## Does Anxiety Affect Written Communication? A study of Engineering Students in Indian Context

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#### **ABSTRACT**

This research paper aims to identify types of written communication strategies (CSs) used and frequency of using them by engineering students with high and low level of anxiety. The data on students' anxiety level was collected by using Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz & Cope et. al. (1986). Three written tasks (letter writing, email writing, report writing) were given to select subjects of the study. Their responses were collected on plain papers. By using an advanced cell phone with strong audio recorder, students' retrospective interviews were audio recorded. To analyze the data taxonomy on communication strategies was adapted from the taxonomies of Arndt (1987), Wenden (1991), Victori (1995), Riazi (1997), and Saski (2000).

Results showed that high anxious students used planning, re-reading, revising, literal translation, word coinage, circumlocution, paraphrase, generalization and getting help; rehearsing and resourcing were used more by low anxious students. Repetition and using similar words were used equally by both high and low anxious students.

Keywords: Written Communication Strategies, Anxiety, Engineering students

#### Introduction

Writing has been described as having three main activities: plan-ning, formulating or composing and revising, which in the traditional understanding of writing was understood as a linear procedure, a strict "plan-outline-write" that had little to do with the complex activities that teachers observed in their writers' composing

processes, as these were much more than building grammatically correct sentences (Peñuelas, 2012). However, observations of writers during the process of composing resulted in a large range of recursive activities, such as gathering ideas, writing them down, composing, editing, reading, rescanning and proofreading. Such activities became fundamental in the fields

of learning and educational psychology in an attempt to understand how people undertake learning tasks and how to provide strategy instruction so that students become successful lear-ners (Jones et al., 1987; Weinstein et al., 1988). It was the belief among cognitive psychologists that strategies are deliberate actions that learners select, implement and manage in order to carry out writing tasks. As Jones et al. (1987, p. 15) explained it: "an effective learner or good strategy user knows when to use a given strategy as well as when to abandon it and select another one".

Very less amount of research has been done on communication strategies used by low and high anxious engineering students in different written communicative situations in India. Most of the teachers are unknown about the importance of teaching communication strategies to their students. Hence, the present research, conducted in order to find out insights regarding communication strategies used by second year engineering students helps to make teachers aware of the crucial role communication strategies play in second language learning and to contribute to the research outcome in the field of communication strategies used by engineering students. The research also focuses on the type of communication strategies used by low and high anxious students.

#### **Theories**

#### **Anxiety**

Language Anxiety can bring about several

problems in the process of language learning as it can hinder the students from mastering the language. Anxiety refers to concern and fear, especially about what might happen (Oxford dictionary, 1995, p. 16) and language anxiety refers to a type of anxiety unique to second language learning (Horwitz et al., 1991, p. 25).

What are the causes that hinder or stop learners to succeed in learning a second/ foreign language? Most of the time, students' feeling of stress, anxiety or nervousness may impede their language learning and performance abilities. Theorists and Second Language Acquisition (SLA) researchers have reiterated that these feelings of anxiety are specifically associated with learning and speaking a second/foreign language, which distinguishes SL/FL learning from learning other skills or subjects. Both language teachers and students are aware and generally feel strongly that anxiety is a major hurdle to be overcome when learning to speak another language.

According to Horwitz et al. (1991) language anxiety means the feeling of nervousness, worry, or uneasiness experienced by foreign language students. Many students, especially in a classroom situation, find that learning a foreign language is stressful especially if they have to perform something using foreign language due to the fear of making mistakes, high feelings of self-consciousness, and the desire to be perfect when speaking (Foss et al., 1991).

There are three divisions of language anxiety: test anxiety, fear of negative evaluation, and communication apprehension. "Communication apprehension is the fear or anxiety an individual feels about orally communicating." (Daly, 1991, p. 3). Formerly McCroskey (1970) viewed CA as a multi-based anxiety linked to oral communication. It usually occurs in a classroom situation. Students may avoid talking or writing in foreign language because they are unprepared, uninterested, lacking confidence, and because they are afraid communicating. characteristics of a person with high communication apprehension level are-they have difficulties in concentrating, become forgetful, and sweat much (p.3). Albert P'Rayan (2008) denotes CA as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons.

#### **Communication strategies**

"When language learners are unaware of how to say a word in English due to fear or anxiety, they can communicate effectively by using their hands, imitating sounds, inventing new words, or describing what they mean. These ways of communicating are communication strategies (CSs)". "Communication strategies are attempts to bridge the gap between the linguistic knowledge of the second-language learner and the linguistic knowledge of his or her interlocutor in real communication situations" (Dornyei, 1995).

As per Selinker's (1972) views, "Strategies

of Second Language Communication" are the ways in which foreign/second language learners deal with the difficulties they encounter during the course of their speaking performances in target language when their linguistic resources are inadequate.

