

The Effective Factors on the Postgraduate Students' Interest and Participation in Performing Research Activities - Case Study: Kermanshah University of Medical Science

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Background: Over the past decade, new dynamics have emerged in each of the key domains of higher education, research and innovation; therefore, considering effective factors on performing research activities is so necessary. The aim of the present study was to determine the factors influencing on postgraduate students' interest and participation in research activities.

Methods: This cross-sectional and descriptive-analytical study was performed in all postgraduate students of Kermanshah University of Medical Sciences (75 people). The researchers-made questionnaire has been used for identification the effective factors on performing research activities among the postgraduate students. In this study we used a Likert Scale based questionnaire (Very Low=1, Low=2, Average=3, High=4 and Very High=5). The Cronbach's alpha coefficient of 0.85 was obtained. Data analysis was done Kruskal-Wallis and Mann-Whitney U tests for variables for 2 or three groups, respectively. Also One-Sample T-test and Friedman test have been used for identification of effective factors and priority order of these factors.

Results: The results show that the viewpoint of students in different schools, different age groups and between students with and without research experience has significant difference in relation to the role of effective factors on research activities ($p < 0.05$). The efficiency level of these factors was related to: educational and research facilities, organization support (university), research and scientific experiences, other factors and finally the role of professors ($p < 0.05$), respectively.

Conclusions: Based on students' viewpoint, educational-research facilities and organizational support play an important role in conducting research activities. Therefore access to internet with appropriate speed, different databases, equipping the research labs for scientific research and providing the advanced laboratory devices, financial support of university research unit and encouraging the postgraduate students in different ways, can strengthen the participation of students in conducting research activities.

Keywords: Research Activities; Participation; Postgraduate Students; Kermanshah University of Medical Sciences

عوامل موثر بر علاقه و مشارکت دانشجویان تحصیلات تکمیلی در فعالیت‌های پژوهشی - مطالعه موردی: دانشگاه علوم پزشکی کرمانشاه

زمینه: رشد تحصیلات تکمیلی در دو دهه اخیر، نیاز به پژوهش را ضروری تر کرده است. شناسایی عوامل موثر در انجام پژوهش بسیار مهم است. هدف از این مطالعه تعیین عوامل موثر بر میزان علاقه و مشارکت دانشجویان تحصیلات تکمیلی در فعالیت‌های پژوهشی می باشد.

روش کار: این مطالعه توصیفی-تحلیلی و مقطعی بر روی تمامی دانشجویان تحصیلات تکمیلی دانشگاه علوم پزشکی کرمانشاه (۷۵ نفر) انجام گرفت. ابزار گردآوری داده‌ها، پرسشنامه محقق ساخته‌ای است که در آن به منظور شناسایی عوامل موثر در انجام فعالیت‌های پژوهشی دانشجویان از دیدگاه آنها از مقیاس لیکرت (خیلی کم=۱، کم=۲، متوسط=۳، زیاد=۴، خیلی زیاد=۵) استفاده شد. در این پرسشنامه ضریب آلفای کرونباخ برای تمام متغیرها برابر با ۰.۸۵ بدست آمد. برای متغیرهای سه گروهی و دوگروهی به ترتیب از آزمون‌های آماری Kruskal-Wallis و Mann-Whitney U و همچنین جهت شناسایی عوامل تأثیرگذار و اولویت بندی آنها به ترتیب از آزمون One-Sample T-test و Friedman استفاده گردید.

یافته ها: یافته ها نشان داد که دیدگاه دانشجویان دانشکده‌های مختلف، گروه‌های سنی مختلف و دانشجویان با و بدون تجربه پژوهشی در ارتباط با نقش عوامل تأثیرگذار در انجام فعالیت‌های پژوهشی تفاوت معناداری دارند ($P < 0.05$). میزان تأثیرگذاری عوامل مذکور به ترتیب اولویت مربوط به امکانات آموزشی-پژوهشی، حمایت سازمانی (دانشگاه)، تجربیات علمی و پژوهشی، سایر عوامل و نقش اساتید بود ($P < 0.05$).

