

Investigating interest in research and its related factors in postgraduate students of Ahvaz Jundishapur University of Medical Sciences

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ABSTRACT

Introduction: The influence of individual factors and social factors on interest in research is different from the viewpoint of female and male students. Therefore, considering the importance of the issue of research in graduate studies and the high cost and time, and energy that is spent on research activities, the researchers decided to determine the interest in research and its related factors in postgraduate students of Ahvaz Jundishapur University of Medical Sciences in 2018.

Methods: This is a descriptive cross-sectional study that was carried out after obtaining permission from the relevant authorities on postgraduate students of Ahvaz University of Medical Sciences in 2018. Data were collected by two questionnaires: demographic questionnaire and interest in research. The results were analyzed using SPSS 21 software, T-test, ANOVA, and Pearson correlation coefficient.

Results: The sample consisted of 151 postgraduate students of Ahvaz Jundishapur University of Medical Sciences with an average age of 26.93 ± 5.21 . The average score of intrinsic interest in research of student, authority and sustainability, social status, and the overall score of interest in research was 54.83 ± 12.33 , 23.48 ± 5.00 , 26.22 ± 6.71 , and 104.19 ± 17.98 , indicating a modest intrinsic interest authority and sustainability, social status and the overall score of interest in research. So that 83.2% of the subjects had a high interest in research and only 0.7% had little interest in research. There was a significant relationship between the overall score of interest in research and the educational level, which it was the most interest in the research in the Ph.D. ($P = 0.04$).

Conclusion: The results showed that the interest in research in the studied population was moderate to high. It is recommended that studies be conducted in larger communities in order to maximize the results.

Keywords: Students, Postgraduate, Research, Ahvaz.

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Introduction

Research is considered as the main driving force of the progress of the community and it is one of the most important tasks of universities and higher education institutions, so that the anxiety and weakness of its achievement are among the factors that reduce the performance and quality of research and, consequently, the bitterness of the course.¹ The first step in organizing research in society is to achieve an understanding of capabilities, available facilities, as well as finding out the strengths and weaknesses of the research topic.² Universities and research centers are also among the most important platforms for the realization of the knowledge-based society strategy and it is only through the extensive and collaborative activity of graduate students and faculty that can be seen as the result of science and technology and research in the country. Research in the academic community is carried out by two main groups of professors and students. Teachers play the role of advisers and coaches of future researchers, and postgraduate students go profound into the field of science and research.³ Since students play a very important role in the development of society as the young forces and future researchers of the country, understanding students' intellectual needs and concerns, providing research facilities, creating suitable positions, and providing material and technical support for their research talents can have a significant impact.⁴ Individual, informational, educational, social, and economic factors are effective in enhancing the research motivation of postgraduate students. Also, the impact of individual and social factors on research motivation is different from the viewpoint of female and male students.⁵ Therefore, self-efficacy, research experience, research expectation, personality factors and educational-research environment, creation of adequate facilities, making structural changes

in the educational system, and teaching research methods in the interest of research are effective.^{6,7} Simulation training activities can be used simultaneously with other educational strategies to strengthen the attitudinal skills needed to create informed consent in the field of health research.⁸ Student research beliefs have an important role in conducting or avoiding research. It is also necessary to familiarize students with research in life and daily activities in order to raise their creative talents in producing knowledge and participation in the development of the country.⁹ Many factors may prevent effective research in universities. According to research carried out in the country, the barriers to research by the research institutes are that, firstly, research centers are in difficulty with expert research workforce; secondly, researchers are not supported financially and professionally; thirdly, research activities do not provide material and spiritual motivation for researchers; and, fourthly, the research does not have the required quality.² The study by Nouri et al. Showed that the effective and continuous use of student research experience assessment tools provides the ground for identifying the strengths and weaknesses of educational and research processes in colleges and universities.³ Therefore, considering the importance of the issue of research in postgraduate studies and the high cost and time and energy that is spent on research activities, without which no country can identify and solve problems and plan a strategy for development, as well as a few studies investigating this issue, the researchers decided to conduct a study aimed at determining the interest in research and its related factors in postgraduate students of Ahvaz Jundishapur University of Medical Sciences in 2018.

