# Frequency of effective factors on Course Selection among Nursing and Paramedical Students in Jahrom University of Medical Sciences

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**Abstract:** Course selection is one of the most important decision makings of volunteers entering the universities. The process of course selection of volunteers can be impacted by various factors. in a, cross-sectional include 275 students of the Faculty of Nursing and Paramedical in three courses of nursing, anesthesiology, and operating room assessed with a a questionnaire of demographic information and valid and reliable questionnaire of factors impacting on course selection. The effective factors on course selection in order of impact include family and social factors (28.8±5.6), individual factors (28.5±5.21), and economic and future job factors (20.8±6.6), among which family and social factors on course selection with gender, field of study and semester (P=0.05). In the present study the most effective factor in course selection was family and social factors.

Keywords: Course selection, field of study, Paramedical Students

# I. INTRODUCTION

Course selection is one of the most important decision makings of volunteers entering the universities. Based on the viewpoints of theoreticians, searching and acquiring desired information regarding university courses is the major objective of correct decision making about course selection. Based on the evidences it has been specified that each year the enthusiastic or the desire to enter the university takes a number of youths, but for some reasons, the most important of which is the lack of adequate recognition regarding the university and hasty decision in course selection causes their discouragement and reduction of motivation.

The process of course selection of volunteers can be impacted by various factors according to time and place conditions. A volunteer facing with varied university courses is actually obliged to make his/her decision, and should consider numerous factors too, because it has considerable impact on his/her future life.

Since the goal of education for anybody is to gain a job in future, and having an appropriate job can be a source of supplying an individual's requirement of a community, respecting him/herself and healthy compatibility; hence it is obvious that undertaking the jobs that people do not interest causes stress, physical and mental diseases and the lack of social adjustment and finally would waste the material and spiritual capitals.

Regarding that the major goal of teaching health care professions is the qualitative and quantitative improvement of patients' care, the students of these courses should choose their course with more awareness and information to perform this duty much better, so that more interest is created in them and the ultimate goal which is indeed the maintenance and promotion of patients' health is obtained. They can obtain the information from various resources such as family, medical practitioners, the media, etc.

According to Davis, the National Entrance Examination volunteers in all stages of choosing university course are impacted by their surrounding, that it can impact directly on the effective factors of a course selection.

Based on the compound model of Jackson, it is believed that the course selection is impacted by individual and social factors on the one hand, and is impacted by daily economic factors on the other hand. Actually course selection is the result of individual and social interaction and real world' restrictions that impact on one' selection.

Chapman believes that university and course selection is based on a set of internal features in connection with external factors. According to this theory, the interaction of internal factors includes interest and the level of personal aspirations, attitude, ability and academic performance with the external factors such as family, friends, university, place and the ratio of fee, and its educational level causes course selection. Family as the first social experience of anybody has a role in creating or changing his/her attitude, and this experience can to a great extent specify the kind of his/her future job.

According to Hasler, the first stage of course selection process is the phase of preparation that occurs when an individual impacted by environmental factors investigates his/her primary motivations and desires for educating in the desired university or course, to continue the education, or suffice with high school diploma. In the second phase, after decision, that is looking for, the volunteer determined to continue education should collect information regarding university courses, and ultimately at the final phase which is selection, the individual considering the results of previous phases attempts to select the desired course.

Nasr in his study knows the interest in the course, the possibility of continuing education, appropriateness of the course with the volunteer's scientific capabilities as the most important criteria for entering the university. Reid in his research on the first year university students has mentioned individual features and personal decision as the most important factors impacting on course selection. Kern in his study mentions the impact of parents and then considering the future job more important than other factors in course selection. In Davis study the role of friends and peers was more highlighted than other factors. In Frisbee study the impact of family in course selection has been more than other factors. Arfaie et al. believe that the social and economic factors are the most important reasons of job and educational trends. In Nejat et al. study on medical sciences students, 42 percent of students have mentioned scientific interest, 21 percent have mentioned helping patients' health, and 14.3 percent have mentioned good financial income as the factors impacting on their course selection. In Rostami study on anesthesiology students, it was specified that in 16 percent of cases the parents' recommendations have been effective in students' course selection. Generally, it can be said that educational interests are impacted by individual, social, and economic factors and has content fitness with people's talent capabilities. Considering the importance of course selection, and since no similar study with this title has been performed in Jahrom University of Medical Sciences, this study was performed with the aim of investigating the factors impacting on course selection of the students of the Faculty of Nursing and Paramedical Sciences of Jahrom University of Medical Sciences.