نتیجه‌گیری: از دیدگاه دانشجویان، امکانات آموزشی و پژوهشی و حمایت سازمانی نقش پر رنگی در انجام فعالیت های پژوهشی دارند، بنابراین دسترسی به اینترنت با سرعت مناسب و بانک های اطلاعاتی مختلف، مجهز نمودن آزمایشگاه های تحقیقاتی و فراهم نمودن دستگاه های پیشرفته آزمایشگاهی، حمایت مالی بخش تحقیقات دانشگاه از فعالیت های پژوهشی دانشجویان و تشویق آنها از طرق مختلف، می تواند مشارکت دانشجویان تحصیلات تکمیلی در انجام فعالیت پژوهشی را تقویت کند.

واژگان کلیدی: فعالیت‌های پژوهشی، مشارکت، دانشجویان تحصیلات تکمیلی، دانشگاه علوم پزشکی کرمانشاه

العوامل المؤثرة على مستوى العلاقة و المشاركة عند طلاب التخصص في مجال البحوث - الدراسة الموردية : جامعة کرمانشاه للعلوم الطبية

التمهيد: إن نمو الدراسات التخصصية في العامين الاخيرين اوجب ازدياد ضرورة البحث. هناك أهمية بالغة لمعرفة العوامل المؤثرة في اجراء البحوث. إن الهدف من هذه الدراسة هو تعيين العوامل المؤثرة على مستوى العلاقة و المشاركة عند طلاب التخصص في مجال البحوث.

أهداف العمل: تم اجراء هذه الدراسة التوصيفية - التعليمية و المنظمة على جميع طلاب التخصص في جامعة کرمانشاه للعلوم الطبية (75 طالب). تم استخدام استمارة مدروسة تختبر العوامل المؤثرة في اجراء البحوث الطلابية. من خلال رؤيتهم على مقياس ليكرت (متدني جداً = 1، متدني = 2، متوسط = 3، عالي = 4، عالي جداً = 5). تم الحصول على ضریب ألفا كرونباخ لكل المتغيرات مساوياً لـ 0.85 في هذه الاستمارة. تم استخدام الاختبار الاحصائي Kruskal-Wallis للتغيير التلاتي و Mann-Whitney U للتغيير التناهي و لاجل معرفة العوامل المؤثرة و ترتيبها حسب الاولوية Friedman و One-Sample T-test.

النتائج: اشارت النتائج الي أن هناك تفاوت واضح في مجال العوامل المؤثرة من خلال نظرة الطلاب في الكليات و المجموعات المختلفة من حيث السن و الطلاب الذين لديهم تجارب في البحوث و الذين لم يكن لديهم تجارب. ($p < 0.05$) مستوى التأثير كان حسب الترتيب التالي: 1- امکانات التعليم و البحوث. 2- العناية من قبل الجامعة. 3- التجربة في مجال الابحاث. 4- دور الاساتذة. 5- موارد اخرى ($p < 0.05$).

الاستنتاج: إن الإمكانيات المستخدمة في مجال البحث و التعليم و العناية المؤسساتية كانتا ابرز الامور الفعالة من خلال رؤيته الطلاب في مجال اجراء البحوث. لذا أن وجود انترنت بسرعه عالية وبنوك معلوماتيه و تجرير مخبرات حديثة و العناية المالية الكافية و اعطاء المحفزات الكافية في مجال البحوث تقوي مجال البحوث بشكل جيد.

الكلمات الرئيسية: المشاركة، طلاب التخصص، البحوث، جامعة کرمانشاه للعلوم الطبية

کرمانشاه یونیورسیتی آف میڈیکل سائنسس میں تحقیقاتی سرگرمیوں اور کیس اسٹڈیز میں پوسٹ گراجویشن طلباء کی دلچسپی اور مشارکت کے اسباب۔

