

Examining Engineering Students' Anxiety Levels during the English for Specific Purposes Class

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ABSTRACT

The study aims to determine the level of students' anxiety during their participation in English for Specific Purposes (ESP) class. 38 Home Economics Department, Engineering Faculty students from Universitas Negeri Semarang were examined in this study. To measure the level of students' anxiety, the Foreign Language Classroom Anxiety Scale (FLCAS) was used to collect the data. Moreover, the descriptive analysis method was used in this study to investigate the level and the sources of their speaking anxiety. The findings of this study revealed that students experience mild, moderate, and severe anxiety, particularly in communication and class activities. There were several external and internal factors causing this anxiety. Language, grammar, pronunciation, and peer factors significantly triggered external anxiety. Lack of confidence, shyness, and stage fear became the biggest challenges for the students in facing anxiety during the ESP class.

Keywords: Speaking anxiety level, Engineering student, English for specific purposes.

1. INTRODUCTION

In our interconnected world, communicating effectively has never been more crucial. Language serves as the bridge that connects cultures, facilitates understanding, and fosters collaboration [1][2]. Among the many languages spoken globally, English stands out as a lingua franca, weaving through international business, diplomacy, science, technology, and the arts [3][4]. The importance of learning the English language transcends mere linguistic proficiency; it opens doors to opportunities and unlocks a world of knowledge and connections [5][6].

In the ever-evolving global communication landscape, mastering the English language is not merely a pursuit of linguistic competence but an essential tool for professional success [7]. Within this expansive realm of language learning, English for Specific Purposes (ESP) stands as a beacon, guiding learners toward a focused, tailored, and highly targeted linguistic proficiency. ESP are designed to meet specific language needs related to particular professions or fields [8][9][10]. The focus is on teaching specialized vocabulary, terminology, and communication skills required for professional contexts [11]. The course is tailored for professionals and students who need English language skills for specific occupations or academic disciplines [12]. It is commonly used in vocational training, higher education, and corporate settings.

As well as in the Department of Home Economics, Faculty of Engineering, Universitas Negeri Semarang (UNNES), students are required to take English courses related to their major study. The English courses provided are tailored to their respective study programs. The purpose of these courses is to equip students with English language skills for communication, both formal and informal, related to the terminology specific to their study programs. It focuses on teaching English related to specific professions or fields. Therefore, these students often have a firm grasp of specialized vocabulary related to their study area [13]. It also often incorporates real-life contexts and materials relevant to the students' professions. This contextual learning helps them

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understand and use English in situations they will encounter in their workplaces [14].

ESP students are typically motivated by the relevance of the course content to their future careers. They understand the practical importance of improving their English skills for professional success, which can result in high motivation levels in the classroom [15]. However, since the ESP courses students come from various academic disciplines not necessarily related to the English language or literature, they have their distinct characteristics. Usually, they only consider this English course somewhat crucial since it falls outside their study program. The students often feel frustrated and less motivated [16][17].

In the dynamic landscape of language learning, where effective communication is paramount, students often grapple with a unique challenge: anxiety in the English class [18]. Similarly, the same situation occurs in ESP classes. Many students also experience anxiety during learning sessions, especially when they have to communicate in English. There are several reasons students might feel anxiety when speaking English as a second language; among them are inadequate linguistics and psychological factors [19].

Anxiety during a course, especially in language learning like ESP, can have several adverse effects on students. Anxious students might refrain from actively participating in class discussions, group activities, or presentations, hindering their learning experience [20]. It can also erode students' confidence in their language abilities, making them hesitant to engage in spoken communication inside and outside the classroom [21]. Prolonged anxiety might lead to disengagement from the course, causing students to lose interest and motivation in learning, ultimately affecting their academic progress.

This study examines the anxiety levels experienced by Home Economics Education students when attending ESP courses. Additionally, this study will explore the factors causing such anxiety. The results of this research are expected to assist both lecturers and institutions in addressing this issue.

