RESEARCH ARTICLE

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Investigating the State of Self-Expression and its Relationship with Adjustment and Self-Efficacy of Students: Evidence From a Cross-sectional Study in Southern Iran

Ali Reza Yusefi[1], Narjes Sadat Nasabi[2], Jamshid Bahmaei[3], Hedyeh Askarpour[4] and Shima Bordbar[5,*]

[1]Healthcare Services Management, School of Medical Sciences, Sirjan School of Medical Sciences, Sirjan University of Technology, Sirjan, Iran

[2]Human Resource Management, Manager of Organizational Development and Administrative Transformation, Shiraz University of Medical Sciences, Shiraz, Iran

[3]Healthcare Services Management, School of Medical Sciences, Behbahan Faculty of Medical Sciences, Behbahan, Iran

[4]Psychiatry School of Medicine, Student Research Committee, Clinical Research Centre of Imam Khomini Hospital, Jiroft University of Medical Sciences, Jiroft, Iran

[5]Health Human Resources Research Center, School of Health Management and Information Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

Abstract:

Introduction: The ability to express themselves, adjustment, and self-efficacy play an important role in the academic success of students. The purpose of this research was to investigate the state of self-expression and its relationship with adjustment and self-efficacy of University students of Medical Sciences in 2024.

Methods: This descriptive-analytical cross-sectional study was conducted on 290 students of various fields studying in the first semester of 2023-2024. Data were collected using standard self-expression, adjustment, and self-efficacy questionnaires. Data were analyzed with SPSS software version 23 using descriptive and inferential statistics, and t-test, ANOVA, and Pearson's correlation coefficient were performed at a 5% significance level.
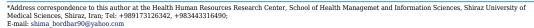
Results: The mean and standard deviation of self-expression, adjustment, and self-efficacy of the students were respectively 92.48 ± 17.36 out of 200, 123.87 ± 15.94 out of 335, and 48.31 ± 11.25 out of 85. This indicates the average level of self-expression and self-efficacy, as well as poor adjustment. Also, a statistically significant direct correlation was observed between self-expression with adjustment ($p=0.002$, $r=0.328$) and self-efficacy ($p<0.001$, $r=0.516$).
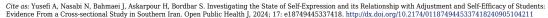
Conclusion: Self-expression and self-efficacy were estimated at a medium level, and adjustment was estimated at a low level. Based on the results, with the improvement of self-expression, the students adjustment and self-efficacy will improve. Therefore, it is suggested that the officials of the university provide the conditions for improving the self-expression of students through educational workshops and increase their self-confidence and self-esteem. Subsequently, paying attention to the needs of students and trying to solve their problems will help to reduce incompatibility.

Keywords: Self-expression, Adjustment, Self-efficacy, Student, Data, Self-confidence.

CrossMark

*Address correspondence to this author at the Health Human Resources Research Center, School of Health Managemet and Information Sciences, Shiraz University of Medical Sciences, Shiraz, Iran; Tel: +989173126342, +983443316490;
E-mail: shima_bordbar90@yahoo.com

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1. INTRODUCTION

Students are the talented parts of society that will manage their country in the future, so their physical, mental, and social health levels will have a significant impact on their learning and increasing their scientific awareness and academic success [1]. In this regard, some studies show the occurrence of unfavorable psychological states and behaviors, such as anxiety and depression, due to several reasons, such as low confidence and self-esteem and the inability to present and express their abilities and self-expression [2].

Self-expression includes asserting one's rights and expressing opinions and feelings in an appropriate way so that the rights of others are not violated [3]. In other words, self-expression is a behavior that enables a person to act in their interest, have self-reliant behavior without any anxiety, express their true feelings honestly, and gain their rights by considering the rights of others [4]. Self-expression, as a social skill, has both positive and negative aspects. The positive aspects of self-expression include accepting one's shortcomings, exchanging definitions, initiating interactions, and expressing positive feelings, and its negative aspects include expressing unusual or different opinions, asking others to change their behavior, and making unreasonable requests. Both of these aspects are necessary for successful social interaction and lead to expressing thoughts and feelings and showing appropriate responses in interpersonal relationships [5].

