



Scholars Research Library  
Der Pharmacia Lettre, 2017, 9 (1):29-37  
(<http://scholarsresearchlibrary.com/archive.html>)



## The Relationship between Self-Efficacy and Motivation among Midwifery Students of Tehran University of Medical sciences in 2016

Masoomeh Kheirkhah<sup>1</sup>, Zeinab Zamani Joghi<sup>2\*</sup>, Ezzat Jafar Jalal<sup>3</sup>, Hamid Haghani<sup>4</sup>

<sup>1</sup>Masoomeh Kheirkhah. PhD of medical education. Assistant professor of Midwifery School of Iran University of Medical Sciences. Tehran. Iran.

<sup>2</sup>Zeinab Zamani Joghi. MS Student of Midwifery Management of Iran University of Medical Sciences. Tehran. Iran.

<sup>3</sup>Ezzat Jafar Jalal. Faculty Member of Iran University of Medical Sciences. Tehran. Iran.

<sup>4</sup>Hamid Haghani. PhD of Statistics and Faculty Member of Iran University of Medical Sciences. Tehran. Iran.

**\*Correspondence Author:** Zeinab Zamani Joghi. MS Student of Midwifery Management of Iran University of Medical Sciences. Tehran. Iran, Email: [zeynab.zamanijoughi@gmail.com](mailto:zeynab.zamanijoughi@gmail.com)

---

### ABSTRACT

**Introduction:** Motivation is one of the key factors in the process of learning and it is the sole factor that has a direct impact on academic success; it can function as an index to measure academic performance and success of university students. Midwives are responsible for taking care of more than half of the population of the country. Thus, the present study was conducted to examine the relationship between self-efficacy and motivation among 2016 midwifery students of Tehran University of Medical sciences.

**Methodology:** the statistical population of the present descriptive, correlational, cross-sectional study included all undergraduate midwifery students of School of Nursing and Midwifery of Medical universities in Tehran, including Iran, Tehran, and Shahid Beheshti university. Ansari's Student Self-Efficacy Questionnaire (2010) and Valrnd's Student Academic Motivation Questionnaire (1992) were used to collect necessary data. The validity of the questionnaire was determined through content validity and reliability was measured through Cronbach's alpha as 0.819 and 0.809 for self-efficacy and motivation in order. The collected data was analyzed using SPSS software, version 16.

**Results:** The mean of motivation score was 139.95 and the rate of self-efficacy was 74/59, which turned out to be high. There was significant relationship between motivation and self-efficacy ( $p < 0.001$ ). Extrinsic motivation had the highest average score among other motivational dimensions; regression test showed a correlation between changes in self-efficacy and motivation.

**Discussion and conclusion:** Considering the relationship between external motivation and self-efficacy of students, increased motivation, self-efficacy, and academic success can be achieved through planning, encouragement, and offering incentives.

**KEYWORDS:** self-efficacy, motivation, student, midwifery

---

## INTRODUCTION

Motivation is one of the key factors in the process of learning and it is the sole factor that has a direct impact on academic success [1]. There are three types of motivation and intrinsic motivation is the source of spontaneous activity, interest, and satisfaction of the individual [2]. Extrinsic motivation stimulates fulfillment of job through rewarding [3], and unmotivated individuals lack the intention and will to do the job [4]. People with motivation do their best to achieve efficacy beliefs. Self-efficacy in academic environments refers to the beliefs of students in their abilities to perform tasks Cheraghi [5], it functions as an index to measure the degree of success and excellence of performance [6]. Effort, perseverance, and self-regulation are three dimensions of self-efficacy; effort and perseverance bring success for students in their tackling with existing barriers, enhance their performance in confrontation with difficulties, improve their sense of self-regulation, and help them flourish their potential self-efficacy [7]. Academic environments are faced with educational insufficiencies which could lower motivation, sense of empowerment, and self-efficacy of students [8]. The experiences of researchers have shown that the failure of the process of teaching and learning could result in frustration and reluctance among students. Considering the crucial role of midwives in taking care of newborn babies and mothers and enhancing the level of health of society, professors, researchers, and managers active in this field are responsible for investigating the roots and causes of motivation and self-efficacy. Thus, the present study was conducted to examine the relationship between self-efficacy and motivation among 2016 midwifery students of Tehran

University of Medical sciences to achieve and present proper solutions and strategies for enhancing the level of health and hygiene of society through providing fruitful instruction and education.

