The Influence of Anxiety in Second Language Learning: A Case Study with Reference to Engineering Students in Tamil Nadu, India

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Abstract

Objective: This study investigates the influence of anxiety in second language learning amongst engineering college students in the least literacy rate district in Tamil Nadu. **Methods:** Researchers used mixed research design that includes quantitative and qualitative methods. To investigate the levels of anxiety among the L2 learners, adopted AMTB[1] questionnaire has been used (N=190) and unstructured interview (N=19) has been conducted. The quantitative data were analysed by using descriptive statistics, Cronbach's internal reliability and Pearson Correlation coefficient. **Findings:** The results of the study exposed that English class anxiety and English use anxiety was correlated; hence the ESL learners are more anxious to use English inside and outside the classroom. **Applications/Improvements:** The language instructor could bring innovative thoughts and positive believes through alternative method of teaching in their classroom.

Keywords: Anxiety, Correlation, English Class Anxiety and Use Anxiety, Factors, L2 Learning

1. Introduction

In educational psychology, anxiety is an important variable that affects the indirectly by influencing the cognitive process in learning. Anxiety creates an emotion by feeling of tension, worries and fears in particular or specific situations. Thus,[2] defined anxiety as "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system".

The[3], theory "affective filter hypothesis" plays a vital role in L2 acquisition. There are three "affective filter variables" such as a) motivation, b) self-confidence and c) anxiety. To succeed in L2 achievement the learners should be motivated, high level of self-confidence and lower level of anxiety. Similarly, if the learners have low motivation, low self-confidence and high anxiety level, it affects the learners input and form a mental block. However, anxiety is a predominant factor that affects the L2 learners' success.[2] examined that the major performing anxieties are

"communication apprehension, test anxiety, and fear of negative evaluation". There are three types of anxiety such as a) trait anxiety, b) state anxiety and c) situation-specific anxiety. Trait anxiety is a stable, state anxiety is a temporary apprehension of an individual, and it arouses only at certain situations. Situation-specific anxiety is similar to state anxiety, it arouses at a specific situations and events such as speaking in L2 inside or outside the classroom[4].

Language anxiety could have aroused in many situations, as Gardner's Socio educational model[5] depicted that anxiety aroused in two situations, the language class and outside of the classroom situation where the language might be used. Over three decades, L2 anxiety has become a great concern in second language research. In recent cases, numerous studies have been conducted[6–13] on anxiety in second and foreign language learning. Primary purpose of this study is to examine the relationship between the English use and English class anxiety of the undergraduate engineering students.

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2. Literature Review

Anxiety is one of the most essential predictors of L2 achievement[14]. [9] examined the levels of Korean language anxiety. The result showed that increase in anxiety level among the first year students, which is related to communicative apprehension. In addition, many learners have increased in test anxiety[15]. [8] examined L2 learners' anxiety among adult refugees from Latin America to Australia. The adult immigrants have high in anxiety especially in L2 communication. Similarly, The author [7] conducted a case study among ten female Arabs learners. The female learners' felt more anxious, this is because of various teaching method and mandatory to speak in English inside the classroom. The anxiety level increases, poorer the English comprehension[6].

The authors [13] examined FL classroom anxiety among 156 English as Foreign Language (EFL) learners in the context of multilingualism in Turkey. Due to different cultural settings, the learners' have higher in language anxiety. In contrast, author[11] reviewed that in South African context the learners acquired L2 language in multilingual rather than monolingual classroom. The authors [16] carried out a comparative study between low-level and high-level multilingual second language learners by using FLCAS. The multilingual foreign language other than English has an effect on level of English language anxiety. The authors [12] identified that the learners have higher in level of English use anxiety subsequently they are happy to use English language inside their classroom. A study was carried among Hebrew speakers' anxiety on English reading and writing. The result showed that moderate negative correlations with anxiety and reading comprehension. This is because of language anxiety differ in both reading and writing[17].

From the light of the above review, it is found that no studies have been carried out by using English use and class anxiety factors through AMTB questionnaire. Hence, this study is useful to identify the undergraduate learners' anxiety level in the study area.

Objectives of the study

1. To investigate the relationship between English class anxiety and English use anxiety towards learning English.
2. To observe the usage of ESL learners English inside and outside the classroom.

Research questions

1. What is the relationship between English class anxiety and English use anxiety?
2. Which anxiety factor makes the L2 learners more anxious?

3. Methodology

3.1 Participants and Instruments

The participants for this study were 190 (94 males and 96 females) first year engineering students from various engineering colleges in the least literacy rate district, Tamil Nadu, India. Mixed research design and simple random sampling method have been used in this study. In quantitative method, the questionnaire contains two sections i) Demographic profile and ii) adopted anxiety questionnaire. For this study, researchers adopted two factors i.e. English class anxiety and English use anxiety from [1] Attitude and Motivation Test Battery (AMTB) questionnaire. There are 16 items used in the questionnaire, which includes six demographic details about the respondents and ten anxiety questions by using "levels of agreement scales". To avoid confusion, the positives keys have been used for this study. Subsequently, unstructured interview has been conducted amongst nineteen respondents (10% of the sample). The opinions given by the interviewee have been transcribed on the paper. The quantitative data were analysed using the statistical package STATA 13. The analysis used for this study is Mean, Standard Deviation, Cronbach's Alpha, Pearson Correlation coefficient.

4. Results

Table 1 showed demographic details of the respondents. There were 94 male and 96 female respondents took part in this study, from the age group of 18–20. From the demographic profile, it was found that 126 (66.3%) respondents studied their high school in Tamil medium and 64 (33.7%) respondents were in English medium. Subsequently, 132 (69.4%) respondents were living in villages, 31 (16.3%) were in town and 27 (14.3%) were in city. Among all respondents, 116 (61%) respondents studied their high school in government, 16 (8.4%) were in aided and 58 (30.6%) were in private schools.