## II. MATHERIALS AND METHODS

The present study performed in 2015 is descriptive, cross-sectional type. The people under study include 275 students of the Faculty of Nursing and Paramedical Sciences of Jahrom in three courses of nursing, anesthesiology, and operating room entered to the study through consensus. The criteria for entering the study were being engaged in studying in the Faculty of Nursing and Paramedical Sciences of Jahrom, and consent to participate in the study. The tool of collecting information included the questionnaire of demographic information and the questionnaire of factors impacting on course selection. The demographic features include information such as age, gender, field of study, semester, marital status, parents' occupation, economic status and the quota of acceptance in the university. The second tool was a research-made questionnaire that has been prepared and collected by using previous studies in the form of 27 questions. The content validity of questionnaire has been confirmed by using the viewpoints of academic members and professionals in this field, and its reliability has been investigated by using test-retest method and completing 30 questionnaires by the students as pilot and calculating Cronbach's Alpha coefficient (0.80). This tool has designed the factors impacting on course selection into three categories of factors including: individual's factors (question numbers 1, 2, 5, 9, 10, 11, 13, 22, 24, and 26), family and social factors (question numbers 3, 4, 6, 7, 8, 12, 14, 15, 20, 23, and 27), and economic and future job factors (question numbers 16, 17, 18, 19, 21, and 25). Each question was answered as Likert scale from "I agree strongly" to "I disagree strongly" by the scores 1 to 5. The score 1 indicates the lowest impact and the score 5 indicates the highest impact of that statement in course selection. Those statements that have gained the highest score will be regarded as effective factor in the course selection. The questionnaire is provided for the students after holding justification session and giving adequate information to the students willing to participate in the study. The collected information was analyzed by SPSS software by using descriptive statistical tests such as frequency, mean, standard deviation and Chi- Square test.

## III. RESULTS

Among the whole 275 students entered to the study, 177 persons (64.4%) were girls and the rest were boys, 76.4% were single with mean age of  $20.65\pm1$  years old and had the average of  $17.46\pm2$  (demographic information, Table (1).

Table 1: Absolute and relative frequency of demographic information in sample of study

Demographic information	Variables	Absolute frequency	Relative frequency
sex	Male	98	35/6
	female	177	64/4
Marriage status	Single	210	76/4
	married	65	23/6
Field of Study	nursing	163	59/3
	Operation room	60	21/8

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	Anesthesia	52	18/9
semester	Semester 1	112	40/7
	Semester 3	44	16
	Semester 5	81	29/5
	Semester 7	38	13/8

The effective factors on course selection in order of impact include family and social factors  $(28.8\pm5.6)$ , individual factors  $(28.5\pm5.21)$ , and economic and future job factors  $(20.8\pm6.6)$ , among which family and social factors were significantly more than others (P=0.000).

In respect of comparing the factors impacting on course selection in the girl and boy gender, this relationship was significant in economic and family dimension, in a way that the girls' scores were significantly more in family and social dimension ( $30\pm5.5$  versus  $26.6\pm5.1$ , P=0.000), and the boys' scores were significantly more in economic dimension ( $23.12\pm8.6$  versus  $19.6\pm4.8$ , P=0.019).

In respect of comparing the individual, family, social, economic and future job factors impacting on course selection and kind of course, only the economic factors were significantly more and effective in the course of operating room ( $21.5\pm4$  versus  $20.6\pm8$  in the course of nursing, and  $20.6\pm3.2$  in the course of anesthesiology, P=0.005).