Self-expression by students is important because it is one of the most effective factors in their success. In this regard, Deluty concluded in his study that students who had the ability to express themselves had better academic progress, and their popularity increased [6]. In addition, Nota and Soresi's study showed that having the ability to express oneself increased students capacity to gather important information in order to make decisions and strengthened their desire to achieve professional goals [7].

Drake declared that teaching life skills, such as self-expression, had a significant impact on the individual and interpersonal life of society [8]. The research of Naderi *et al*. showed that bold behavior training increased the quality of life and reduced social anxiety [9]. Also, the research of Yadav and Iqbal indicated that academic adjustment and personal-emotional adjustment of students increased significantly after teaching self-expression skills [10]. In addition, numerous researches have shown that mental and emotional disorders have different psychosocial causes, many of which lead to social harm (such as suicide, addiction, violence, and delinquent behaviors), and this is rooted in a lack of self-expression skills, low self-esteem, inability to express feelings and emotions, and lack of ability to adapt to the environment [11].

Adaptation is a process in which a person makes efforts to adapt to internal pressures and external requirements [12]. A compatible person can establish a healthy relationship between himself and their social environment [13]. Being admitted to university and transferring from high school to university is a major change in life for many students [14]. Acceptance in a university is an opportunity for more learning and psychological growth; however, this is an experience with stress that causes problems for the individual [15].

Although entering the university due to meeting new people, new information and knowledge, and most importantly, growing as a young and independent person is considered a wonderful event for students, it can also be stressful [16]. This situation is because students usually have problems with social adjustment and personal-emotional adjustment in different situations and face different tasks [17]. The transition period of the university is accompanied by a separation from the patterns and norms related to their previous experiences, which are not completely in the behavioral pattern of the university [18]. Students are separated from home and school and must simultaneously interact with new groups, including professors, students, and staff. It is in this situation that adjustment plays an important role in the successful continuation of the students academic path [19]. Baker and Siryk have mentioned four dimensions of adaptation to university, including academic adaptation, social adjustment, personal-emotional adaptation, and institutional adaptation [20]. Academic adjustment expresses the motivation to learn, perform actions to meet academic requirements and needs, and have a clear understanding of academic goals, academic progress, and overall satisfaction with the academic environment [20]. In social adaptation, the student establishes a suitable relationship with their social environment and develops their interpersonal relationships suitably with classmates, professors, employees, and other student groups. Personal-emotional adjustment includes psychological and physical aspects [20]. The feeling of tension and anger in university, exhaustion, fatigue, inability, anger, desire to be aggressive, and the ability to deal with academic problems are also actions related to personal-emotional adjustment. The students feelings towards the university and the quality of engagement with academic issues are related to attachment to the institution and compatibility with it [20]. In the adjustment process, which plays an important role in the success of students during their academic career, their self-efficacy is a subject to be considered [20]. Students beliefs about their abilities to apply academic activities are related to their academic motivation [21], and what learners believe about their abilities in the study process is defined as self-efficacy [22]. Self-efficacy is one of the most important factors for success and adaptation to the existing situation, and it is one of the fields of positive psychology [23]. The theory of self-efficacy is based on the assumption that one's belief about talent and abilities has favorable effects on them and is considered the most important factor determining behavior [24]. This is a key element of social cognitive theory and is an important variable in students learning because it affects motivation and learning [25]. Regarding the relationship between internal personal and behavioral factors, a lot of research show that self-efficacy affects the

students performance and their behavior, such as persistence, choice of tasks, *etc* [26]. The results of many studies showed that self-efficacy affected the students motivation and cognition by influencing work interests, work continuity, goals that students set, and the choices they make in life [27, 28]. The results of studies also indicate the direct and indirect effect of students self-efficacy on their achievements [29, 30].

Considering the importance of self-expression, adjustment, and self-efficacy in improving the performance and success of students, such as academic success, as well as the few studies in the simultaneous examination of these three variables, conducting research in this field seems necessary. Therefore, this study was conducted with the aim of investigating the state of self-expression and its relationship to adjustment and self-efficacy of students at Jiroft University of Medical Sciences in 2024.

