

Motivating the Engineering Students for Learning English with Gender Difference in an ELP Context

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ABSTRACT The paper presents the outcome of the study carried out to establish the engineering students' ELP, the motivation for learning English and their relationship in terms of gender. The design of the study was in the form of a questionnaire survey and the information gathered in the form of quantitative data. The investigations' main thrust was on motivation and its three constructs: instrumental motivation, integrated motivation and personal motivation. The major finding revealed the students' moderate level ELP with a greater orientation towards instrumental motivation for learning English. The next prominent motivation was personal. The integrative motivation, as a part of the culture of its people, did not have a good impact on students of engineering to learn English. However, the students showed a distinct gender difference in ELP and motivational constructs. Finally, the researcher had given certain important implications of the study to tap the students' motivation for effective learning of English.

INTRODUCTION

Teaching the English language to students has become significant due to the role that English plays as a universal language. The English language is spoken and written by a large number of people in the world. The value of being proficient in the English language is indisputably worthy and it is necessary particularly in academic life. English is used in various fields such as financial aspects, travel, business, beautiful objects, knowledge gained from science, communication media, and political life (Che Mat and Yunus 2014). In many cases, students are living within homogenous variables such as society, popular culture, a system of communication, relating to the teacher's profession, and then the results show that female students are outperforming male students in learning English. Still, female students' motivation for acquiring of knowledge in English is higher than males (Al-Khasawneh and Al-Omari 2015). It was taken into account from the result of the previous researchers that the English language is of very great significance for education and related to professional work of the engineering students.

However, the colleges of Engineering affiliated to the Anna University, Chennai located in

Tirunelveli, Tamilnadu, India have been stated to be not so proficient in the English language. As a result of the poor presentation in written as well as spoken English, many of the graduates turned out to be unsuccessful in the campus interviews for placement. There are many factors responsible for such low proficiency in English. An important one might be students' motivation towards the English language. It is a fact that learners' motivation is a key factor influencing the proficiency in the English language in all aspects.

Thus establishing the importance of motivation towards learning English of students of engineering in Tirunelveli, Tamilnadu, India, this paper presents an investigation conducted to assess the level of motivation in terms of its constructs – instrumental, integrative and personal motivation towards the English language of the target population in Tirunelveli, Tamilnadu, India. Lack of research in this area had been a driving force for the researcher to undertake this piece of research. In practice, the present study could also serve as a reference for curriculum designers and practitioners to improve the English language teaching atmosphere in colleges of engineering in general and in the colleges located in Tirunelveli, Tamil Nadu, urban and rural in particular.

Literature Review

This section provides a review of the literature providing information about the research outcomes of the previous studies falling under this area of research. It includes a brief overview of English language proficiency and motivation of students of engineering and a review of related studies.

Motivation

Students are envisaged by two types of motivation to encourage them to learn English, instrumental and integrative. Al-Mahrooqi and Denman (2014) explained the first type, the instrumental motivation as the willingness of a second language (L2) learner to benefit from the society and intellectual activity result that language leads to personal advantages such as professional progress or an academic degree. They clearly defined the second type the integrative motivation as students' curiosity in the language itself and their willingness to exchange the information with the users of that language whether through involving in their society or other means.

Tulu (2014) stated that when the learners of an L2 lack of motivation, it becomes a hindrance to achieving attainment in their learning. Mahadi and Jafari (2012) stated that the three important factors for language acquisitions are gender, personality, and motivation and the latter are the most influential. The motivation components such as "anticipation, curiosity, gradual development" can be seen as internal factors, whereas, the teachers in the learning environment and family support are the external factors.

Ignacio et al. (2010) define integrative motivation as a strong wish to learn L2 to have contact with members of the L2 community; while the instrumental motivation for them was defined as the desire to learn L2 to reach practical applications such as academic success and job advancement. In other words, instrumentally motivated learners own very particular goals for L2 learning such as pay attention to the radio, reading books, interpretation of something or time spent on watching TV programs. On the other hand, integratively motivated learners have got different goals such as knowing the development of a skill, norms, and customs of the L2 community.

Studies suggest different results that female students showed importantly, more motivation to learn English and had more "optimistic self-concept" than their counterpart males. Coskun's (2014) study of students' motivation in Albania exposes that female students were instrumentally more motivated to learn English than males. On the other hand, other studies found male students had higher instrumental motivation for learning English than females. Finally, the combination of both types of motivation and students' positive attitudes towards English increase their proficiency in English.