## METHODS

The statistical population of the present descriptive, correlational, cross-sectional study included all undergraduate midwifery students of School of Nursing and Midwifery of Medical universities in Tehran, including Iran, Tehran, and Shahid Beheshti university. The inclusion criterion was simply being a 4<sup>th</sup> to 8<sup>th</sup> semester undergraduate student of Midwifery in medical universities of Tehran city. Visitor students were not participated in the study. Necessary data was collected through demographic information questionnaire, Ansari's student self-efficacy questionnaire, and Valrnd's educational motivation questionnaire.

Ansari's [9] self-efficacy questionnaire (2010) was a localized version of self-efficacy questionnaire of Jerry Jenkins, Morgan, and Scherer; it included 20 items and three criteria of effort, perseverance, and self-regulation. Perseverance component had seven items (1-7), self-regulation component 7 items (8-14), and effort component had 6 items (15-20). Each item was graded based on Likert 5-part scoring system, ranging from 'Strongly Disagree' (1) to 'Strongly Agree' (5). Content validity was used to assess the validity of the research and Cronbach's alpha estimated the reliability about 0.87 [9]. The validity of the content of the questionnaire was reassessed by ten university professors of School of Management and Midwifery; reliability and internal consistency were estimated as 0.81 using Cronbach alpha. A score between 20 to 40 indicated low self-efficacy, from 40 to 60 showed medium self-efficacy, and higher than 60 represented high self-efficacy.

Valrnd educational motivation questionnaire was used to determine the role of motivation in the present study. The validity of this questionnaire was assessed by Veisani in Iran and the reliability was measured as 84%, 86%, and 67% using Cronbach alpha for microscales of intrinsic, extrinsic, and unmotivated motivation in order. This questionnaire included 28 questions of seven options which examined three dimensions of motivation; i.e. intrinsic, extrinsic, and unmotivated. The first option implies that the question is by no means related to the student's reason for going to university. Option 2 to 6 imply low to high harmony and option 7 signify strong consistency with the student's ideas; option 4 represented the middle ground. The validity of the content of the questionnaire was reassessed by ten university professors of Schools of Nursing and Midwifery and the reliability and internal consistency was measured as 0.809 using Cronbach alpha. A score between 28 to 70 showed weak educational motivation, 70 to 112 indicated medium motivation, and higher than 112 represented high educational motivation. Collected data was analyzed using SPSS software, version 16. The Ethics Committee of Iran University of Medical sciences confirmed the present study under the permission code of [1394.9211373212IR.IUMS.REC](#). Necessary permission forms from Research vice president of the university and relevant authorities and written informed consent of the subjects were obtained and confidentiality of information was ensured; first and last name of the participants remained anonymous and collected data was simply applied to accomplish the objectives of the study. Intellectual property of the research was for Iran university of Medical sciences.

## RESULTS

In terms of demographic, the majority of studies samples (74/2%) were single, aged between 22 to 24 (53/4%), in 4<sup>th</sup> educational semester (25/3%), and on level 2 (23%). Tehran University of Medical Sciences showed highest frequency distribution (45/8%) of 82 subjects, 120 subjects (67%) of native students, and 120 subjects (69%) of medium economic situation.

Standard deviation and mean of self-efficacy score was 74/59±9/15. 70 students (95%) showed high self-efficacy, 8 students (4/5%) showed medium efficacy, and only 1 student indicated low self-efficacy. Numerical indexes of self-efficacy and its dimensions in research units are presented in Table1.

**Table-1: Mean and standard deviation of self-efficacy components of undergraduate midwifery students of Tehran universities of Medical sciences, 2016**

Self-efficacy	minimum	maximum	mean	SD
Perseverance (7-35)	11	35	25.97	3.86
Self-regulation (7-35)	12	35	26.19	3.50
Effort (6-30)	10	35	22.41	3.57
Self-efficacy (20-100)	36	99	74.59	9.15

The obtained mean of self-efficacy is higher than means score in all dimensions; self-regulation showed the highest mean (26/19) and effort showed the lowest mean score (22/41). Table2 presents frequency, mean, and standard deviation of motivation in research units.

**Table-2: Frequency, mean, and standard deviation distribution of motivation in 2016 research units**

Motivation	frequency	percent
Medium	11	6.1
Very good	168	93.9
Total	179	100
Standard deviation ± mean	139.95±19.54	

The mean score of motivation was 139/95 among students; this is actually a very desirable result and no research unit yielded low motivation level. Table3 shows motivation and its dimensions.