In respect of factors impacting on course selection in various educational semesters, significant difference was observed in the individual factors, but in the economic and family factors no significant difference was observed, in a way that the individual factors of first semester students or the first year of study was significantly more than the rest of semesters in course selection (3, 5, and 7) (in order of semester 29.7 $\pm$ 5.4 in the first semester versus 28.2 $\pm$ 2.7, 26.7 $\pm$ 5.8, 28.7 $\pm$ 4.3, P=0.027).

Variables		Mean±SD	P value		
Personal factors			28/5±5/21		
Social and family factors		28/8±5/6	0/000		
Economic factors and job prospects		20/8±6/6			
		Personal factors	27/9±3		
	Male	Social and family factors	26/6±5/1		
Sex	-	Economic factors and job prospects	23/1±8/6	0/019	
<b>B</b> LA		Personal factors	28/8±6		
Female	Female	Social and family factors	30±5/5		
		Economic factors and job prospects	19/6±4/8		
		Personal factors	28±4/6	0/005	
	Nursing	Social and family factors	28/6±5		
	-	Economic factors and job prospects	20/6±8		
	Operation	Personal factors	29/7±4/8		
Field of	room	Social and family factors	29/6±6/1		
study Toom Anesthesia		Economic factors and job prospects	21/5±4	-	
		Personal factors	28/8±6/7		
	Anesthesia	Social and family factors	28/3±6/6	-	
		Economic factors and job prospects	20/6±3/2		
semester	Semester 1	Personal factors	29/7±5/4	0/027	
SUIICSUI	Semester 1	Social and family factors	30/7±6/1		

 Table 2: Mean and standard deviation of effective factors on course selection

 Based on demographic information.

	Economic factors and job prospects	22/6±2/8	
	Personal factors	28/2±2/7	
Semester 3	Social and family factors	28/1±3/5	
	Economic factors and job prospects	21/2±14/3	
	Personal factors	26/7±5/8	
Semester 5	Social and family factors	27/6±5	
	Economic factors and job prospects	18/3±3/7	
	Personal factors	28/7±4/3	
Semester 7	Social and family factors	26/1±5/1	
	Economic factors and job prospects	20/6±9	

# IV. DISCUSSION

In the present study among various factors (individual, family, social, economic, and job factors) impacting on course selection of the students of Nursing and Paramedical Sciences of the city of Jahrom, the family and social factors had the highest role. In Abdi and Aghbaba study (2007) the family and job factors compared with individual factors were also effective in course selection of volunteers permitted to select course in the National Entrance Examination. The impact of family in course selection of volunteers entering the university has been more than other factors in the studies of Pearson and Delman Jenkins (1997), Frisbee et al. (2000), and Shayegh et al. (2009) as well. But in Dali study (2003) in investigating the factors impacting on educational course selection in the university, he found out that the individual factors such as values, personal knowledge, and also interest to the course have firstly the highest impact and then family factor. Kern et al. (2000) in their study have mentioned the impact of parents and then considering future job more important than other factors in educational course selection. In Enayati Novinfard et al. (2012) study the highest effective factor is related to the economic factors, which is unlike the result of present study.

Actually, the esteem and dignity that a specific course has in the community can be an important factor in one's educational course selection; moreover parents and family members' encouragement can be one of the basic motivators in leading students in educational course selection. Due to the social dignity that Medical and Paramedical Sciences courses have with themselves and the picture that families have about the future job and probably the position that will be created among the relatives due to choosing Paramedical Sciences courses, they encourage their children to select such courses.

Regarding the difference of factors impacting on course selection in respect of students' gender, it was observed that the highest factors among the girls were family and social factors and among the boys were economic and future job factors, but individual factors were equal in both sexes. In Abdi and Aghababa study (2007) there was a significant difference between the two sexes permitted to select course in job factor and also family factor. Rorberg et al. (2002) investigating the difference of girls and boys in course selection, concluded that the girls consider the issue of earning less than the boys. Moreover Reid (2002) found out that the impact of parents in course selection of girls have been two times higher than the boys. Through the outcome of Reid study the reason that family and social factors have been more effective in girls' course selection is also due to the reason that educational course selection is a part of job selection process and leads many people towards their future job, and the men are considered as the major economic basis of families and this point in turn shows more consideration of boys about economic factors in logical course selection.