2. MATERIALS AND METHODS

2.1. Design and Setting

This descriptive-analytical study was conducted cross-sectionally on the students of Jiroft University of Medical Sciences in southern Iran from March to May 2024.

2.2. Participants

The population included students of the faculties of medicine, nursing (nursing and midwifery), health (public health and environmental health), and paramedical sciences (laboratory sciences, operating room, and anesthesiology). Based on the population, which was 1136 individuals, using the following formula with an error level of 5%, we estimated the sample size at 290 students.

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N}\left(\frac{z^2 pq}{d^2} - 1\right)}$$

Pq = 0.5
d = 0.05
z = 1.96
N = 1136

According to the total population, dividing 290 by 1136 and multiplying the obtained number by the number of students in each faculty, the necessary sample size was obtained in each faculty. In the Table below, the names of the faculties, the total number of students, and the sample size in each faculty are mentioned (Table **1**).

Also, in each faculty, based on the year of entry into the university and the field of study, a stratified sampling was used according to the size to determine the required sample size. After determining the sample size according to each entry and field of study, students were randomly selected based on their student number and the table of random numbers.

Table 1. The size of the population and the sample (students) by each faculty.

Faculty	Population	Sample
Medical	302	**77**
Nursing and Midwifery	326	**83**
Health	215	**55**
Paramedical Sciences	293	**75**
Total	1136	**290**

The inclusion criteria were students studying in the first semester of 2023-2024, willingness to participate in the research, and lack of consumption of psychoactive drugs at least one month before the investigation. The exclusion criteria included unwillingness to participate in the study, suffering from physical and mental illness, and having seizures and neurological diseases (based on their medical records at the university).

2.3. Instruments

The data collection tool was a four-part questionnaire. The first part of the questionnaire contained the demographic characteristics of age, gender, field of study, level of education, marital status, residence, and employment status. The second part was the standard self-expression questionnaire of Gambrill and Richey with 40 items. The scoring scale of this questionnaire is scored using a 5-point Likert scale (very low (1 score), low (2 score), medium (3 score), high (4 score), and very high (5 score)). According to the scoring range, the average score between 40 and 80 was classified as low self-expression, the scores between 81 and 120 as medium self-expression, and the scores above 120 as high self-expression [31]. The validity and reliability of this section (with Cronbach's alpha coefficient equal to 0.89) had been confirmed in previous studies [31].

The second part was Baker and Siryk's standard adjustment questionnaire. This part had 67 items and four subscales of academic adjustment (24 items), personal-emotional adjustment (15 items), social adjustment (20 items), and attachment (8 items). Each item of this scale is scored on a 5-point Likert scale from 1 for completely disagree to 5 for completely agree. The scoring of negative items is reversed. According to the scoring range, the scores between 67 and 156 were considered as low adjustment, the scores between 157 and 246 as medium adjustment, and those between 247 and 335 as high adjustment [32]. The validity and reliability of this part (with Cronbach's alpha coefficient equal to 0.92) had been confirmed in a previous study [32].

The third part was Sherer's general self-efficacy standard questionnaire. This part of the questionnaire has 17 items. The scoring scale of this questionnaire was also in the form of a 5-point Likert scale (totally disagree (score 1), disagree (score 2), have no opinion (score 3), agree (score 4), and completely agree (score 5)). According to the scoring range, scores between 17 and 39 are considered as low self-efficacy, scores between 40 and 61 as average self-efficacy, and scores between 62 and 85 as high self-efficacy [33]. Its

validity and reliability (with Cronbach's alpha coefficient equal to 0.83) have been confirmed in the study of Khaleghkhu and Najafi (2017) [33].

2.4. Procedures and Statistical Analysis

In order to collect data, one of the researchers went to the faculties on different days of the week, morning and evening, and distributed and collected questionnaires. For compliance with ethical considerations, participating in the study and filling out the questionnaire were done completely voluntarily. After explaining the objectives of the project to the participants, the confidentiality of the responses was emphasized, and verbal consent was obtained from them; then, the questionnaires were distributed and collected on the same day. The collected data were entered into SPSS version 23 software.