Materials and Methods

The present study is a descriptive cross-sectional study which was conducted by a responsible sampling method on postgraduate students of Ahvaz University of Medical

Sciences in 2018 after obtaining the permission of relevant authorities. The sample size was calculated according to the formula below 151 persons.

$$n = \frac{Z_{1-\frac{\alpha}{2}} \times P(1-P)}{d^2}$$

The criteria for entering the study include: postgraduate students including M.Sc students and Ph.D. students of all fields of Ahvaz University of Medical Sciences, having informed consent to participate in the study. The data gathering tool consists of two demographic questionnaires and an interest in research. The demographic questionnaire includes questions about the field, grade, gender, employment status, and so on. The research interest questionnaire has 29 questions and its general purpose, investigating the interest in research from different dimensions (intrinsic interest, authority, and sustainability, social status). This questionnaire was designed by Dr. Zarger and colleagues (2011). This questionnaire has 3 dimensions, which includes the intrinsic interest of question 1-16 and the authority and sustainability of question 17-22, and the social status of question 23-29.

The method of scoring it based on the Likert spectrum is five options, with options from 1 to 5. Of course, this grading method is reversed in questions 17, 18, 19, 20, and 21 and the rating is from 1-5. Score 29 to 58: The person's interest in research is low. A score between 58 and 87: The person's interest in the research is average. Score higher than 87: The person's interest in the research is high. The minimum possible score is 29 and the maximum is 145. The validity and reliability of this questionnaire have been tested. Confirmatory Factor Analysis on questionnaire items using KMO confirmed

the 3-factor structure of this scale. Also, for reliability, Cronbach's alpha coefficient was used and the value of this coefficient for these intrinsic interest, authority and sustainability, and social status were 0.94, 0.79, and 0.89, respectively. For the whole scale was 0.95, indicating good reliability of this scale.⁸

In this study, the students completed the written consent and completed the questionnaire with full satisfaction and ethical considerations were fully observed. The results were analyzed using SPSS software version 21, T-test, ANOVA, and Pearson correlation coefficient.

Results: The sample consisted of 151 postgraduate students of Ahvaz Jundishapur University of Medical Sciences with an average age of 26.93 ± 5.21 . The results showed that 51 people (33.8%) were male and the rest were women, 52.7% of whom were M.Sc students.

33.8% of the people had not published an article yet, and the rest had at least one published article. 23.8% of the people had not yet approved the research plan and the rest had at least one approved research project. 20.4% of these students were talented students, 61 percent of them had experienced in the advanced research methodology workshop, 9.9% had teaching experience, 3.6% had a patent, 26.4% had articles in congresses.

The average score of intrinsic interest in research of student, authority and sustainability, social status, and an overall score of interest in research was 54.83 ± 12.33 , 23.48 ± 5.00 , 26.22 ± 6.71 , and 104.19 ± 17.98 , indicating a modest intrinsic interest authority and sustainability, social status and an overall score of interest in research. So that 83.2% of the subjects had a high interest in research and only 0.7% had little interest in research.

There was no statistically significant relationship between the mean total score of interest in the research and its subscales with the academic year, gender, teaching history, possession of the patent, presentation of the paper in the congress and the talent student ($P > 0.05$). (Figure 1)

There was no significant difference in the degree of interest in research in colleges of study ($P > 0.05$). There was a significant positive correlation between research and educational environment with interest in research.

Also, the ANOVA test showed that there was no significant difference between the mean scores of interest in research and its subscales with the field of study ($P = 0.24$). But there was a significant relationship between the overall score of interest in research and the educational level, which it was the most interest in the research in the Ph.D. ($P = 0.04$). There was no significant correlation between the interest in research with age and the correlation coefficient was negative ($P = 0.09$).