In comparing factors impacting on course selection with the educational semester, it was observed that the individual factors of first semester students were significantly more effective than the students of other educational semesters. In this respect, Moatabari (1992) in the analytical investigation of factors impacting on course selection of first semester students also found out that the individual factors like looking at a course at the extent of one's talent, personal interests and motivations, adaptation with physical capabilities have more impact on students' course selection. In Reid study (2002) also the first year students of university have mentioned individual features and personal decision as the most important factor in their educational course selection. Moreover, in Nejat et al. study (2005) it was specified that in the higher semesters, the students' attitude towards educational course withdraw from individual factors and will focus more on economic factors and future job. This finding can be justified in this way that having increased the age of participants, their evaluation about

future job is significantly changed, and by the increase of students' age and closeness to their educational career, the role of other factors such as continuing education, future job and income level will be considered.

The last result of present study was the investigation of factors impacting on course selection in respect of educational course that among three courses of nursing, anesthesiology, and operating room, the economic factors in the operating room course was significantly more than other courses. In Peyravi et al. study (2012) the students of operating room course compared with other courses declared solely entering the university as the major factor of course selection. In Enayati et al. study (2012) also the economic factors were more important than other factors among the technical engineering students compared with educational sciences students. But in Abedian and Shah Hosseini study (2012) the students of nursing stated selection of nursing course as an opportunity to acquire high educational degrees as their highest motivation, and in Abaszadeh et al. (2011) they stated the individual and career factors as the most effective reason of selecting the course of nursing. It seems that the students of operating room resort to this selection with this attitude that in the operating room they would be familiarized and cooperate with physicians of various surgical courses, and there is the possibility of cooperating with these physicians in other places such as private clinic and acquiring more income.

Among the limitations of present study is that the findings of this study has been based on surveying the students of nursing by using qualitative instruments. To remove this limitation, it is suggested to achieve richer and deeper findings concerning factors impacting on course selection in future studies by performing individual and group interviews.

#### CONCLUSION

Conclusion: In the present study the most effective factor in course selection was family and social factors. Since in our country university course selection is done at low ages, perhaps course selection in many cases is performed based on pressure from family or relatives. Since accurate educational course selection has an undeniable role in educational, job and in general people's life future, it is recommended that in the age of about 18 years old and before entering the university, the required trainings about course selection is performed for the students

#### REFERENCES

- [1]. Crowley, C. (2004); Factor Influencing College Choice among Trackand Field Student Athletes at NCAA D-1 Conference HBC US; Unpublished Doctoral Dissertation, Florida State University
- [2]. Mirhoseni F, Mahdian M, Akbari H. A survey of the Kashan University of Medical Sciences students know ledge about this field of study before choosing the held. IJME 2002; 7:1143. (in Persian).
- [3]. Abdi, B., & Aqababa, A. (2008). Factors affecting the selection of candidates allowed to select courses entrance examination. Journal of Higher Education, 1(3), 151-170 (in Persian).
- [4]. Cristiani TS, Rickey L. Counseling theory and practice, translated by Fallahy R, Hajilu M, Tehran: Roshd;1381.p.40