Related Studies

Female students have been seen more active participants who produce valuable insight and complicated ideas in a particular set of circumstances compared to males, which seems to show the slower learning process with many competitions in some activities and skills as reading and writing (Abdilah and Chowdhury 2013). Many studies agreed that female students undertake the two types of motivation instrumental and integrative for learning English compared to their counterpart males, which seems to have instrumental motivation to complete their personal desire such as getting a job (Akram and Ghani 2013).

Adachi's (2015) study pointed out that female students are motivated as a successful outcome of their positive attitudes towards English, whereas, males are motivated by the people surrounding them. On studying the English language proficiency (ELP) to students of engineering colleges in Tamilnadu, India, Chelvi (2007) has reported that the level of ELP is just average for the students of engineering colleges and their competency with regard to LSRW is also just moderate. The skill of oral communication is stated to be significantly correlated with the ELP of engineering college students. However, the female students are stated to be better than their male counterparts in their ELP as well as in the dimension speaking.

In the study, 'On overcoming situational constraints in communicative language teaching', Vishwanathan (2013) had stated that getting learners to use target language was rather tricky as most of them did not have any fluency. According to him, the teachers were of the conclusion that the class size was too big. More-

over, teachers remarked that the end exam was not based on the method adopted, but on the basis of the prescribed pattern which was not suitable enough to test the learning outcomes of the students. Similarly, the text offered for teaching was also not conducive for the adoption of the intended approach. Above all, from the learners, he observed that they were not prepared enough to get involved in the process of teaching. It was also reported by him that only forty percent gave full cooperation, whereas sixty percent did not participate fully, though the teacher compelled. 27.1 percent said that their shyness prevented their participation while 25.5 percent did not want to be ridiculed by the classmates or by the teachers. In such a condition, it goes without saying, that it would be very difficult to realize the goals of teaching English.

There are a number of researchers carried out internationally to investigate learners' motivation towards learning English. In a study completed by Livingston (2012) on the title 'Using communication skills laboratory in enhancing speaking skills of engineering students' has reported that student who attended the programme were successful in improving their level of motivation to speak. Moreover, the learners who were shy in the beginning were able to speak in groups, shedding off their shyness in a few days. From the studies given above one can identify the gap in the literature with regard to engineering students' English language proficiency and motivation towards learning English in the Indian context in Tamilnadu, India, especially in Tirunelveli urban and rural locality. In spite of the problem is present for long, the colleges of engineering in the chosen region have not made any significant effort to undertake research in this area so far.

Objectives

The present study was undertaken with the prime objective of identifying the engineering students' English language proficiency and their motivational orientation for learning English by adopting the survey technique.

MATERIAL AND METHODS

In this study, two research tools were used – questionnaire and interview. The study generated quantitative data through the questionnaire

to provide information regarding the English language proficiency and motivational orientations of the target population. Through interviews the researcher obtained qualitative data to confirm the validity and reliability of the process of quantification.

Population and Sample

All the third year students of all the engineering groups in two of the engineering colleges in Tirunelveli, Tamil Nadu, urban and two of the engineering colleges in Tirunelveli, Tamil Nadu, rural form the population of the study. It comes to around 1500 students.

A representative sample of the population was selected using purposive sampling based on researchers own judgment as suggested by Milroy (1987). The final sample comes to 162 students comprising 70 male and 92 female students.

Instruments

The major research tool in the present study was a questionnaire. It had two sections: A, and B. In section A, three items were used to collect information about the background of the students. Item 1- to tick off the engineering group he/she is pursuing; Item 2 - to mark his/her gender as male or female, and Item 3 – to furnish the percentage of marks obtained for English in the previous semester exam as a score for their ELP. Section B had two parts - part I and part II. The questions in part I was intended to identify students' motivation to learn English.

The researcher made use of the research tool adopted by Al-Tamimi and Munirshuib (2009) which in fact originated from the two scales of Gardner's (1985) attitude/motivation test battery (AMTV) and Cooper and Fishman's (1977) personal motivational constructs. Items 1, 2, 3 and 4 were meant for assessing instrumental motivation; items 5 and 6 for personal motivation; and item 7 for integrative motivation. Therefore, the instrument prepared for assessing the motivational constructs was in the form of a Rating Scale. Each one of the reasons given under the three motivational constructs was to be rated against the FIVE point scale: Not Important (1 score) – Little Importance (2 scores) – Of Some Importance (3 scores) – Important (4 scores) – Very Important (5 scores). In part II of section B, the students were required to answer a ques-

tion, to reveal whether they are interested or not in attending more training courses in English language to improve their English language proficiency. It was quite necessary for the present study to assess their desire for learning the language. The information collected through the questionnaire were to be supplemented and cross-validated by the responses of the subjects to the motivation oriented questions asked in the interview.