2. METHOD

In this study, to measure the level of students' anxiety, the Foreign Language Classroom Anxiety Scale [22] is used to collect the data. Participants were asked to rate their responses on a five-point Likert scale, ranging from 'strongly agree (5)' to 'strongly disagree (1).' 38 Home Economics Department, Engineering Faculty students from Universitas Negeri Semarang were examined in this study.

To determine the planned research outcomes, the mixed-method research approach used in this study, specifically an explanatory design. This method combines qualitative and quantitative research designs to yield valid results. Mixed methods aim to achieve research objectives by integrating qualitative and quantitative methodologies in the process and results analysis [23]. Explanatory designs involve a mixed-method approach that employs qualitative data to elucidate and enhance the conclusions drawn from quantitative findings [24].

In this study, the authors employed a descriptive analysis method to categorize anxiety levels, identify contributing factors, and explore students' strategies to alleviate anxiety while learning ESP. Subsequently, they thoroughly reviewed the recorded material and students' interview responses. The findings were then presented and explained descriptively.

3. RESULT AND DISCUSSION

3.1 Student Anxiety Level

The results of students' anxiety levels were obtained through data collection in the form of questionnaires distributed to the students. The questionnaire distributed to students consists of 33 statements from the FLCAS (Foreign Language Classroom Anxiety Scale) to measure students' anxiety levels during ESP (English for Specific Purposes) classes. Participants were asked to rate their responses on a five-point Likert scale, ranging from 'strongly agree (5)' to 'strongly disagree (1).

No	Statement	Scale (%)					
		1	2	3	4	5	
1	I never feel quite sure of myself when I am speaking in my foreign language class.	10.5	10.5	31.6	28.9	18.4	
2	I do not worry about making mistakes in language class.	7.9	42.1	23.7	18.4	7.9	
3	I tremble when I know that I'm going to be called on in language class.	5.3	21.1	26.3	28.9	18.4	
4	It frightens me when I don't understand what the teacher is saying in the foreign language.	10.5	7.9	23.7	31.6	26.3	
5	It would not bother me at all to take more foreign language classes.	2.6	5.3	23.7	39.5	28.9	

Table 1. Result of students' response.

6	During language class, I find myself thinking about things that have nothing to do with the course.	13.2	21.1	34.2	26.3	5.3
7	I keep thinking that the other students are better at languages than I am.	0	0	21.1	23.7	55.3
8	I am usually at ease during tests in my language class.	5.3	13.2	42.1	28.9	10.5
9	I start to panic when I have to speak without preparation in language class.	5.3	5.3	18.4	34.2	36.8
10	I worry about the consequences of failing my foreign language class.	2.6	2.6	18.4	44.7	31.6
11	I don't understand why some people get so upset over foreign language classes.	5.3	21.1	44.7	13.2	15.8
12	In language class, I can get so nervous I forget things I know.	2.6	2.6	13.2	44.7	36.8
13	It embarrasses me to volunteer answers in my language class.	7.9	10.5	28.9	31.6	21.1
14	I would not be nervous speaking the foreign language with native speakers.	10.5	28.9	36.8	7.9	15.8
15	I get upset when I don't understand what the teacher is correcting.	7.9	5.3	23.7	42.1	21.1
16	Even if I am well prepared for language class, I feel anxious about it.	2.6	10.5	23.7	47.4	15.8
17	I often feel like not going to my language class.	26.3	42.1	15.8	13.2	2.6
18	I feel confident when I speak in foreign language class.	10.5	23.7	44.7	13.2	7.9
19	I am afraid that my language teacher is ready to correct every mistake I make.	2.6	2.6	13.2	44.7	36.8
20	I can feel my heart pounding when I'm going to be called on in language class.	2.6	5.3	23.7	39.5	28.9
21	The more I study for a language test, the more confused I get.	26.3	42.1	15.8	13.2	2.6
22	I don't feel pressure to prepare very well for language class.	21.1	31.6	10.5	28.9	7.9
23	I always feel that the other students speak the foreign language better than I do.	0	0	21.1	23.7	55.3
24	I feel very self-conscious about speaking the foreign language in front of other students.	10.5	15.8	7.9	28.9	36.8
25	Language class moves so quickly I worry about getting left behind.	10.5	2.6	15.8	23.7	47.4
26	I feel more tense and nervous in my language class than in my other classes.	2.6	23.7	5.3	28.9	39.5
27	I get nervous and confused when I am speaking in my language class.	0	0	21.1	55.3	23.7
28	When I'm on my way to language class, I feel very sure and relaxed.	10.5	10.5	31.6	28.9	18.4
29	I get nervous when I don't understand every word the language teacher says.	2.6	2.6	13.2	44.7	36.8
30	I feel overwhelmed by the number of rules you have to learn to speak a foreign language.	13.2	21.1	34.2	26.3	5.3
31	I am afraid that the other students will laugh at me when I speak the foreign language.	2.6	5.3	23.7	39.5	28.9
32	I would probably feel comfortable around native speakers of the foreign language.	10.5	28.9	36.8	7.9	15.8
33	I get nervous when the language teacher asks questions which I haven't prepared in advance.	2.6	23.7	5.3	28.9	39.5

