Obstacles on applying quality in educational scientific Researchs from the point of view of master's students

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Abstract:

The current study aims to identify the obstacles of applying quality in educational scientific research from the point of view of first and second year Master students. The study sample consists of 63 male and female. The study tool is a questionnaire of 57 statements including five axes, and their psychometric properties calculated according to the research objectives. The findings show the following:

- The study sample have a medium level of knowledge about the research quality culture.
- The main obstacles encountered initially were those related to researchers, followed by management, supervision, and finally research-related issues.
- There are no statistically significant differences between the study sample in facing obstacles of applying research quality according to academic level.

Keywords: Obstacles, Quality, Educational scientific research.

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1. Introduction:

The contemporary view emphasizes the importance of quality in all fields, particularly research, in higher education for graduate students' competitiveness, success, and sustainable development. Quality in scientific research is also a key academic accreditation standard. (Al-Zoubi & Al-Zoubi, 2019, p. 62)

Research value increases when researchers adhere to quality standards, including educational scientific research. This contributes to human development and progress, as society relies on utilizing resources effectively, developing individual capabilities, and equipping individuals with skills for modern life, ultimately contributing to comprehensive development. (Fleet, 2015)

Educational research is a scientific branch that seeks to uncover new knowledge, present solutions, diagnose educational system problems, and provide appropriate solutions. (Al-Sukran, 2012)

Educators believe universities should perform three integrated functions: teaching, scientific research, and community service, extending their activities beyond their walls to contribute to problem-solving through creative research and studies. (Kassis, Abu Samra, & And Jabr, 2008)

The university is the foundation for educational and scientific research, involving students and professors in various disciplines. However, obstacles threaten their careers and ability to meet societal needs and development requirements. (Benouda & Mekdad, 2018)

Algerian university prioritizes higher education and scientific research by providing necessary capabilities for research centers, laboratories, and researchers, ensuring a decline in research mission performance. (Benouda & Hamad , 2019)

Educational research faces numerous obstacles that hinder its effectiveness and benefits in decision-making, planning, and educational process management. (Fleet, 2015)

Scientific methodology is crucial for university formation and achieving international quality standards. Postgraduate students play a vital role in scientific research, driving progress and fostering applied achievements. However, many doctorate students lack a strong scientific research methodology culture, which can be developed through experience and proofreading. (Al-Bar, 2009, p. 31)

Research experience at Bachelor's, Master's, and Doctoral levels often lacks practical application, except in the final form. To excel in scientific research, students should have a background in scientific research concepts, technical aspects, and management. Intellectual research culture and experience are acquired through postgraduate research careers.

The achievement of research quality is hindered by various factors, including poor scientific preparation, inadequate supervision, student failure to adhere to supervisors' observations, administrative difficulties at the university level, and lack of references and periodicals related to the research subject. These obstacles may vary in severity at the researcher or scientific supervision level, or less in terms of completion of the research project and university administration's role. (Khedna, 2018)

Afana's study (2005) of educational scientific research revealed issues such as repetition of graduation notes, philosophical topics, lack of reliable information sources, inability of postgraduate students to prepare research plans, and insufficient coordination with faculties. (Boutebal, Yahya, & Mihoubi, 2017)

The hasty view in educational research overlooks the crucial stages of preparation and planning, leading to a quick and complex data collection process. This overlooks problem selection and formulation, and instead focuses on initial identification of data collection procedures. (Al-Mutlaq, 2012)

The current view calls for a reconsideration of research production, focusing on quality to compete with countries. However, obstacles like lack of research culture, researcher's involvement, and supervision process hinder qualitative scientific research growth in Algerian universities. Thus, in our study, we will try to highlight the most important obstacles that limit the achievement of quality in educational scientific research, by asking the following questions:

1-Do the study samples have high level in research quality culture ?

2- what are the main obstacles that hinder the quality of educational scientific research?

3- Are there any differences between the study samples in facing obstacles of applying research quality according to academic level?

1.1. Study Hypotheses:

The hypotheses of the study were as follows:

1- The study sample have low level about research quality culture.

2- The quality of educational scientific research is impeded by various types of obstacles.

3- There are differences between the study samples in facing obstacles of applying research quality according to academic level.

1.2. Importance of study:

The importance of this study lies in the following:

- The importance of the study is evident in the importance of the topic covered, as it sheds light on a modern and serious concept in higher education, which is the concept of quality, especially since quality assurance in educational scientific research has become a means to achieve social and economic development.
- The significance of research lies in university students' understanding of educational research quality, a topic of ongoing scientific discussions to effectively apply it in education and scientific research.
- Educational Scientific research is crucial for society's development, and understanding obstacles limiting quality application can help diagnose deficiencies in Algerian universities and develop solutions.

1.3. Objectives of the study:

The current study aims to:

- To recognize the level of research quality culture that the study sample have.
- Identifying obstacles that prevent the application of the quality of educational scientific research.
- Identifying the main obstacles that hinder the quality of educational scientific research.

- Detecting differences between the study samples in facing obstacles of applying research quality according to academic level.