Data Collection

The researcher embarked on the main study in February 2016 securing permission from the Heads of the four colleges of engineering and individually, confirming the date of visit for data collection from the concerned English language faculties. Before administering the questionnaire the students were informed of the objectives and the importance of this research. Their doubts were also clarified on the spot.

Before conducting the interview, the students were briefly told about its importance and the process of the interview session, in order to strengthen their faith and confidence on the researcher. The interviewees were assured that the responses would be kept secret and would be used only for the research purpose. The responses of the interviews were recorded in MP4 format.

Data Analysis

The present study generated quantitative as well as qualitative data. The quantitative data were analyzed in terms of means, standard deviation, percentage, t-test, and product moment correlation using the Statistical Package for Social Sciences (SPSS). The qualitative data, on the other hand, was subjected to content analysis.

RESULTS

The present study was in the form of a questionnaire survey to find the motivation followed

by an interview to verify the genuineness of the information gathered in the form of quantitative data and data were analyzed as planned and the results furnished as in the order of the questionnaire items to fulfill requirements of the stated objectives. The students from two Engineering colleges doing the course of study in the academic year 2016-17, numbering 162 from the urban and rural area in Tirunelveli, Tamilnadu, were taken as the sample of the study.

Table 1 presents the mean score for ELP (English Language Proficiency) obtained from the university semester examination marks of the students in the concerned language. As the mean of ELP was found to be 53.46, it could be inferred that they were neither poor nor good in their English language competence. Anyhow the state of being 'average' would certainly be not a welcome one in the competitive job market to secure a suitable placement.

Table 1: English language proficiency of engineering students

Variable	N	Mean	SD
English Language Proficiency	162	53.46	4.84

Table 2 depicts the result of male – female differences in ELP. A look at the table reveals that female student, with a mean score of 57.24 were significantly (1% level) better than their male counterparts with a mean of 49.76. The fact that the female students were placed in a higher bracket of 55 *plus* in ELP convincingly puts them at a higher plane of employability, compared to male students caught in the *minus* 50 bracket of ELP.

Table 3 displays the strength/effect of the three motivational constructs of the subjects in the form of mean scores secured by them. Of the three motivational constructs studied, the instrumental motivation of the students of engineering in Tirunelveli, Tamil Nadu, India – urban and rural was at the highest with their overall mean of 4.61, followed by personal motivation

Table 2: Difference in the means of language proficiency of male and female students

Variable	Gender	N	Mean	SD	t- value	p -value
English Language Proficiency	Male	70	49.76	5.24	10.17	0.00**
	Female	92	57.24	4.12		

** Significant at 1% level

Table 3: Motivation for learning English of engineering students

Motivational constructs	Reasons for learning English	N	Mean	SD	Overall mean
Instrumental Motivation	1) Because it will enable me to carry out my tasks more efficiently	162	4.64	0.51	4.61
	2) Because it will enable me to get a job easily	162	4.59	0.49	
	3) Because it will help me to further my education	162	4.71	0.53	
	4) Because it is a university requirement	162	4.51	0.69	
Personal Motivation	5) For a personal development	162	4.21	0.85	4.18
	6) Because it will enhance my status among my friends	162	4.15	0.95	
Integrative Motivation	7) To integrate with the western culture	162	3.51	0.91	3.51

with 4.18, and then by integrative motivation with 3.51. Means arrived at individual reasons wise for *instrumental motivation* reveals that the reason: 'because it will help me to further my education' stands supreme with 4.71. In the case of *personal motivation*, the reason: 'for a personal development' stands superior with a mean of 4.21 to the reason 'because it will enhance my status among my friends' with a mean of 4.15.

Table 4 brings out gender differences in the motivational constructs of students of engineering. In all the four reasons for learning English of instrumental motivation, the female students

were found to reign superior to the males; whereas, in the case of both the two reasons for learning English of personal motivation, the male students stood higher than their female counterpart. However, no gender difference was found in the case of integrative motivation.