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- [5]. Rostaminejad A. Anesthesia technician student awareness and interest in their study medical science;. Dena journal 2008;3(3,4): 43-50.
  [6]. Davis, H. D., Noland. D. & Deato. N. (2001). Novel approaches to college choice: A survey of postsecondary opportunities. Annual Meeting of the Association Research. http://www.state.tn.us/ thec/policyinit.html.
- [7]. Jackson, G.A. (1982). Jackson, G.A. (1982). Public efficiency and private choice in higher education. Public efficiency and private choice in higher education. Educational Evaluation and Policy Analysis Educational Evaluation and Policy Analysis. Summer, 4 (2): 237.
- [8]. Chapman, D.W. (1984). Teacher retention: The test of a model. AmericanEducational research.
- Saberian M, GanjiT, Davachi A. Comparison of Nursing students and their parent's attitudes toward nursing field in Semnan. Journal of Medical Education & Development, Qazvin University of Medical Sciences 2005; 1 (1): 4-9.
- [10]. Hossler D, Schmidt J, Vesper N. Going to college. Baltimore:Johns Hopkins University Press. (1999). http://isadrise. Berueleyedn/choosingmajor/definition.html.
- [11]. Reid, P. (2002). Major Decisions: Major Choice. Retrieved from: www.elon. Edu/ajones
- Kern, C. W. K. (2000). College choice influences: Urban high school students respond. Community College Journal of Research and Practice, 24(6), 487-494.
   Contrast R. B. Bulker, C. & Sundara, P. E. (2000). Doministry of the school students of the school students and the school students and the school students and the school students.
- Frisbee, R.L., Belcher, G., & Sanders, R.E. (2000). Recruitment techniques that influence students to attend four year automotive programs. Journal of Vocational Education Research, 25(2), 104-125.
   Arferi K., Alcheri S. A. Jourine id H. Lerenet in the fault of the fault of the state of the
- [14]. Arfaei K, Akbari S, Alavimajd H. Interest in education in the field midwifery and associated factors among students of Tehran University of Medical Sciences. Knowledge and health journal 2010;3(1):28-31
- [15]. Nejat, S., Emami Razavi, SH., Rashidian, A., Yazdani, Sh., & Majdzadeh, SR. (2006). Evaluation of students in medicine and recognition of the career choice of medicine at Tehran University to deal with both qualitative and quantitative methods both qualitative and quantitative approaches. The Development of Medical Education, 3(1), 1-10
- [16]. Kelly A. Family background subject specialization and occupational recruitment of Scottish universities .J Higher Educ 2000; 105(2): 51-54
- [17]. Pearson, C., & Dellmann-Jenkins, M. (1997). Parental influence on a student' selection of a college major. College Student Journal, 31(3), 301-313.
   [18]. shayegh S, Mirkhani H, Bazrafcan L. Students' Point of View about the Effect of University Open Day (UOD) on Selecting Field of Study, Shiraz
- University of Medical Sciences. Strides Dev Med Educ. 2009; 6 (1):40-49 [19]. Daly, B. A. (2003). Color and gender based difference in the sources of influence attributed to the choice of college major. Critical
- [20]. Perspectives on Accounting, 1037, 119- 134.
- [21]. Enayati Novinfar A, Durrani K, Karamdoost N A. Comparative Evaluation of Effective Factors in Students' Major Selection at Educational Sciences and Engineering Colleges in University of Tehran. Quarterly Journal of Research and Planning in Higher Education. 2013; 18 (4):145-167
- [22]. Rohrbaugh, C. C. (2005). Career choice and gender: The impact of gender differences on efforts to aid career decision making.
- [23]. http://www.fcww.edo/users/crohrbangh1/gender.
- [24]. Motabari, S.M. (1992). Analytical study of factors influencing students brantkhab some of the students. (Master's dissertation).
- [25]. Tehran University
- [26]. Payrovi N, Derakhshan F, Karimi T, Asefzadeh S. Factors influencing the selection of study field in students of Qazvin University of Medical Sciences. The Journal of Qazvin University of Medical Sciences. 2012; 16 (2):87-90
- [27]. Abedian K, Shah hosseini Z. Factors Affecting Students' Motivations for Choosing Nursing as a Career: A Cross-Sectional Stud. Journal of health breeze 2013; 1(3);26-32.
- [28]. Abaszadeh A, Borhani F, Mohsenpour M. Factors Affecting Discipline (Major) Choice among Newly Admitted Students of Nursing in Kerman University of Medical Sciences. Iranian Journal of Medical Education. 2012; 11 (6) :600-608.