بیک گراؤنڈ: گذشتہ دو دہائیوں میں اعلیٰ تعلیم کی بنا پر تحقیقات ایک ضروری امر بن گیا ہے۔ اسی وجہ سے تحقیقاتی سرگرمیوں میں موثر عوامل کا پتہ لگانا بھی ضروری ہو گیا ہے۔ اس تحقیق کا مقصد یہ دیکھنا ہے کہ پی جی اسٹوڈنٹس کی تحقیقاتی سرگرمیوں میں کونسے عوامل موثر واقع ہوتے ہیں۔

روش: یہ ایک عارضی تحقیق ہے جس میں کرمانشاه میڈیکل یونیورسٹی میں پی جی کے تمام طلباء یعنی پچھتر طلباء شریک تھے۔ ڈیٹا کی جمع آوری ایک سوالنامے سے کی گئی جس میں پی جی طلباء کی تحقیقاتی سرگرمیوں اور کیس اسٹڈیز میں موثر اسباب کا جائزہ لیا گیا۔ نتائج کا تجزیہ لائیکرٹ اسکیل سے کیا گیا۔ اس میں کرونباخ آلفا کو ایفی شینٹ بھی حاصل کیا گیا جو صرفاً اعشاریہ آٹھ پانچ ہے۔ اس کے علاوہ کروکر سال ویلیس اینڈ مین وٹنی کے ٹسٹ بھی انجام دئے گئے۔ اس کے علاوہ ون سیمپل ٹی ٹسٹ اور فرائڈ مین ٹسٹ بھی کئے گئے تاکہ موثر اسباب کا پتہ لگایا جاسکے۔

نتیجے: اس تحقیق سے پتہ چلتا ہے کہ مختلف یونیورسٹیوں اور فیکلٹیوں کے طلباء نیز نئے اور تجربہ کار طلباء نے تحقیقات کے لئے اپنے اپنے مختلف نظریات بیان کئے ہیں۔ ان کی نظر میں سب سے پہلے، تحقیقات پر اثر انداز ہونے والے عوامل میں تعلیمی اور تحقیقاتی وسائل و ذرائع ہیں اور یونیورسٹی کی جانب سے تحقیقاتی منصوبوں کی حمایت ہے۔ طلباء نے یہ بھی کہا کہ ان کی تحقیقات پر علمی تجربے نیز اساتذہ کے رویے سے بھی کافی اثرات پڑتے ہیں۔

سفرارشی: طلباء کی نظر میں یونیورسٹی کے وسائل و ذرائع اور یونیورسٹی کی سپورٹ ان کی تحقیقات پر بنیادی اثرات چھوڑتی ہے لہذا اس امر کے پیش نظر بر تعلیمی مرکز اور یونیورسٹی کو چاہیے کہ اپنے طلباء کو تحقیقات کے لئے بہترین وسائل و ذرائع فراہم کرے۔

کلیدی الفاظ: تحقیقاتی سرگرمیاں، مشارکت، طلباء، پوسٹ گریجویشن۔

INTRODUCTION

Research has always been known as a material and spiritual tools. Without doubt research is one of the key points of human progress during history. Over the past decade, new dynamics have emerged in each of the key domains of higher education, research and innovation. Research, learning and teaching are among important processes and skills for students, especially postgraduate students and play an important role in the improvement of educational processes and expansion of scientific services in the society (1, 2). Respect to research program, requires large, comprehensive and all-encompassing vision which necessitate the more seriously, more flexible and more practical attention of university managers and above all higher authorities (3). In today's world, universities defined as the mainstream of thought and reflection about issues in society. One of the most important strengths of higher education in the past fifteen years is their growth towards every subject. Higher education is now very important as it is an important source of knowledge production (4). Today one of the most important and attractive categories of interest in higher education, is the "research-based learning" and its various incarnations of its components. Reduction of the distances between the areas of research and education with the arrival of the research in the higher education and particularly in the field of education is possible (5). It is not possible to develop people but we must provide an environment that facilitates their development and prosper their creative talents in production science. In recent years, expert- induced research like vertical development has been questioned very intensively and the issue of the local community's role in research is strengthened (6, 1). In other studies, the method of choosing research topic has been known as one of the important factors in students' participation in conducting research activities. This means that getting people interested in solo projects and in only one university is the main reason of lack of participation of other people in the research projects (7). Others believe that lack of access to sources of information is one of the obstacles for the participation of people in scientific-research activities (8). Meanwhile, students expressed the lowest satisfaction from library and Internet resources, and they stated that paying attention to these subjects must be placed at the first priority (9). In another study, professors stated that students have little interest for participating in research and this is because they do not have sufficient knowledge about principles of research activities. Students require receiving detailed instructions on research methodology and should be encouraged to consider research as a part of their educational programs. Faculty members should be motivated to devote more time and energy towards students' research activities. The low value of research, long administrative process of performing research and lack of timely budget allocation, are the most important barriers were identified in the field of students' research activities (10, 11). Students' researches and studies provide strong incentives for students to enter the field of study and research. Students' studies provide strong incentives and cause