Table 5 shows the relationship between the three motivational constructs and the English language proficiency of engineering students in Tirunelveli – urban and rural. The product movement correlation 'r' was significant at the one percent level for instrumental motivation and integrative motivation. No significant relation-

Table 4: Male and female difference in motivation to learn English

Motivational constructs	Reasons for learning English	Gender	N	Mean	SD	t value	p value
Instrumental Motivation	1) Because it will enable me to carry my tasks more efficiently	Male	70	4.19	0.53	6.46	0.00**
		Female	92	4.71	0.49		
	2) Because it will enable me to get a job easily	Male	70	4.38	0.52	5.43	0.00**
		Female	92	4.79	0.44		
3) Because it will help me to further my education	Male	70	4.54	0.58	3.24	0.00**	
	Female	92	4.81	0.48			
4) Because it is a university requirement	Male	70	4.29	0.78	3.35	0.00**	
	Female	92	4.67	0.66			
Personal Motivation	5) For a personal development	Male	70	4.44	0.75	2.30	0.02*
		Female	92	4.12	0.96		
6) Because it will enhance my status among my friends	Male	70	4.26	0.84	3.66	0.00**	
	Female	92	3.71	1.02			
Integrative Motivation	7) To integrate with the western culture	Male	70	3.54	0.99	0.46	0.65
		Female	92	3.47	0.94		

** Significant at 1% level * Significant at 5% level

Table 5: Relationship between motivation for learning English and English language proficiency

<i>Variable</i>	<i>r value</i>	<i>p value</i>
<i>Instrumental Motivation</i>	0.64	0.00**
English language proficiency		
<i>Personal Motivation</i>	0.08	0.48
English language proficiency		
<i>Integrative Motivation</i>	0.71	0.00**
English language proficiency		

ship was found between personal motivation and English Language Proficiency of the subjects studied.

Table 6 reveals the desire of the students of engineering to learn English language. Out of 162 students, 160 students answered 'Yes' to the question asked, scoring 98.75 percent of two students answering 'No' (1.25%). It reveals that the general underlying reason for the students of engineering to learn English was their interest expressed through their academic desire.

DISCUSSION

This research aims to investigate the English language learning motivation with gender difference in an ELP context positively. Considering the students' motivation based on genders, this present research study proves that female students have more advanced levels of motivation and confident attitudes towards learning English compared to males (Genc and Aydin and 2017; Saranraj et al. 2016). Females not only are instrumentally motivated, but they show a higher level of integrative motivation. Their optimistic attitudes to learning English for civilizing purposes like communicating with others, knowing and identifying the other cultures, and for academic purposes are higher compared to male students. Male students appear to be more instrumentally motivated for achieving personal target areas such as academic opportunities, good jobs, and the activity of making journeys to abroad.

Table 6: Desire of engineering students for learning the English

<i>Questionnaire item</i>	<i>Yes</i>		<i>No</i>		<i>Total</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Do you prefer to attend more English language training courses helpful to you to improve your proficiency in the language?	160	98.75	2	1.25	162	100

The research exhibits that the instrumental motivation is prominent than personal motivation (Al Harthy 2017). The findings carried out showed that both genders in the two groups have similar interests of motivation for learning English, but they are dissimilar in some motivational factors that are dominant or hamper their learning. Moreover, the study reported that efficient teachers were the second most motivated factor for learning English. So the L2 teachers, especially make the most persuasive role in motivating the students in their learning process; therefore, L2 teachers have to spend their teaching hours in various motivational activities and especially in organizing various extra activities at English classes. If the teacher gives the similar task all the time, the learners feel uninterested, so it affects motivation negatively. Concerning the priority of teachers, the study found that students give priority to the public teachers than native speakers or expatriate teachers because they are not acquainted with students' educational, arts and intellectual activity and necessity. Adachi (2015) revealed that male students' motivation in schools were influenced by their teachers and peers.

The study conducted by Che Mat and Yunus (2014) showed that more than seventy percent of the participants confirmed that they will understand better in English class if their teachers changed their methods of teaching. Most of the studies found that students were highly motivated towards learning the English language. It is understood that the students are aware of the significance of the English language, so they desire to learn and perform their proficiency in English to succeed in all competitive fields.

CONCLUSION

The findings of this study showed that students at Engineering colleges are highly motivated towards learning the English language.

Moreover, the results revealed that the students reported higher instrumental motivation than the integrative one. The research also reported that there were no statistically significant differences in the motivational level according to gender. Based on the research findings, it can be stated that the students are aware of the importance of learning the English language. The high level of integration and instrumental motivations reported by the students can be an indication of this awareness. Therefore, several pedagogical implications can be attained.

RECOMMENDATIONS

Teachers of English language should take into consideration their students' perceptions and interpretations about learning English and try to value those perceptions and interpretations. Teachers should convey and present the proper teaching materials and contents that suit the students' motivational orientations. In addition to, teachers can assist students in setting particular goals in language learning and help them in achieving these goals through providing the required feedback. Teaching English should not be for completing the syllabi only, rather, teaching English should be outlined carefully to cater more meaningful learning experiences and maximize the chances of language commitment. These opinions and impression might lead to a more positive attitude and motivation which are remarkably necessary to succeed in language learning.

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