

Original Research

Motivation in Learning English among the Paramedical Sciences Students in Iran: Finding a Job or Grabbing a Culture?

Fariba Azabdaftari^{1*}, Nahideh Gharehaghaji², Maral Hariri Akbari³

¹Department of Basic Sciences, Paramedical School, Tabriz University of Medical Sciences, Tabriz, Iran

²Department of Radiology, Paramedical School, Tabriz University of Medical Sciences, Tabriz, Iran

³Department of Health, School of Health and Sciences, West Chester University, Philadelphia, Pennsylvania, USA

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Abstract

Introduction: The present article determines whether or not the undergraduate paramedical students of Tabriz University of Medical Sciences of Iran are motivated to learn English; to which orientation of motivation, integrative or instrumental motivation, they incline; and how much their field of study affects increased motivation to learn English.

Methods: This study was carried out with the participation of 141 undergraduate paramedical students including four fields of study: Laboratory Sciences, Technology of Radiology, Anesthesia, And Health Information Technology (HIT). The participants were asked to fill two questionnaires to determine their attitude toward learning English. Each questionnaire contained 15 items to estimate the degree of their integrative and instrumental motivation for learning English. The theoretical framework applied was based on Gardner's socio-educational model of second language acquisition.

Results: The undergraduate paramedical students of Tabriz University of Medical Sciences of Iran were motivated to learn English. The comparison between integrative and instrumental motivation showed a mean value for integrative motivation as 4.02, and for instrumental motivation as 4.32 with a meaningful difference. Students in the laboratory sciences field showed the highest degree of both types of motivation.

Conclusion: Iranian paramedical students are highly motivated in learning English in general; however, there was a difference in the degree of motivation according to the student's field of study. In general, instrumental motivation was higher than integrative motivation in this study.

Introduction

Motivation as a significant determiner on the process of learning a foreign language has been studied for more than three decades. Many scientists consider language to be a mirror image of the cognitive capabilities of human beings that must be approached from different angles.¹ Therefore, motivation as a multifaceted concept playing a great role in learning language should be studied from different angles. Motivation contains its own specific characteristics. It reflects cognitions, affections, and behavior or behavioral intentions. It is a concept which is defined in many different ways by many different researchers in Psychology and other scientific disciplines.

Although it is hardly possible to give a simple definition for such a broad concept, "almost all the research done come to the point to agree that attitude and motivation play a significant role in learning a second language".² By summarizing much of the literature surrounding the topic, Gardner³ discussed various conceptual, analytic, and theoretical issues associated with the area. He believed that both personal and social

relevant factors have an influence on the degree of motivation in learning a foreign language.⁴ Gardner is also concerned about how motivation causes people change their behavior to achieve a specific goal. He refers to four aspects of motivation: determining a goal, putting forth the effort and showing desire to attain the goal, and having a favorable attitude toward the activity in question.³ Gardner offered a socio-educational model to consider 'achievement' as the most influential factor in determining the degree of integrative motivation. Integrative motivation refers to the directed, reinforcing effort to learn a language.^{5,6} That is, enjoying the challenge of a new language and discovering the cultural issues which become revealed in the literature of that language. However, instrumental motivation refers to reasons for learning the language, such as finding an appropriate job.

There have been multiple studies conducted by different universities and centers that consider the reasons for becoming motivated and the degree of motivation among undergraduate students.⁷⁻¹¹ The studies were also concerned

*Corresponding authors: Fariba Azabdaftari, Email: f_azabdaftari@yahoo.com

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with which type of motivation, integrative or instrumental, created the strongest desire in students to learn a foreign language. Since the issue of motivation among paramedical students of Tabriz University of Medical Sciences has not been studied thus far, the researchers ascertained a need for this study. The problems being explored in this study included whether the students under investigation were motivated to learn English as a foreign language in the first place, and if they did, had they determined a goal for learning English, put an effort and show desire to attain the goal, and did the field of study play any role in their degree of motivation in learning English or not?

The aims of the study were to determine whether the undergraduate paramedical students of Tabriz University of Medical Sciences of Iran were motivated to learn English; if so; to which orientation of motivation, integrative or instrumental motivation, they inclined; and finally, how much their field of study affected their measure of motivation to learn English.

Hypotheses:

- 1- There is a strong motivation among undergraduate paramedical students of Tabriz University of Medical Sciences of Iran to learn English.
- 2- The students' major goal for learning English is to use the language in society and social relevant situations to improve their living condition, like finding a job. Therefore, field of study can affect their measure of motivation for learning English as a foreign language.

Materials and Methods

The study was carried out during fall semester 2010-2011 among 158 undergraduate paramedical students of Tabriz University of Medical Sciences with four fields of study: Laboratory Sciences, Technology of Radiology, Anesthesia, and Health Information Technology (HIT). Since 17 participants did not complete the questionnaires correctly, they were removed from the study, with 141 remaining in the study. All participants were provided with adequate information about the nature and reasons of the study, and were told in advance that the information provided by them would be kept confidential.