Pearson's correlation coefficient was used to examine the correlation of self-expression with adjustment and self-efficacy, as well as the correlation of these three variables with the students age. A t-test was used to examine the difference in the score of the three main research variables according to gender, marital status, place of residence, and employment status. Also, an ANOVA test was used to investigate the difference in the students scores of self-expression, adjustment, and self-efficacy based on the variables of education level and field of study.

3. RESULTS

The mean age of the students participating in the study was 22.59 ± 9.07 years, and most of them (63.10%) were in the age group of 18-22 years. Most respondents were female (75.39%), single (74.14%), medical students (26.55%), had bachelor's degrees (71.03%), and were dormitory residents (87.24%). Also, 11.38 percent of the students were employed (with a legitimate and independent source of income) (Table **2**).

Based on the findings shown in Table **3**, the mean and standard deviation of self-expression and self-efficacy of students were equal to 92.48 ± 17.36 out of 200 and 48.31 ± 11.25 out of 85, respectively; this indicated the average level of these two variables. On the other hand, the mean and standard deviation of students adjustment was equal to 123.87 ± 15.94 out of 335, which indicated the low level of this variable (Table **3**).

Table 2. Frequency distribution of studied students (n=290).

Variable	Category	Frequency	Percent
Age (year)	18-22	183	63.1
	23-27	79	27.25
	28-32	22	7.58
	32<	6	2.07
Gender	Male	72	24.83
	Female	218	75.18
Marital status	Single	215	74.14
	Married	75	25.86
Grade level	Associate of Science (As)	7	2.42
	Bachelor of Science (BS)	206	71.03
	Doctor of Philosophy (Ph.D)	77	26.55
Field of study	Doctor of Medicine (MD)	77	26.55
	Nursing	50	17.24
	Midwifery	28	9.66
	Laboratory science	31	10.69
	Operational room	25	8.62
	Nurse anesthetist	28	9.66
	Public health	24	8.27
	Environment health	27	9.31
Residence	Dirmitory	253	87.24
	Non dormitory	37	12.76
Employment status*	Employed	33	11.38
	Non employed	257	88.62

Note: *Having a legitimate and independent income.

Table 3. Mean and standard deviation of self-expression, adjustment and self-efficacy among students.

Variables	Score	Mean	Standard Deviation
Self-expression	40-200	92.48	17.36
Adjustment	67-335	123.87	15.94
Self-efficacy	17-85	48.31	11.25

Table 4. The relationship between self-expression, adjustment, and self-efficacy with the demographic variables of the studied students.

Variable	Category	Self-expression		Adjustment		Self-efficiency	
		Mean±SD (from 200)	P-Value	Mean±SD (from 335)	P-Value	Mean±SD (from 85)	P-Value
Age	18-22	16.28 ± 90.78	0.02	15.32 ± 122.63	0.04	12.05 ± 46.85	0.03
	23-27	18.47 ± 91.28		15.45 ± 123.25		11.10 ± 48.43	
	28-32	17.15 ± 93.72		16.14 ± 123.74		11.19 ± 48.74	
	32<	19.37 ± 94.14		15.11 ± 125.86		11.32 ± 49.22	
Residence	Dormitory	18.23 ± 91.86	0.46	15.72 ± 123.25	0.23	11.14 ± 47.49	0.11
	Non-dormitory	17.56 ± 93.10		15.34 ± 124.49		11.37 ± 49.13	
Gender	Male	17.21 ± 91.91	0.04	15.64 ± 123.91	0.08	10.19 ± 48.33	0.10
	Female	17.49 ± 93.05		15.57 ± 123.83		11.42 ± 48.29	
Marital status	Single	17.58 ± 90.82	0.08	15.64 ± 122.10	0.02	12.11 ± 47.45	0.009
	Married	18.36 ± 94.14		16.17 ± 125.64		11.22 ± 49.17	
Grade level	Associate of Science (As)	18.11 ± 91.25	0.02	15.36 ± 123.15	0.06	11.21 ± 47.39	0.03
	Bachelor of Science (BS)	17.58 ± 92.02		15.54 ± 123.65		11.10 ± 47.58	
	Doctor of Philosophy (Ph.D)	17.67 ± 94.18		15.68 ± 124.81		10.12 ± 49.96	
Field of study	Doctor of Medicine (MD)	1748 ± 94.38	0.01	16.07 ± 125.34	0.07	10.12 ± 49.96	0.04
	Nursing	17.27 ± 93.44		15.64 ± 124.63		10.38 ± 49.63	
	Midwifery	17.24 ± 92.60		15.29 ± 123.90		11.42 ± 48.16	
	Laboratory science	17.16 ± 92.33		15.16 ± 123.79		10.55 ± 47.92	
	Operational room	17.83 ± 92.56		15.58 ± 123.86		12.34 ± 47.99	
	Nurse anesthetist	17.14 ± 91.68		15.78 ± 123.74		11.26 ± 47.69	
	Public health	18.47 ± 91.57		15.92 ±122.98		11.47 ± 47.64	
	Environment health	17.57 ± 91.28		15.86 ± 122.77		11.02 ± 47.48	
Employment status	Employed	17.46 ± 93.65	0.001	15.75 ± 125.33	0.002	11.28 ± 49.57	0.02
	Non-employed	18.56 ± 91.31		15.34 ± 122.41		11.04 ± 47.05	

