). Evaluation of attitude to, knowledge of and barriers toward research among medical science students. *Asia Pacific Family Medicine*, 14(1): DOI:10.1186/s12930-015-0019-2.
- Meo SA, Usmani AM, Vohra MS, Bukhari IA. Impact of GDP, Spending on R&D, number of universities and scientific journals on research publications in pharmacological sciences in Middle East. *Eur Rev Med Pharmacol Sci*. 2013;17(20):2697–705. 4 .
- Mesleh, Atia Wa Nada, Yahia (2007), Albahth Alelmi Fe Jame'at Alquds Almaftoha: Dwafe' Wa Mo'weqat Men Wejhat Almoshreefen Alacademien Almotafargheen, *Al-Quds Open University Journal*, Edition 9, pp.157-19.
- Messerli, P., Murniningtyas, E., Eloundou-Enyegue, P., Foli, E. G., Furman, E., Glassman, A., ... & Richardson, K. (2019). *Global Sustainable Development Report 2019: The Future is Now—Science for Achieving Sustainable Development*.
- Ministry of economy and planning. (2005). *The Eighth development plan 2005-2009*.
- Parahoo, K. (2006). *Nursing Research: Principles, Process and Issues*. 2nded. China: Palgrave Macmillan Co., p.210.
- Pho, P., & Tran, T. (2016). Obstacles to scholarly publishing in the social sciences and humanities: a case study of Vietnamese scholars. *Publications*, 4(3), 19 .
- Sanjari, M., Baradaran, H. R., Aalaa, M., & Mehrdad, N. (2015). Barriers and facilitators of nursing research utilization in Iran: A systematic review. *Iranian journal of nursing and midwifery research*, 20(5), 529.
- Sereshti M, Kazemian A, Daris F. Research barriers from the viewpoint of faculty members and employees of Shahrekord University of Medical Sciences. *Educ Strateg*