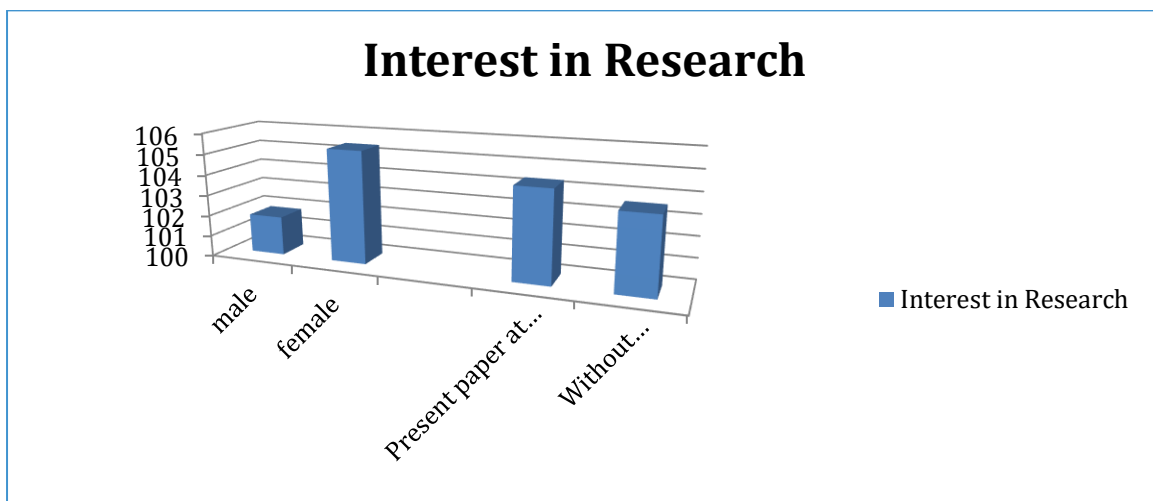


Figure 1: Average Grades of Interest in Research Based on Gender and Submission of Papers in Congresses in Graduate Students.

Discussion and Conclusion

Research is considered as the main driving force of the progress of the community and it is one of the most important tasks of universities and higher education institutions.¹ Individual, informational, educational, social, and economic factors are effective in enhancing the research motivation of postgraduate students. Also, the impact of individual and social factors on research motivation is different from the

viewpoint of female and male students.⁵ The purpose of this study was to determine the interest in research and its related factors in postgraduate students of Ahvaz Jundishapur University of Medical Sciences. This study indicates a modest intrinsic interest in authority and sustainability, social status, and an overall score of interest in research. There was no significant difference in the degree of interest in research in colleges of study.

There was a significant positive correlation between research and educational environment with interest in research; this means that the more perception of the educational-research environment, the more interest in research is more. These results were compared with the study of Bahman Abadi and his colleagues who found that the tool to measure interest in research responded to many of the students' motivational issues in doing research and, on the other hand, could be used to identify the strengths and weaknesses of students in conducting research.¹⁰ As in research, the expected outcomes of the research and the research self-efficacy were among the predictors of research interest in the students.¹¹ It was also found in the study that research self-efficacy was predictable through the educational-research environment and social factors of the university and its components.¹² That is, according to Kahn, Lambie, Vaccaro, and colleagues who concluded in their research that whatever students would be more self-efficacious, they would be more interested in research.¹³

In other words, feeling the ability and expecting to achieve positive outcomes will lead to more research. And the educational environment was also among the variables that influenced students' interest.¹¹

The results showed that the interest in research in the studied population was moderate to high. It is recommended that studies be conducted in larger communities in order to maximize the results.

The results of this study can be used to identify and resolve problems related to the field of education as well as to create a suitable platform for the development of research activities on the agenda of policymakers and planners. From the limitations of this study that

this study was conducted in an accessible way on a limited population of a particular population of students (postgraduate) with low sample size and only at Ahvaz Jundishapur University of Medical Sciences. Therefore, it is suggested that future studies should be carried out on all students at different universities of high samples so that the study can be generalized and expanded.

Also, more detailed aspects of the educational-research environment and interest in research should be studied and demographic variables and hidden aspects affecting these two variables should be investigated. In addition, by designing and implementing qualitative research through in-depth interviews, it can be achieved by factors that have an impact on students' interest in research.

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