Since attitude is one major aspect in motivation to learn a foreign language, the effort was done to investigate the attitude of the students towards learning English; therefore questionnaires were used as tools of study. Two questionnaires were filled by the participants to estimate the degree of instrumental and integrative motivation among them. The same participants were given the questionnaires to complete after two weeks. The questionnaires were prepared following the theoretical framework of Gardner's socio-educational model of second language acquisition, and according to a five-point Likert scale (ranging from strongly agree toward strongly disagree). Some demographic and social information related to the participants was also taken. The validity of the questionnaires was confirmed through reviewing previous studies, and taking verification from two other professors of Social Sciences and Health Management. Each of the questionnaires contained 15 items to estimate the

degree of instrumental and integrative motivation among the participants. The questionnaires were completed in the classroom before starting the session using paper and pencil. Adequate time was allocated to all participants to fill out the questionnaires.

The questionnaires were collected and were fed to the SPSS 16 to be analyzed. For statistical analysis, one way ANOVA, F test, Tukey multiple comparisons, and paired *t* test were employed. The reliability coefficient ($r=0.9$) was calculated using Pearson's correlation coefficient test.

Ethical issues

All participants were fully aware of the nature and confidentiality of the study. The questionnaires were shown to and verified by the Deputy of Research of the Paramedical School before being issued among the participants.

Results

Paramedical students of Tabriz University of Medical Sciences were highly motivated in learning English. A higher instrumental motivation to learn English in each field of study was noticed. The difference between integrative and instrumental motivations for all fields of study is clearly exhibited in Table 1, obtained using a paired *t* test. The mean value for integrative motivation was 4.03, whereas that of instrumental motivation was 4.32. The difference between integrative and instrumental mean value was 0.29 and meaningful ($P<0.001$).

The integrative mean values for different fields of study are shown in Table 2. The highest mean value field was that of laboratory sciences. The Anesthesia, Radiology and HIT fields come next, respectively. A comparison using variance analyses was displayed in Table 3.

The table shows F value for differences among integrative motivation of paramedical students using one way ANOVA and F test. The results showed a meaningful difference between integrative motivation for the four fields of study ($P= 0.005$). Multiple comparisons using the Tukey test were performed and the results are illustrated in Table 4. According to Table 4, part of the difference in integrative motivation was related to the difference between laboratory sciences and radiology fields of study ($P= 0.014$).

That is, the mean value for laboratory sciences was 0.32 higher than the mean value for radiology. A meaningful difference of 0.34 between laboratory sciences and HIT was observed ($P= 0.010$). There was no meaningful difference when comparing Radiology and HIT, and Anesthetic and HIT fields of study ($P>0.9$). A borderline difference between laboratory sciences and anesthesia was observed in terms of integrative motivation ($P= 0.054$). Table 5 shows the instrumental mean value for different fields of study. The laboratory sciences displayed the highest value. The second highest was anesthesia, the third was radiology, and the last was HIT. However, according to Table 6, using F test for instrumental motivation, no meaningful difference was seen in instrumental motivation regarding the fields of study ($P= 0.2$).

Table 1. The difference between integrative and instrumental motivations. The table shows the total number of the students (N), the mean difference between two types of motivation, and related standard deviations

Motivation	N	Mean	Std. Deviation
Integrative	141	4.0252	0.45842
Instrumental	141	4.3176	0.51000

Table 2. Comparing the degree of integrative motivation according to the field of study. The table shows the number of students in each field of study (N), mean differences, and related standard deviations and errors

Field of Study	N	Mean	Std. Deviation	Std. Error
Radiology	37	3.9375	0.43073	0.07081
HIT	33	3.9172	0.47023	0.08186
Anesthesia	35	3.9843	0.44696	0.07555
Laboratory Sciences	36	4.2542	0.42281	0.07047
Total	141	4.0252	0.45842	0.03861

Table 3. F value for differences among integrative motivation of paramedical students. The table shows the degree of freedom (df), F value, and significance between groups

	Sum of Squares	df	Mean Square	F	P
Between Groups	2.617	3	0.872	4.458	0.005
Within Groups	26.804	137	0.196		
Total	29.421	140			

Table 4. Differences in integrative motivation among students according to the field of study using Tukey test

Field of Study (I)	Other Field of Studies (J)	Mean Difference (I-J)	Std. Error	P
Radiology	HIT	0.02028	0.10591	0.997
	Anesthesia	-0.04687	0.10430	0.970
	Laboratory Sciences	-0.31678*	0.10355	0.014
HIT	Radiology	-0.02028	0.10591	0.997
	Anesthesia	-0.06715	0.10733	0.924
	Laboratory Sciences	-0.33706*	0.10660	0.010
Anesthesia	Radiology	0.04687	0.10430	0.970
	HIT	0.06715	0.10733	0.924
	Laboratory Sciences	-0.26991	0.10500	0.054
Laboratory Sciences	Radiology	0.31678*	0.10355	0.014
	HIT	0.33706*	0.10660	0.010
	Anesthesia	0.26991	0.10500	0.054

Discussion

The study was carried out during 2010-2011 fall semester among 141 undergraduate paramedical students of Tabriz University of Medical Sciences with four aforementioned fields of study. The purpose was to determine whether the undergraduate paramedical students of the University were motivated to learn English; and what kind of motivation, integrative or instrumental, had a larger influence in their learning English as a foreign language, and whether the field of study affected in increasing motivation to learn English or

not.