students to become more successful in the field of individual and group research. In this regard, a study showed that training of research methodology to medical students increased their positive attitude to science and research activities and also improved their ability to performing research in higher education (12).

Since most students have no experience of research and teaching methods by professors are allocated much time (13), therefore it is recommended that due to the effect of students' views on their involvement in the research programs, the status and value of students' researches determined in the country and it is better that students' research were encouraged and supported at different levels. Also the establishment of implicit and enlightened guidelines for the studies and researches and clarifying decision-making authority for approval of research projects can be prevented from imposing personal preferences (14).

Paying attention to the appeal made by developed countries in the field of research and the existence of shortcomings and obstacles in performing research activities in the developing world can bring worthwhile results. The carried out research especially in recent decades reflects the fact that a lot of limitations such as lack of appropriate allocation of funds, lack of proper and timely information, rapid changes of management and regulation, lack of professional researchers, selection of weak research topics , poor management and lack of planning, have always been in the way of research.

According to studies conducted in Australia about the main factor affecting the participation of PhD Students' in research activities, six important factors were identified which were include the way of supervision of a thesis by supervisor, skill development, public school climate, required infrastructure for research, thesis examination and clarity of expectations in performing thesis (15). According to the study by Hafferin et al. in the field of research, factors such as the lack of using the results of research, busy working, problems related to statistical analysis, lack of support for research activities, lack of time and cost, as well as lack of motivation and interest for research activities were cited as the important barriers in the way of performing researches (16 and 17).

This study aimed to determine the factors affecting the participation of postgraduate students in research activities and their production of science. Since research and evaluation of the educational criteria, make possible the judgment of the quality and access to the education system goals (18), and identification of these factors for performing more research activities is very effective, the necessity of doing such study can be strongly felt in order to improve the participation of this group of students in research activities and production of science.

METHODS

This cross-sectional and descriptive – analytical study was performed in all postgraduate students of Kermanshah University of Medical Sciences (75 people) and the sampling method was census. The researchers-made questionnaire has been used for identification of the effective factors on doing research activities according to students' viewpoint. This

questionnaire consisted of 42 questions and it has three parts. The first part included demographic data (10 items), the second part is about the evaluation of current research of students (14 items) and the third part is concerned with various effective factors on interest and participation of students in research activities (18 items).

The researchers-made questionnaire has been used for identification of the effective factors on doing research activities according to students' viewpoint. In this questionnaire we used from 5-degree Likert Scale (Very Low=1, Low=2, Average=3, High=4 and Very High=5). The main factors which were considered for this sector, including educational and research facilities, organizational support (University), the role of university professors, scientific and research experience and other factors (Table 1). The Cronbach's alpha coefficient of 0.85 was obtained. For triple and two group variables we used Kruskal-Wallis and Mann-Whitney U tests respectively. Also One-Sample T-test and Friedman test have been used to identify the effective factors as well as order priority of these factors.