1.4. Definition of concepts:

1.4.1. Obstacles:

The ter mis defined by (Muhammad Ali Muhammad) as: "All the results or processes witnessed by the social system and are seen as leading to a threat to integration, harmony and stability in this system". (Raqqad, 2014, p. 9)

1.4.2. Quality:

Quality is the opposite of mediocrity, encompassing learning, dexterity, and perfection in all aspects of things. Accuracy and quality are determined by knowledge, skill, gumption, and correcting deficiencies or ignorance in these aspects. (Abou Hammad & Al-Quadah, 2017)

Quality is a set of principles, policies, and organizational structures aimed at improving performance and services, achieving the highest standard, and ensuring they match targeted standards. (Tawil & Taitim, 2019, p. 49)

Quality is a set of principles and technical methods that continuously improve performance at all levels by using available resources to meet beneficiaries' needs and achieve satisfaction. (Rabiaa & Obaid, 2015, p. 310)

1.4.3. Educational scientific research:

We will provide definitions of various terms, until we determine the appropriate procedural concept for the research.The following are the most important of these definitions:

Scientific research is ''an organized intellectual process conducted by researchers at universities to discover new scientific facts, validate existing knowledge, and identify societal realities ''. (Jellab & Balamushi, 2018, p. 115). It's ''an organized intellectual process by researchers to investigate facts about specific issues using an organized scientific method, aiming to find appropriate solutions and generalizable results''. (Al-Abadi, 2008, p. 31). It involves systematic investigation of phenomena to interpret, determine relationships, control, predict, and modify knowledge, contributing to human development and civilization. (Hamdan & Makazi, 2011). It is also Compulsory university student projects on chosen topic within specific time frame, culminating in applied and theoretical standards study at bachelor's, master's, or doctoral level, under qualified professor supervision. (Farahati, 2012, p. 23)

While, Educational research is ''the systematic application of the scientific method to study educational problems, aiming to describe, explain, predict, or control educational phenomena. However, describing human-like situations and identifying specific causes of behaviors in educational environments can be challenging''. (Gay, Mills, & Airasian, 2012, pp. 5-6)

The quality of scientific research is indicators and standards approved by the concerned authorities in scientific research through which we can distinguish good research from other (Darwish, Abu Saqr , & Kalakh , 2020, p. 4)

The quality of educational research is defined as "the set of characteristics or specifications that accurately and comprehensively express that the educational research

system is effective in monitoring and diagnosing educational problems in the social and educational reality, and is capable of predicting them in the future, enabling it to raise the level of the educational product in educational and university institutions, and this requires Necessarily the quality of its researchers, the quality of its management, and the quality of the relationship between society and the educational research system''. (Al-Azzazi, , 2022)

1.4.4. Procedural Definition :

The researcher definde obstacles to quality in scientific educational research as challenges faced by master's students, including researcher, administrative, and supervision issues, and research-related issues. This is indicated by the grades obtained by the study sample in their responses to a questionnaire prepared for this purpose.

2. Method:

2.1. Study method :

Based on the problem of the study, its objectives, and its questions, the descriptive approach was relied upon, which collects facts and information to analyze and interpret them for generalizations. It aimed to formulate important principles and understand the phenomenon, providing an accurate picture and discovering the theoretical background.

2.2. Data Collection :

A.Limitations of the study: fields of study

-Time domain: The study was conducted from 2019 to 2022.

-Spatial domain: The study was carried out at the level of the Institute of Social and Human Sciences at the University Center Morsli Abdullah in Tipaza.

B. Participants:

The study contains 63 Master's students in the first and second-year at the University Center Morsili Abdullah's in institute of Social and Human Sciences, selected from counseling, guidance, school psychology, and educational sociology disciplines, using random selection method.

C. Study tools :

After presenting the questionnaire to three arbitrators and evaluating its psychometric properties, it was found that the content validity ranged from 0.24 to 0.50 and a Cronbach's alpha coefficient was 0.70. The questionnaire now consists of 57 statements and five axes with alternatives (Yes, No); these axes are as follows :

-**The first axis**: Level of educational research quality culture
-**The second axis**: Obstacles of research-related issues.
-**The third axis**: Obstacles related to the researcher.
-**The forth axis**: Obstacles related to the supervision process.
-**The fifth axis**: Obstacles related to management.

2.3. Data Analysis :

The researcher utilized statistical methods like frequencies, percentages, arithmetic means, standard deviations, correlation coefficientor calculating the validity between the statement and the total score, Cronbach's alpha stability coefficient, and "T" test.

3. Results:

3.1. First Hypothesis:

The hypothesis states that the study sample have low level about research quality culture.

Fore testing this hypothesis , the following is calculated:

Determining the ranges or categories (little - medium - wide) by applying the following equation: The upper limit - the lower limit / the number of the ranges : (number of items x the largest weight alternative) - (the number of items x the least weight alternative)/ the number of ranges.

$$\text{The number of ranges} = \frac{3x\ 2 - (3\ x1)}{2} = \frac{3}{2} = 1.5$$

-The length of the range or category is: 28, and accordingly the ranges are divided as follows:

(3-4.5) short, (5-6.5) medium, (7-8.5) wide.