Based on the data in table 1, the responses indicate a wide range of student anxiety levels. The data highlights the multifaceted nature of anxiety in the language class, encompassing fear of speaking, concerns about understanding, self-confidence issues, and test-related stress. Students experience anxiety related explicitly to speaking in a foreign language class. They fear making mistakes, being corrected by the teacher, or being laughed at by peers. Moreover, understanding the language (both the teacher and native speakers) and keeping up with the class pace are significant sources of anxiety.

Anxiety has four distinct levels: mild, moderate, severe, and panic. These levels vary in intensity and are influenced by individuals' internal and external abilities and their surrounding environment [25]. Approximately 48.7% of students exhibit mild anxiety based on responses to specific statements. These students feel unsure at times (Statement 1), occasionally worry about

making mistakes (Statement 2), and might get distracted during class (Statement 6). While these concerns exist, they do not significantly hinder their overall participation. Around 68.4% of students experience moderate anxiety. These students often feel nervous and worried in various situations, such as speaking in class (Statement 3), understanding the teacher (Statement 4), and taking unprepared speaking tasks (Statement 9). Their anxiety levels impact their active participation and confidence in language learning. Approximately 78.9% of students demonstrate severe anxiety levels. They exhibit significant distress, especially in situations involving speaking (Statement 1), understanding instructions (Statement 5), taking tests (Statement 25), and being corrected by the teacher (Statement 27). These students may struggle significantly with communication and class activities, indicating a high level of hindrance to their learning process. Though not explicitly categorized as "panic," certain situations, particularly Statement 17 and Statement 21, demonstrate high anxiety levels among students. The fear of attending language class (Statement 17) and feeling overwhelmed by the course content (Statement 21) indicates an exceptionally high level of distress.

In summary, most students (approximately 78.9%) deal with moderate to severe anxiety in various aspects of the language class, especially in speaking and understanding tasks. Students might exhibit distinct anxiety-driven behaviors in the foreign language classroom. These behaviors include avoiding complex language structures, feeling uneasy during learning tasks, hesitating to volunteer or join oral activities, arriving unprepared, refraining from using a foreign language, and showing a reduced willingness to communicate, contrasting with more relaxed peers [26].

3.2 Anxiety Causing Factors

The causes of this anxiety are further explored by conducting interviews with several students. The factors contributing to anxiety can be categorized into psychological and physiological aspects, further divided into internal and external factors.