To determine the content validity, multiple copies of questionnaires were given to professors of school of Public Health and the necessary amendments were made according to their recommendations. To determine the reliability of the research tools, a questionnaire was given to 20 medical students and Cronbach's alpha coefficient of 85% was

calculated for all variables. In order to compare the views of students to identify the factors affecting level of interest and participation of students in research activities based on various demographic variables (such as gender, age, marital status, university, etc.), for the three groups variable used Kruskal–Wallis test and for two group variables Mann-Whitney U test was used. To identify effective factors, we used one Sample T-test, to compare with the average or the number of cutting (equal to 3). Average comparison (cut-off) was calculated in the form of $(1 + 2 + 3 + 4 + 5 = 15)$ and then from the division of 15 to 5 the required number was obtained respectively, and finally to identify the most effective of the five studied variables in order of preference, Friedman test was used. All tests used in this study, were applied in a significant level of $\alpha = 0.05$.

RESULTS

Frequency of studied students according to the demographic variables were shown in Table 1, relative frequency (percentage) of the effect of examined factors on the interest and participation of students in research activities based on the Likert scale were shown in Table 2. The role of education and research facilities in the involvement of postgraduate students in research activities was 5.3% 7.3%, 14%, 24.7% and 48.7% respectively, which is very low, low, average, high and very high. Description of other important factors is listed in Table 2.

Table 1. Main variables and sub-variables relevant to identify factors affecting the level of interest and participation of postgraduate students in conducting research activities

The Main Elements to Identify Affective Factors on the Level of Interest and Participation of Post Graduate Students in Conducting Research Activities	The Sub Variables
Educational and Research Facilities	1. Access to the high speed Internet and databases proportional to the number of students 2. The presence or absence of chemicals in the laboratories of the University 3. The presence or absence of advanced laboratory equipment 4. The process of purchasing advanced laboratory equipment from outside the country or out of province companies
Organizational Support (University)	1. Financial support of the university and other organizations 2. The process of approval of research projects at the University (for the time being) 3. knowing the research activities prizes and grants (e.g. admission to brilliant talent student cores in the university, being university and country top students, receiving top ratings in various festivals, facilitate the continuation of higher education, etc.) 4. Being the member of the students' research committee in the university and participate in the program of this committee. 5. The research priorities suggested by the university Vice Chancellor for research 6. Bonus dedicated to published articles
The Role of University Professors	1. Academic rank of professors (assistant, associate professor, full professor) 2. Scientific capabilities of professors 3. How encouraging are the professors 4. Close and friendly relationship between faculty members and students 5. Assign a part of the final grade of practical and theoretical courses for research activities by students 6. Propose a new research areas by professors
Scientific and Research Experience	1. Participation in workshops related to research activities (such as basic and supplementary research, SPSS, writing article, etc.) 2. Participation in scientific-research conference and Congress
Other Factors	1. Factors (lack of time) as a barrier in performing research activities 2. The process of acceptance of an article in scientific journals, especially in terms of time

Table 2. Relative frequency (percentage) of effective factors on the interest and participation of students in conducting research activities (n=75)

Factors Affecting the Level of Interest and Participation of Students in Research Activities	Effectiveness				
	Very poor	Poor	Average	High	Very high
Educational and Research Facilities	5.3	7.3	14	24.7	48.7
Organizational Support (University)	4.3	5.9	20.5	33.1	36.3
Other Factors ***	8	7.3	16.7	36	32
Scientific and Research Experience	1.3	7.6	32.4	34.2	24.4
The Role of Professors as Incentives	7.5	10.9	27.5	29.9	24.3

*** Other factors means parameters such as the process of various articles approval in scientific journals and conferences, especially in terms of time, the factors of lack of time and busy working are the barrier for conducting educational and research activities.

Table 3. Comparison of the Effect of Various Factors on the Interest and Participation of Students in Research Activities

Factors Affecting the Level of Interest and Participation of Students in Research Activities	Mean	Standard Deviation	Minimum	Maximum	P-value (Comparison of Influence of Each Factor or Average Compared with the Cut-off Point ** (Equal to 3) Using One-Sample T-test)
Educational and Research Facilities	4.04	1.18	1	5	>0.001
Organizational Support (University)	3.91	1.08	1	5	> 0.001
Other Factors ***	3.77	1.2	1	5	> 0.001
Scientific and Research Experiences experiences	3.73	0.96	1	5	> 0.001
The Role of Professors as Incentive incentives	3.53	1.18	1	5	> 0.001

***Other factors means parameters such as the process of various articles approval in scientific journals and conferences, especially in terms of time, the factors of lack of time and busy working are the barrier for conducting educational and research activities.