By calculating the arithmetic mean of the items as a whole, we find:

Table 1. The arithmetic mean of the items

Axis1	Sample Size	Arithmetic mean	Standard Deviation
The study sample	63	5.30	0.77

The source: produced by the author

Through Table N° (1), it is clear that the arithmetic mean is 5.30, belonging to the range (5-6.5), and this means that the degree of possession of the study sample of the research quality culture was medium.

1.2. Second Hypothesis:

The hypothesis states that the quality of educational scientific research is impeded by various types of obstacles.

To find out the most prominent obstacles in the application of research quality from the point of view of the study sample, the arithmetic means were calculated for each of the axes (2, 3, 4, 5).

Table 2. The calculation of the arithmetic mean of axis

Axes	Second axis	Third axis	Forth axis	Fifth axis
Sample	63	63	63	63
Arithmetic mean	19.74	31.77	19.09	24.07

Standard Deviation	1.90	3.56	1.90	1.91

The source: produced by the author

Through the values of the arithmetic mean, we find that they ranged between (19.09-31.77) and that the researcher-related obstacles take the wide value (31.77), which reflects the most prominent axes of obstacles, followed by obstacles related to university management (24.07), then obstacles related to research (19.74) but the lastest obstacles related to the process of academic supervision is (19.09)

3.3. Third Hypothesis:

The hypothesis states that there are differences between the study sample in facing obstacles of applying research quality according to academic level.

The researcher utilized the "T" test to compare the scores of first and second-year master's students in their questionnaire responses to confirm the validity of hypothesis. The results were as follows**:**

Table 3. The results of the 'T' test to compare the mean scores of study sample

Academic Level	Sample size	Arithmetic mean	Standard deviation	'T' test	Freedom Degree	Statistical significance
Master1	39	106.10	6.52	1.50	61	0.44
Master2	24	103.41	7.38			

The source: produced by the author

Through the above table, The study sample consisted of 63 male and female students, 39 of whom were first-year students. The arithmetic mean of their scores was 106.10, with a standard deviation of 6.52, while the second-year master students had a higher mean score of 103.41, with a standard deviation of 7.38. The "T" tests valus was 1.50, indicating no differences in obstacles related to educational scientific research.

4. Discussion:

The statistical analysis of previous hypotheses can provide an explanation for their results based on the following data:

1.The study sample demonstrates a medium culture towards research quality, This explains that the acquisition of knowledge in the field of the term quality was perhaps through casual student dialogues or during study as a slight indication of the emergence of this term in the field of economics or education. This concept is activated through methodology unit instruction, practical application in research practices, and Supervisors direct outstanding research without using quality in supervision.

The results have shown that research results' quality, research process/researching quality, and research groundedness quality were highly valued as determinants of academic research quality. The results signify that proper interplay of the three guarantees rightfully situating research undertakings, and ascertaining pragmatic soundness of the process to produce quality results relevant to policies and practices.

2. In the second hypothesis, the main obstacles encountered initially were those related to researchers, followed by management, supervision, and finally research-related issues.

One study has found the challenges faced by faculty members in scientific research, including lack of support, exhaustion, publishing issues, low financial income, and lack of experience, leading to sterility in universities. (Umm Al-Jilali, 2018). Also, Al-Fayoumi's (2017) study which revealed obstacles in Jordanian universities for faculty and graduate students in educational research, Hassan's (2012) study highlighted challenges in refereeing scientific theses, and Al-Khatib's (2010) study highlighted weaknesses in ethical research, lack of problem-solving, and insufficient information on training program implementation. (Al-Zoubi & Al-Zoubi, 2019)

This explains the lack of training in research methodology among university students and in ways to achieve quality in it, this leads to low absorption due to the focus on specialization units, rather than the practical applications of research methodology in their fields

3. The results of the third hypothesis indicate that there are no statistically significant s differences between the study samples in facing obstacles of applying research quality according to academic level.

The study sample face similar obstacles in applying scientific research quality regardless of their academic level, indicating no significant differences in academic performance.

The study reveals that master's students face challenges in achieving quality in scientific research due to theoretical training and a lack of practical application. They struggle with high-quality research and choosing cost-effective options, leading to repetition and lack of novelty in research topics.

5. Conclusion:

The current study attempts to identify the main obstacles university students face in achieving quality research, revealing a low research quality culture. The most prominent obstacles are related to the researcher, university management, supervision, and research. No differences were found in these obstacles due to academic level.

The researcher addresses research obstacles in scientific research, highlighting their limitations and proposing solutions to overcome these challenges and enhance the quality of scientific research.including the following:-Adopting quality in training for the scientific research methodology unit on the one hand, and educational research on the other hand, to bridge the deficiencies and gaps inherent in the training process.

- The Scientific Supervisory Board guides and encourages the student to conduct research in general and educational research in particular with a level of quality.
- Provision of rewards to encourage outstanding messages at the expense of the University
- Provide students with quality and up-to-date books by providing them at the university library level in order to employ and utilize new knowledge in a manner that is of high quality in research performance.

- The dissemination of a culture of quality in scientific research in the academic community by organizing seminars, study days and meetings for university students in order to form them in the field of research quality and its standards.

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