Based on the findings, a statistically significant correlation was observed between self-expression and adjustment variables (p=0.002, r=0.328) and students self-efficacy (p<0.001, r=0.516). According to the findings, the average self-expression scores based on the variables of age (p=0.02), gender (p=0.04), education level (p=0.02), field of study (p=0.01), and employment status (p=0.001) were different significantly.

In this way, students average self-expression scores increased with age. Also, self-expression was higher in female students (93.05 ± 17.49 out of 200), medical students (94.18 ± 17.67 out of 200), and employed ones (93.65 ± 17.46 out of 200) than others. The mean adjustment score of students was significantly different based on the variables of age (p=0.04), marital status (p=0.02), and employment status (p=0.002). The students average score of adjustment increased with increasing age. Also, the average adjustment score of married students (125.64 ± 16.17 out of 335) and employed ones (125.33 ± 15.75 out of 335) was higher than others. Finally, the average score of the students self-efficacy based on age (p=0.03), marital status (p=0.009), education level (p=0.03), field of study (p=0.04), and employment status (p=0.02) was significantly different. Thus, the students average score of self-efficacy increased with age, and self-efficacy was higher in married students (49.17 ± 11.22 out of 85), medical students (49.96 ± 10.12 out of 85), and employed ones (49.57 ± 11.28 out of 85) than others (Table 4).

4. DISCUSSION

Based on the findings, the students self-expression was estimated at an average level. Studies have shown that 60% of students are unable to express themselves and show no attitude; this inability affects their learning and practical efficiency in 40% of cases. Lack of frankness in self-expression causes behaviors, such as lying, flattery, backbiting, and conflicts and threatens people's courage to think, creativity, and self-esteem [34]. In explaining this part of the results, it can be said that since most of the students under investigation resided in the dormitory, the average level of self-expression of the students could be related to the sense of homelessness in the university and dormitory environment. It can be said that lack of self-esteem and courage are the characteristics of people who feel alienated. This lack of self-confidence in people with a sense of homelessness can be the basis of the desire to avoid social contact and unwillingness to express feelings [35].

Another part of the results of this research showed that the students self-efficacy was at an average level; in the same line, the results of the study by Farghedani *et al*. showed that the majority of students (57.4%) had average academic self-efficacy [36]. According to the results of the study by Kazemi *et al*., the students scores of self-efficacy and its components were in the medium range [37], and the results of these studies are in line with those of the present study. The results of the study by Afra *et al*.

showed that the self-efficacy of operating room students in Khuzestan was above the average [38]. Also, the results of the study carried out by Vahabi *et al*. showed that the academic self-efficacy score of Kurdistan University of Medical Sciences students was higher than the average [39]; the results of the mentioned studies are contrary to the findings of our research. In explaining the findings of this part of the study, it seems that students of medical sciences, considering the nature of their jobs in the future and communication with people and patients, possess communication skills that are required during their studies. They are forced to study a lot to pass their courses, have internship units, and actively attend and participate in healthcare centers and teaching hospitals. Their self-efficacy beliefs are improved, and consequently, they have a medium to high self-efficacy score.