The results showed that the effects of educational and research facilities on the interest and participation of postgraduate students in conducting research activities according to the semester (4th semester more than the second semester), the type of faculty (faculty of nursing and midwifery less the others), the presence or absence of activity in the previous degrees (students with research experience more than students without experience) and different age groups (older age group (31-37 years), more than other two age groups) indicated a significant difference ($P > 0.05$) while in other variables, there was no significant difference ($P > 0.05$).

For other organizational support (university) for the variables of type of faculty (faculty of Public Health more than others), employment status (employed students more than unemployed one) and age group (age group of 31-37 more than others) showed a significant difference ($P > 0.05$) while for the other variables, there was no significant difference ($P > 0.05$). On the category of the effects of scientific and research experience only in the variable of faculty (faculty of nursing and midwifery more than others) there was a significant difference ($P > 0.05$). In relation to the role of professors there was a significant difference ($P > 0.05$) as in the higher age group (31-37 years), was more than other age groups.

Based on the results of the One-Sample T-test, all studied variables in the participation of post graduate students in research activities have been effective ($P > 0.05$). Comparison of the impact of the studied factors on interest and participation of students in research activities was shown in Table 3.

Based on the results of Friedman statistical test, all the studied variables have been effective on participation of post graduate student in research activities ($P > 0.05$) and this effectiveness was related to research and educational facilities, organizational support (university), other factors, scientific and experimental research, and the role of professors as incentives, respectively. For prioritizing the factors affecting the level of interest and participation of students in research activities using the Friedman test was shown in Table 4.

DISCUSSION

According to the results, students' opinion from different schools, in connection with the role of all examined variables (research and educational facilities, organizational support, etc.) on the interest and participation of post graduate students in research activities, has significant difference ($P > 0.05$) with each other. These differences of opinion can be due to the students' different field of study and also

Table 4. Prioritize the Factors Affecting the Level of Interest and Participation of Students in Performing Research Activities Using the Friedman Test

Factors Affecting the Level of Interest and Participation of Students in Doing Research Activities	Rank Mean	Order of Priority	P value
Educational and Research Facilities	3.51	First	> 0.001
Organizational Support (University)	3.11	Second	
Other Factors ***	3.11	Third	
Scientific and Research Experiences	3.08	Forth	
The Role of Professors as Incentive	2.19	Fifth	

***Other factors means parameters such as the process of various articles approval in scientific journals and conferences, especially in terms of time, the factors of lack of time and busy working are the barrier for conducting educational and research activities.

different favorite field of research for each group of them, therefore, according to their field of study, they follow a specific research area and they need special educational and research facilities. They required different organizational support (especially financial support). So these differences affect their opinions towards participation in research activities (19).

For the variable of age groups, similar results with the variable of school were obtained, so that the students of different age group opinion, in relation to the role of all the variables on the amount of interest and the participation of post graduate students in performing research activities has significant differences with each other ($P > 0.05$) and this means that people with a higher age (which have been mainly employed) understand the supportive role of agents in performing research activities better than others, because these people due to their career, they have been facing many executive and research activities so they are somehow familiar with the problems and its related factors, furthermore these experienced people can solve the problems properly. Consequently, they consider the role of factors influencing on the interest and participation more than the university newcomers (20, 21). In the study by Ramezani et al the results showed that there was no significant difference in the rate of participation and interest in research activities in Birjand medical students among different age groups (14). The different results of Ramezani study compared to this study is because in this research, studied students were all post graduate students and they had great differences with each other in the terms of age and experiences. While in the research by Ramezani et al, studied students were selected from different level of associate students to professional doctorate (non-graduate with no work experience related to their field of study), therefore they were at the same level of research experience. It should be noted that students of the faculty of nursing, understand the scientific gaps and deficiencies in their work environment more tangible than others, and probably for this reason they recognize the role of experiences in creating interest and participation in research activities more effective than other students.