3.2.1 External Factors

External factors causing anxiety in the ESP class can encompass various aspects of the learning environment, interactions, and expectations. As stated by the students, some standard external factors include language, grammar, pronunciation, and peer factors.

Based on the students' interviews, a significant factor contributing to anxiety is the language factor. Insufficient proficiency in English, particularly for non-native speakers, can serve as a barrier, leading to fear and anxiety among individuals. The students may struggle to articulate their thoughts and ideas clearly, leading to frustration and anxiety when attempting to communicate in English. Understanding spoken English, especially when native speakers or instructors speak quickly or use complex vocabulary, can cause anxiety [27][28]. Students may need more important information or instructions.

Grammar-related factors significantly contribute to external anxiety triggers [29][30]. It is one of the primary factors highlighted by students. The fear of making grammatical errors can hinder students' confidence. Students often experience heightened stress due to concerns related to grammatical correctness. The fear of making grammatical errors in speaking or writing can create external pressures and anxieties. This specific aspect of language learning can significantly impact students' confidence and overall comfort level during ESP classes.

Moreover, pronunciation also contributes to speaking anxiety among students [31][32]. Correct and precise pronunciation, along with accurate language comprehension, is crucial. It enhances the learner's confidence, making pronunciation a vital aspect of speaking. Sure, students admitted needing help with their speaking style, errors in speech, pronunciation, and managing speaking situations. Pronunciation-related anxiety can impede effective communication and deter students from participating in speaking activities, further intensifying their speaking anxiety.

Lastly, students often experience anxiety due to their external feelings and the perceived judgment of their peers or classmates [33]. Students may fear being judged by their peers or instructors based on their language proficiency. This fear of judgment can create anxiety during speaking activities and class interactions. For sure, students, this issue revolves around 'emotional conflict' or 'self-respect.'

3.2.2 Internal Factors

Internal factors play a significant role in influencing the level of anxiety experienced by individuals. These factors, originating from within an individual, can vary widely and include personal beliefs, thoughts, emotions, and past experiences.

Speaking a language without anxiety or fear is closely linked to the speaker's confidence [34]. Anxiety arises when a student feels the need to impress the audience but lacks self-assurance in their abilities. Some students have expressed feeling "lack of confidence while speaking." This lack of confidence could be due to inadequate knowledge of the language's vocabulary, weak pronunciation skills, or grammar issues. These factors are recognized as highly significant in this context. Studies have confirmed that a lack of confidence is a significant emotional factor, and its consequences lead to reduced performance levels. Besides, shyness is also a crucial factor contributing to anxiety, mainly when students must utilize the target language.

Furthermore, the fear of performing on stage is primarily linked to performance anxiety and fear [29]. This feeling arises when an individual is required to speak or present in front of a class or an audience. In practical terms, the common cause of anxiety during speaking activities is stage fright. They emphasized that speaking feels like confronting the audience, and the fear prevents them from speaking confidently on stage.

4. CONCLUSION

The result of the study paints a vivid picture of the varying degrees of anxiety experienced in the language class. Approximately 48.7% exhibit mild anxiety, characterized by occasional uncertainty and worry, which, although present, does not significantly impede their participation. The majority, around 68.4%, face moderate anxiety, leading to nervousness and inhibitions, particularly in speaking and understanding tasks, affecting their active engagement. Furthermore, 78.9% demonstrate severe anxiety, indicating substantial communication and class activities, distress in significantly hindering their learning process. Additionally, certain situations highlight high anxiety levels, particularly in attending class and dealing with course content. This comprehensive overview underscores the pressing need for targeted support and interventions to address these anxiety issues effectively and create a more conducive learning environment for all students.

ESP students face anxiety from external factors like language proficiency and grammar concerns. The fear of judgment and stage fright exacerbate internal pressures. Confidence is crucial, with inadequate language skills hindering performance. Addressing these factors through tailored support and a positive learning environment is essential for mitigating student anxiety and enhancing their overall experience in ESP classes.

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