**Table-3: Numerical indexes of motivation and its dimensions in 2016 research units**

Motivation	SD	Mean	Maximum	Minimum
Intrinsic motivation (12-84)	10.56	62.24	84	21
External	11.42	65.49	84	29

motivation (12-84)				
Unmotivated (4-28)	6.59	12.25	28	4
Motivation (28-196)	19.54	139.95	183	71.56

The mean of the obtained score of unmotivated is less than the score mean of the means; the mean score is higher than the means score in other dimensions.

Table 4 shows the correlation between self-efficacy of undergraduate midwifery students and motivation.

**Table 4. The correlation between self-efficacy and its dimension and self-efficacy. 2016**

Motivation Self-efficacy	Motivation	Unmotivated	External motivation	Intrinsic motivation
Perseverance	r = 0.379 P < 0.001	r = -0.239 P = 0.001	r = 0.372 P < 0.001	r = 0.449 P < 0.001
Self-regulation	r = 0.406 P < 0.001	r = -0.194 P = 0.009	r = 0.415 P < 0.001	r = 0.427 P < 0.001
Effort	r = 0.469 P < 0.001	r = -0.261 P < 0.001	r = 0.490 P < 0.001	r = 0.505 P < 0.001
Self-efficacy	r = 0.497 P < 0.001	r = -0.276 P < 0.001	r = 0.507 P < 0.001	r = 0.549 P < 0.001

According to the results of Pierson correlation test, there is positive significant relationship between intrinsic and external motivation and effort, self-regulation, perseverance, and self-efficacy of students. Increased intrinsic and external motivation will enhance perseverance, effort, self-regulation, and self-efficacy of university students.

Additionally, determination coefficient ( $r^2$ ) of intrinsic motivation with perseverance, self-regulation, effort, and self-efficacy were 0.20, 0.18, 0.25, and 0.30 in order; this showed that intrinsic motivation caused the stimulation of 20% perseverance, 18% self-regulation, 25% effort, and 30% self-efficacy among university students. Determination coefficient of extrinsic motivation with perseverance, self-regulation, effort, and self-efficacy were 0.14, 0.17, 0.24, and 0.26 which showed that extrinsic motivation caused the stimulation of 14% perseverance, 17% self-regulation, 24% effort, and 26% self-efficacy among university students. Determination coefficient of motivation with perseverance, self-regulation, effort, and self-efficacy were 0.14, 0.16, 0.22, and 0.25 which showed that motivation caused the stimulation of 14% perseverance, 16% self-regulation, 22% effort, and 25% self-efficacy among university students. Pierson correlation test showed a significant reverse relationship between unmotivated students and perseverance, self-regulation, effort, and self-efficacy. Determination coefficient of unmotivated with perseverance, self-regulation, effort, and self-efficacy were 0.06, 0.04, 0.07, and 0.08 which showed that unmotivated hinders 6% perseverance, 4% self-regulation, 7% effort, and 8% self-efficacy among students. Regression test showed a significant relationship between self-efficacy and motivation and self-efficacy of midwifery students predicts their motivation, the linear formula of which is  $Y = 60.758 + 1.062X_1$ . The relationship between self-efficacy of midwifery students with demographic attributes showed that there is statistically significant relationship between educational semester and self-efficacy ( $P = 0.034$ ). Scheffe post hoc test showed no discrepancy between the level of educational

semester and self-efficacy; however, this test showed difference in the level of motivation and students showed higher average score on level 2.

## DISCUSSION AND CONCLUSION

Motivation and self-efficacy are major challenges facing the process of education [10]. Disordered motivation could interfere with a person's feelings and generate certain complications, such as pessimism, stress, depression, psychological problems, and considerable drop in individual, social, and occupational spheres; the absence of motivation and self-efficacy wastes huge capitals and damages the health of society [11]. If the individual is not sufficiently motivated to continue education, there will be disappointment, reluctance, and educational failure. The more compatible interest and motivations are, the higher the chance of success is Alizade [12], and unmotivated university students face major obstacles on their way towards success (Armstrong and Hope, 2016). Thus, identifying unmotivated students and increasing their intrinsic motivation is one of the most important responsibilities of academics [13].

Motivation generates educational progress and academic success, lowers the rate of academic failure Mehrabi [14], and enhances the self-efficacy of students which, in turn, increases the level of motivation [13].