Table 1. Demographic details

Category		N	%
Gender	Male	94	49.5
	Female	96	50.5
Medium till High School	Tamil medium	126	66.3
	English medium	64	33.7
Respondents Belongs to	Village	132	69.4
	Town	31	16.3
	City	27	14.3
Respondents High School	Government	116	61
	Aided	16	8.4
	Private	58	30.6

Table 2 showed the internal reliability of the questionnaire. There were 16 variables used in this questionnaire, which includes ten Likert scale variables and six demographic variables of the respondents. The internal consistency reliability of the "Cronbach's alpha" is 0.718, that is acceptable.

Table 2. Internal consistency reliability

No. of items	Cronbach's Alpha
16	0.718

Descriptive analysis has been shown in Table 3, the mean frequency of the given two factors are same in mean and standard deviation. The mean and standard deviation results confirmed that the L2 learners were same levels of aware of and use of English class anxiety and English use anxiety.

Table 3. Descriptive statistics

Factors	N	Mean	SD
English Class Anxiety	190	3.64	.706
English Use Anxiety	190	3.45	.833

Table 4 showed the Pearson's correlation value of English class anxiety and English use anxiety, which is 0.644 with a signified p value of .000. The p value being less than .01, the variables have a significant correlation at 0.01 levels. It was found that there is strong correlation observed between two factors (r=.644, N=190, p<0.01).

5. Discussion

The first objective of this study is to investigate the relationship between English class anxiety and English use anxiety towards learning English among L2 learners. As the results shown in Table 4, there was strong correlation observed between English class and use anxiety (r=.644, N=190, p<0.01). Moreover, the use of English anxiety was found to have a cause on learners' level of L2 anxiety. As expected, students who are low usage of English having higher level of English class anxiety. The English use anxiety arises unusual in the age of onset, intensity, persistence and types of fear[18]. Nevertheless, increase in state anxiety when the video camera was introduced inside the classroom[10]. Hence, increase in levels of anxiety cannot able to demonstrated information what they have learned in the past[19]. More importantly, these findings suggest that the regional language instructions could reduce language anxiety in the classroom[11]. In addition, the usage of mobile devices inside the classroom for teaching reduces the L2 learners' anxiety[20].

Table 4. Pearson's Correlations

Factors	English Class Anxiety	English Class Anxiety
English Class Anxiety	-	.644**
	-	.000
English Class Anxiety	.644**	-
	.000	-

N = 190   ** Significance level at 0.01 (2-tailed)

The second objective of this study is to observe the usage of ESL learners English inside and outside the classroom. So unstructured interview has been conducted amongst nineteen respondents. The interview is about the interviewees' opinion about the usage of English language in their classroom and in community.

Many students completed their schooling in Tamil medium, so they feel nervous while speaking inside the classroom. Even though they knew that English language is very important for their career, they are not showing interest to learn English. The difficulty faced by L2 students is stage fear, it hinders the regional L2 learners. However, L2 learners are scared of grammatical errors such as tenses and improper sentences. In few cases, the learners are ready to speak inside the classroom but their colleagues will criticize and they will not encourage. There is no collaborative setting in their classroom.

Learners feel proud while communicating English in their community and learners' are not scared to speak

even though it is wrong. A few learners communicating in L2 with their relatives and associates, they believed that it enriches their personality in the society. In contrast, L2 learners are teased by their friends, they thought that speaking English just for show off. Some L2 learners never tried to speak in English.

6. Conclusion

The findings of this study revealed that undergraduate engineering students are extremely affected by language anxiety. To overcome the problem, the language teacher has to be conscious of the motivational factors in order to exhibit positive believes among L2 learners[21]. Similarly, to lower the anxiety level, the instructor could teach in alternative method than the conventional method of teaching. Moreover, the instructor could create supportive classroom environment and reduce the classroom stress[9]. In recent days, use of games and virtual learning improves learners' attention[22]. Rather than role-play, virtual presences results in reduced of apprehension and embarrassment[23]. Thus, teaching could focus the real needs of the L2 learners'. It is concluded that performance in learning L2 will improve if anxiety controlled. The instructor could able to help the L2 learners to overcome their English class and English use anxiety and improve their learning. Future studies might investigate the rural L2 learners' anxiety among tertiary level learners all over Tamil Nadu as well as India. It would be useful to conduct comparative study with the beginner and advance level learners whether the anxiety level increased or decreased.

7. Acknowledgement

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Annexure I

A. Demographic details

1. Gender:

Male	Female

2. Age (in years): _____.

3. Medium of instruction till high school:

☐ English	☐ Tamil	☐ Urdu	☐ Hindi	☐ Others, specify_____

4. You belong to a:

☐ Village	☐ Town	☐ City

5. High School board:

☐ Matric-ulation	☐ State Board	☐ CBSE	☐ ICSE	☐ Others, specify_____

6. Your High School was a:

☐ Government school	☐ Aided school	☐ Private school

B. Anxiety questionnaire [Please (✓) in the appropriate place]

S. No.	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I never feel very confident of myself when I am speaking in my English class.					
2	It embarrasses me to volunteer answers in our English class.					
3	It worries me to know that other students in my class seem to speak English better than I do.					
4	I get nervous when I am speaking in my English class.					
5	I am sometimes nervous that the other students in class will laugh at me when I speak English.					
6	I would get nervous if I had to speak in English to a foreigner.					
7	Speaking English anywhere makes me feel worried.					
8	It would be nervous if I had to speak English on the telephone.					
9	I would feel uncomfortable speaking English outside the classroom.					
10	I feel nervous if someone asks me something in English.					