In this study we found that students of different grades had statistically significant different opinions about the impact of educational and research facilities on engagement of post graduate students. ($P > 0.05$). This can be because post

graduate students of the last year (fourth semester), who are doing a thesis or other research projects (such as those who have experience of research activity in their previous degrees) compared to the second semester students who have not such experiences (such as those who have not experienced research activities in their previous degrees) know better the effective factors on research activities, so that their attitudes (fourth semester students and those who have research activities in their previous degrees) were different comparing to other groups in different studied variables (22).

The results of comparison of the mean of effect of interest and participation of students in research activities with the average of cut-off point which is equal to 3, showed that the mean of all five main studied variables are significantly difference higher than the average (based on the Likert scale) ($P > 0.05$).

In fact, it can be said that all the five studied variables (research and educational facilities, organizational support (University), scientific and research experience, the role of professors as incentives and other factors) have significant influence in the level of interest and participation of students in research activities (average to high impact) and based on the results of the Friedman test, the extent of this impact related to research and educational facilities, organizational support (university), scientific and research experiences, other factors and the role of professors, respectively.

Given that educational facilities and especially research facilities are one of the main foundations of research activities, therefore in the case of lack of chemicals materials, less equipped laboratory or a lack of advanced laboratory equipment, new or applied research cannot be carried out. Based on the results of this study, the responsibility of the university vice Chancellor for research and technology can play an effective role on the research activities of post graduate students. Financial support for conducting of research and grants and financial concessions to students who are more active than others, activate the student research Committee of university (such as approval of student research scheme, by the Committee and the holding of workshops related to the research activities such as preliminary and supplementary methods, writing articles, using SPSS), providing supporting facility for students and to encourage them to participate in the various congress are

the efforts which the supporting organization (University) can be done for the progress of post graduate students research activities (23).

The results of this study are consistent with other studies. Ramezani and colleagues demonstrated that teaching and research facilities for students is an important role in carrying out research activities. As 83%, 3/87 and 3/56 percent of students, respectively, laboratories, research centers and the Internet and computers to do research activities are effective (14).

The results of this study were correlated with other studies. Ramezani et al in their study showed that based on students' opinion, educational and research facilities have the effective role on conducting research activities. As 83%, 87.3% and 56.3% of students believed that laboratory, research centers and the center of the internet and the computer were the most important effective factors on performing research activities among students (14).

Based on the study by Hafferin et al, some factors such as not using the results of research, busy working, the problems related to statistical analysis, lack of support for research activities, lack of time and research budget, as well as lack of motivation were the most important obstacles which have been noted in conducting research activities (16). While Javadian in his study evaluates the research problems in students and reported that the improper educational and management system, lack of research budget and lack of facilities as well as lack of motivation are the main research problems (24).

Badi alzaman Maki Al-Agha in his study revealed that organizational issue is one of the inhibiting factors of performing research activities for doctoral faculty. And lack of research motivation in this group compared to the graduate faculty is due to organizational factors. This research also has shown that university material and spiritual support of researchers would be increased the research activities (3).

Study of kooraki et al. showed that the factors impacting on research activities particularly writing scientific articles, were including busy working in education, training or treatment, the barriers of conducting original research, publication of long time and lack of sufficient proficiency in English, respectively (21).

According to the results, it can be said that students of different faculty (different academic fields) have different level of requirements for performing research activities, and it is suggested that authorizes considered particular research facilities and accommodations based on students' potential for performing research activities. In addition it should be considered the role of educational and research facilities and institutional support as the two most influential factors in conducting research activities. Therefore, it is suggested that the provision of hardware and software equipment appropriate to the number of students (with fast access to the Internet and various databases), equipping the research laboratory with advanced devices for scientific research, and also providing university financial support for research activities considered as the most effective parameters for encouraging students to involve in research activities. Besides, more benefits should be considered for researcher students and make them aware of these benefits in order to take less courses and focus on doing research.

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