The results of investigating self-efficacy of midwifery students show that high average score of self-efficacy represents very desirable motivational average score. Arfaei [15] showed that more than 80% of midwifery students do not have sufficient interest and motivation for continuing education; rather, they have been attracted to this branch under the spell of the name of Medical sciences but considerable differences in terms of social, economic, and occupational conditions generate huge physical and emotional burden in university students and cause educational failure, which is not compatible with the findings of the present study. Arfaei's [15] research used different questionnaires and had different dimensions and study population, which can justify the difference of findings of two studies. Top students of three major Medical Universities of the country participated in the present study and this might be one of the reasons behind high score of motivation and self-efficacy of these students, because the average acceptance score of these students is higher than average score of midwifery students across the country.

Kosgeroglu's [16] study (2009) showed the average level score of intrinsic motivation to be 3.42 and 4.17 for extrinsic motivation, which was consistent with the findings of the present study. Extrinsic motivation had the highest average score of motivational dimensions in the present study.

Roohi [1] stated that there is significant relationship between intrinsically-motivated self-efficacy and the total score of educational motivation scale ( $P < 0.0001$ ), which is consistent with the findings of the present study. Belief in the ability of the individual to accomplish objectives strengthens internal spirit. There was no significant relationship between unmotivated dimension scores and extrinsic motivation and self-efficacy, which is not consistent with the present study. This difference in result might be due to difference in study population and the gender of participant subjects. The present research showed a positive relationship between intrinsic and extrinsic motivation and self-efficacy of female students of midwifery ( $P < 0.0001$ ).

The results of Ghaleb AL-Baddareen study [17] showed a significant relationship between self-efficacy and motivation ( $r=0.46$  and  $P\leq 0.05$ ) and self-efficacy predicts academic motivation ( $P<0.001$ ); the results of this study are consistent with the present research.

Ze-Ju Zhang's [18] study (2015) showed a positive, significant relationship between self-efficacy and motivation ( $P=0.000$  and  $r=0.432$ ), which was consistent with the findings of the present research. The results of Siriparp et al study (2015) showed that self-efficacy, with a rate of 3.496 and 74.547, was related to achieving improvement during the study period; this is consistent with the findings of the present research.

According to the results of Negovan [19] study (2014), the mean score of intrinsic motivation was 3.64 among university students, which is lower than average score and is not consistent with the findings of the present study. The findings of Hamadan-Mansoura study showed that 75% of university students have medium or low motivational level, which is not, again, consistent with what we witnessed in the present study. The mean score of intrinsic motivation was 24.62 in the present study, which can be traced back to difference in the study population.

According to Mehran Taherkhani's [20], study midwifery students showed higher intrinsic motivation for learning in comparison to the students of Nursing and Medical sciences ( $P<0.01$ ), which is consistent with the results of the present study. There was a significant relationship between educational semester and intrinsic motivation of students. The present research showed the motivation of midwifery students to be 2% higher. The results of Ozer and Akgun [21] showed that there is a subtle, significant relationship between motivation and self-efficacy ( $P<0.5$  and  $r=0.353$ ), which was consistent with the findings of this research.

The results of Akomolafe [22] showed that there is a positive relationship between academic performance and self-efficacy ( $P < 0.05$ ,  $r=0.39$ ) and motivation ( $P < 0.05$ ,  $r=0.42$ ), which is consistent with the findings of the present research

## CONCLUSION

Based on the findings of the present research, there is positive, significant relationship between intrinsic, external, and unmotivated motivation and effort, perseverance, self-regulation, and self-efficacy and increased intrinsic and external motivation will enhance perseverance, effort, self-regulation, and self-efficacy of university students. Enhanced self-efficacy increases the educational motivation of university students. Self-efficacy of Midwifery University students predicted their motivation. Considering the relationship between external motivation and self-efficacy of students, increased motivation, self-efficacy, and academic success can be achieved through planning, encouragement, and offering incentives.

## ACKNOWLEDGEMENT

Hereby, the attempts and coopeartions of the vice chancellor of Research and Graduate University of Medical Sciences, Educational vice president and directors of Tehran, Iran, and Shahid Beheshti Nursing and Midwifery schools, and all university students of mentioned Medical Universities are wholeheartedly appreciated.