According to the findings, the adjustment of the studied students was at a low level. The results of the study by Enayati [32], Azar and Reshadatjoo [40], and Sharifi [41] showed the average level of adaptation of students to the university environment, which was contradictory in this research. The study of Yavarian and Golshan on the adaptation of students indicated a low level in students [42], which is the same as the result of the present study. In this regard, it can be said that when they are accepted into the university, they enter a new environment with a decrease in parental support, a different structure from the high school, and a demand to adapt to new social relationships. On the other hand, there is the feeling that the university environment and field of study cannot sufficiently prepare students to enter the labor market and choose the right job, which leads to a decrease in their academic adaptation.

Other findings showed a direct correlation between self-expression with adaptation and self-efficacy. The results of the study by Amidniya *et al*. showed that there was a positive relationship between self-expression and personal adjustment of female students, as well as between self-expression and social adjustment [34]. The results of the study by Mohammadi *et al*. showed that self-expression training had a significant impact on the students social adjustment [43]. Also, the results of the study by Tamnaifar and Moradi showed the relationship between academic adjustment and self-expression in students [44]. Moreover, the study by Ebrahimi showed that self-expression group training had an effect on increasing academic adjustment in female students [45], and the results of the study by Akbari *et al*. indicated that self-expression training was effective on the students self-efficacy [46]. All the results of the mentioned studies are similar to those of this research. As to the direct correlation between self-expression and adjustment, it can be stated that those who benefit from assertiveness as a tool for more effective communication have a better understanding of the problem and can obtain better solutions because they have the power to express their problems [47]. In general, it seems that self-expression can improve people's self-confidence and self-esteem. As to the direct correlation between self-expression and adaptation, it can be said that self-expression gives people the ability to be real and honest in dealing with their surroundings. The inability to express themselves and lack of social skills and daring harms people's mental health. For this reason, feelings of anxiety, helplessness, low self-esteem, depression, psychosomatic diseases, and lack of social adaptation are the consequences of self-expression and passive behaviors since the behavior based on self-expression can increase adaptation to one's environment, enabling him/her to obtain desirable results while maintaining the dignity of himself and others. Not expressing themselves, not paying attention to their rights, and not showing decisiveness can cause a person to suffer from social-behavioral problems. Many social-individual inconsistencies in the youth arise because they do not have the power to express themselves and say no in the right place. They do not want to upset others and try to respond positively to all the demands of those around them, whether legitimate or illegitimate. The consequence of such blind obedience ultimately puts the mental health of the individual and society at risk, so, through self-expression, one can live healthier and achieve greater personal adjustment and self-esteem [34].

The main limitation of this research was its cross-sectional nature, which limits the generalization of the findings. Therefore, it is recommended that future studies should be conducted longitudinally and comparatively. It is also recommended that the framework of this study should be considered to conduct further research on other fields of study, such as pharmacy, dentistry, *etc*.

As a practical application, the findings of this study can, in addition to improving the awareness of managers and planners of educational systems regarding the three main research variables and the correlation of self-expression with adjustment and self-efficacy of students, help them in formulating educational programs to improve students self-expression.

CONCLUSION

In this study, self-expression and self-efficacy were estimated at a medium level, and adjustment was estimated at a low level. Also, with the improvement of self-expression, the adjustment and self-efficacy of the students improved. Therefore, it is suggested that the university authorities provide the conditions for improving the self-expression, adjustment, and self-efficacy of students through educational workshops, regular presence of suitable advisors, and provision of welfare, sports, and recreational facilities.

AUTHORS' CONTRIBUTIONS

A.Y.: Study conception and design; H.A.: Data collection; N.N., J.B.: Data analysis and interpretation of results; S.M: Writing of the paper;

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study is approved by the Jiroft University of Medical Sciences, Iran Ethics Committee with the ID

number of IR.JMU.REC.1402.060.

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