The results confirmed the first hypothesis that the paramedical students of the University were highly motivated (both integrative and instrumental) in learning English as a foreign language. However, an overall significant meaningful difference of 0.01, with an increased degree of instrumental motivation (regardless of the field of study) was indicated that confirmed the second hypothesis of the study. On the other hand, a significant difference was also observed in integrative

Table 5. Comparing the degree of instrumental motivation according to the field of study. The table shows the number of students in each field of study (N), mean differences, and related standard deviations and errors

Field of Study	N	Mean	Std. Deviation	Std. Error
Radiology	37	4.3387	0.45633	0.07502
HIT	33	4.1556	0.60637	0.10556
Anesthesia	35	4.3728	0.44877	0.07586
Laboratory Sciences	36	4.3907	0.51050	0.08508
Total	141	4.3176	0.51000	0.04295

Table 6. F value for differences among instrumental motivation of paramedical students, the table shows the degree of freedom (df), F value, and significance between groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.182	3	0.394	1.532	0.209
Within Groups	35.231	137	0.257		
Total	36.414	140			

motivation among the students of each field of study (Table 4), with Laboratory Sciences as the highest, and HIT, the lowest. These findings contrast with another study⁷ which indicates no significant differences in the integrative orientation of each university's students, and also among the students of all three universities.

Motivation and language proficiency

Taken together, findings from the data of the present study give a consistent picture that instrumental goals are more important than integrative goals for paramedical students. The reason is related to the students concern with future career aspirations rather than appreciating the target language's art and literature. However, English proficiency also plays an important role in integrative motivation among paramedical students. That is, the laboratory sciences students with better English proficiency demonstrated a higher level of integrative motivation than other paramedical students. Therefore, the high motivation, especially integrative motivation, might be a result of high linguistic achievement,¹² and we may conclude that motivation is a result rather than a cause of language proficiency.

Socio-Educational Model

Gardner's^{3,12,13} Socio-Educational Model conceptualizes motivation as a complex set of variables, including "the combination of effort plus desire to achieve the goal of learning the language plus favorable attitudes towards learning the language".³ Motivation has a direct effect on second language achievement, and at the same time is influenced by a number of other social-psychological variables. "One such variable that has received extensive attention in the second language literature is the learner's orientation or reason for learning the second language"^{3,12,13}

Grubbing a culture or career hunting

An integrative orientation is the interest of the learner to

pursue a second language for cultural purposes. Likewise, in an instrumental orientation, learners study a language in order to find a career or achieve an academic goal. The level of instrumental motivation of a learner in finding a career or achieving a goal is of great importance.²

According to Gardner et al., integrative motivation, which refers to "a sincere and personal interest in the people and culture represented by the other language group",³ is considered a more powerful motive in learning a language, especially with second language linguistic achievement. Gardner's model has dominated the area of language learning motivation, and much evidence has confirmed the strong correlation between integrative motivation and achievement in learning a foreign language.¹³ However, the present study revealed that the level of instrumental motivation in learning English as a foreign language is higher than the level of integrative motivation among Iranian paramedical students. One area where instrumental motivation can prove to be successful is the situation in which the learner uses the language in a career related site. Nevertheless, other studies indicated that Iranian undergraduate students were highly motivated in both types of motivation⁷ with a very positive motivation to learn English in general, but more instrumentally motivated.⁸ In addition, in other studies⁹ on Chinese learners, a comparison to Hong Kong students indicated that there was a strong instrumental, career-related motive among learners. Similar results were also reported by Liu et al.,¹⁰ confirming that Chinese students in Hong Kong were more instrumentally motivated. This is in agreement with the findings of a study in Bombay that instrumental motivation was more important than integrative motivation in non-westernized female learners of English as a second language.¹¹ Similar to the present study, all of these studies confirm that in most of the communities where English is being taught as a second language, students are more instrumentally oriented rather than integrative. Nevertheless, it is up to teachers to choose appropriate materials and teaching methods to encourage and

raise instrumental and integrative motivation side by side.

Conclusion

Iranian paramedical students are highly motivated in learning English in general; however, there is a difference in the degree of motivation according to the student's field of study. An overall meaningful difference is seen between the two types of motivation. That is instrumental motivation is higher than integrative motivation among paramedical students. Although the students are more inclined towards instrumental goals in their learning of English, they also are highly interactively motivated; therefore, teachers should be aware of this characteristic and try to facilitate a balanced development of the two types of motivation.

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Ethical Issues

Participants' information was kept confidential.

Competing interests

There are no competing interests to be declared.

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