## REFERENCES

1. Roohi GH, The Relationship between Self-efficacy and Educational Motivation in Medical University Students. *Journal of Medical Education Development Center of Yazd*, **2013**, 8, 45-51.
2. Emmanuel AO, Achievement motivation, academic self-concept and academic achievement among high school students. *European Journal of Research and Reflection in Educational Sciences*, **2014**, 2(2), 24-37.
3. Mccoy DC, Wolf S, Godfrey EB, Student motivation for learning in Ghana: Relationships with caregivers values toward education, attendance, and academic achievement. *School Psychology International*, **2014**, 35(3), 294-308
4. Badri Gargari R, Moradi S, Hosseinpoor H, Learning Motivation Types of Tabriz University Students: A Compariosn of Cognitive, Emotional, and Social Skills of Students. *Modern Psychology Research Journal*, **2011**, 21, 19-42.
5. Cheraghi F, Hasani P, Rizai H, Investigating the Correlation between Self-efficacy and Clinical Performance of Nursing Students. *Nursing and Midwifery School Journal of Hamedan*, 2011, 19, 34-45.
6. York RO, A Study of the Relationship Between Educational Self-Efficacy and Educational Performance Among Social Work Students. in : Society for Social Work and Research 19th Annual Conference: The Social and Behavioral Importance of Increased Longevity, *New Orlean, La*, **2015**.
7. Schunk DH, Dibenedetto MK, Self-efficacy Theory in Education. In *Handbook of Motivation at School*, **2016**, 3:34-54
8. Arfaei K, Amir Ali Akbari S Shahbaz S, Factors associated with job motivation, the profession of midwifery from the perspective of university students in Tehran University of Medical Sciences. *Ardebil Midwifery School Journal*, **2010**, 12. 22-28.
9. Ansari S, The Impact of Instructing Social Skills on Educational Motivation, Progress, and Self-efficay. MA Thesis. Tehran University, **2010**.
10. Hanifi N, Parvizi S, Jolaie S, The Role of clinical Mentor on the Educational Motivation of Nursing Students: A Qualitative Research, **2012**, 24, 23-33.
11. Najafi M, et al. A Qualitaive Study on the Reduction of the Motivation of Nursing Students. *Nursing Research Journal*, 2011, 21. 39-47.
12. Alizade SH, Sigarchian M, The Motivation behind Choosing Midwifery and its Related components in Midwifery Students of Islamic Azad University of Rasht. *Developmental Steps in Medical Education*, **2011**, 10, 78-86.
13. Ross M, Perkins H, Bodey K, Academic motivation and information literacy self-efficacy: The importance of a simple desire to know. *Library & Information Science Research*, **2016**, 38(1), 2-9.



14. Mehrabi T, Behzadi S, Sabouri F, Alavi M, Assessment the effect of the CBT on motivation of the nursing students. *Iranian journal of nursing and midwifery research*, **2016**, 21 (2), 118-123.
15. Arfaei K, Amir Ali Akbari S, Alavi Majd H, Interest in Studying Midwifery and Related Factors in Students of Tehran University of Medical Sciences. *Knowledge and health Journal*, **2008**, 3. 28-32.
16. Kosgeroglu N, et al. An investigation on nursing, midwifery and health care students' learning motivation in Turkey. *Nurse education in practice*, **2009**, 9 (5), 331-339.
17. Ghaleb ALB, Ghaith S, Akour M, Self-efficacy, achievement goals, and metacognition as predictors of academic motivation, *Procedia-Social and Behavioral Sciences*, **2015**, 191, 2068-2073
18. Zhang ZJ, Relationship between self-efficacy beliefs and achievement motivation in student nurses, *Chinese Nursing Research*, **2015**, 2(2-3), 67-70.
19. Negovan V, Sterian M, Colesniuc GM, Conceptions of Learning and Intrinsic Motivation in Different Learning Environments, *Procedia - Social and Behavioral Sciences*, **2015**, 187, 642-646.
20. Tahrekhani M, Sadeghian Z, Intrinsic Motivation Comparative Investigation between Nursery, Midwifery, and Medicine Students During Internship in Iran, *Procedia-Social and Behavioral Sciences*, **2015**, 185, 185-189.
21. Ozer EA, Akgun OE, The Effects of Irrational Beliefs on Academic Motivation and Academic Self-efficacy of Candidate Teachers of Computer and Instructional Technologies Education Department, *Procedia - Social and Behavioral Sciences*, **2015**, 197, 128, 1292-1297.
22. Akomolafe MJ, Ogunmakin AO, Fasooto GM, The role of academic self-efficacy, academic motivation and academic self-concept in predicting secondary school students' academic performance. *Journal of Educational and Social Research*, **2013**, 3(2):335-342.