Many of the researchers proposed several definitions of communication strategies since the notion of 'communication strategy' was first introduced by Selinker (1972). But he did not deal with communication strategies in detail. Tarone, Cohen and Dumas (1976-1977), and Tarone, Frauenfelder and Selinker (1976) defined 'communication strategy' as "systematic attempt by the learner to express or decode meaning in the target language (TL), in situations where the appropriate systematic target language rules have not been formed". One of the definitions most often referred to is the one provided by Tarone (1980) that communication strategies are considered as "a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures are not shared".

The focus of the present research is to check the level of anxiety of the engineering students and find types and frequency of communication strategies used by them.

#### **METHOD**

#### **Participants**

Twenty four participants of this study were second year engineering students from various branches (like- Chemical, Mechanical, Computer, IT, EXTC, Civil, etc.) from four engineering colleges of Ratnagiri district in Maharashtra, India. These students were selected by using stratified random sampling.

#### Context of the study

The present study was carried out in four engineering colleges from Ratnagiri district in Maharashtra, India. These colleges are in Konkan region and affiliated to Mumbai University. The students admitted to various engineering departments in these colleges are from Mumbai and other parts of Maharashtra. All selected students do not have the same level of proficiency in English. Generally, students from Mumbai have better communication Skills than those who are from rural areas. Students from English medium and convent background can complete written tasks properly on the other hand, vernacular medium students face many difficulties in writing letters, emails and report thus, they hesitate to write. Students are motivated and have desire to improve their abilities to write better.

#### **Data Sources**

Selected case studies were given all the tasks (letter writing, email writing, report writing). They were provided blank pages to write letter, email and report. After completion of these tasks pages were collected by the researchers. To collect data on communication strategies retrospective interviews were taken and students were told to share their experiences and the problems faced by them while solving given tasks. These interviews were also audio-

recorded. The purpose was to identify and quantify the communication strategies used by low and high anxious students in selected written tasks. The retrospective interviews were held to obtain information from the participants about their internal thought processing while solving the tasks, and their knowledge of communication strategies. Observation notes were taken to study students' behaviors while completing written tasks.

#### Method of analysis

Students' written tasks were studied by the researchers rigorously to identify their use of various communication strategies. Students' retrospective interviews were also transcribed to know what planning they did to solve the given tasks.

### Taxonomy of written communication strategies

Taxonomy for the written communication strategies has been adapted from the taxonomies of Arndt (1987), Wenden (1991), Victori (1995), Riazi (1997), and Sasaki (2000) as they are considered pioneer in written strategies research. The selected items in the taxonomy used in the present research are as follows.

- 1. Planning: This strategy involves deciding the task purpose which is very much useful for all language skills. The strategy of considering the purpose is an important one, because knowing the purpose for doing something enables learners to channel their energy in the right direction.
- 2. Rehearsing: It includes practicing ideas

and the language structures in which to express them. This strategy helps learners to produce contents needed to complete written tasks. It also gives students confidence to perform better.

- **3. Repetition:** It means repetition of key words and phrases. This strategy is used by the learners when they cannot remember required lexical items.
- **4. Re reading:** It includes re reading the content that has written down. This strategy provides benefit of editing and correcting mistakes.
- **5. Resourcing:** Learners sometimes ask their teachers, researcher, or refer to dictionary for getting words/meaning/structure, etc. This strategy is very much useful as it helps learners not to leave task incomplete.
- **6. Revising:** It involves making changes in plan, written text, making changes to the written text in order to clarify meaning. By using this strategy students can revise the inappropriate content and try to write correct and suitable utterances.
- **7. Reduction:** This strategy is used to alter the message by omitting some items of information, make the ideas simpler or less precise, or something slightly different that has similar meaning.
- **8. Translation:** Translating can be a helpful strategy for beginners in language learning. They need to use it carefully. It allows learners to use their own language to understand what they hear and read in new language.

- **9. Use of similar words:** It means using synonyms or the words which seem to have the same meaning. Uses of synonyms or similar words help learners to continue the task.
- **10. Word coinage:** This strategy means making up new words to communicate a concept for which the learner does not have the right vocabulary. For instance, Sanjana says *airball* to mean *balloon*. Rajiv does not know the expression *bedside table* therefore coins the expression *night table*.
- **11.Circumlocution:** In this strategy the learner uses a circumlocution (a roundabout expression involving several words to describe or explain a single concept) or synonym (a word having exactly the same meaning as another word in the same language) to convey the intended meaning.
- **12. Paraphrase:** It includes using other words for the same message/meaning. This strategy helps learners to write the message in simple words if they have grammar and vocabulary difficulties.
- **13. Generalization:** In this strategy learners overgeneralize some rules of grammar and syntax. Learners use this strategy when they lack knowledge of grammar and vocabulary.
- **14. Getting Help:** This strategy allows learners to ask for help from teachers, friends and others.

#### Findings and discussion

The **figure 1.1** below shows the percentage of overall use of CSs in written communicative situations.

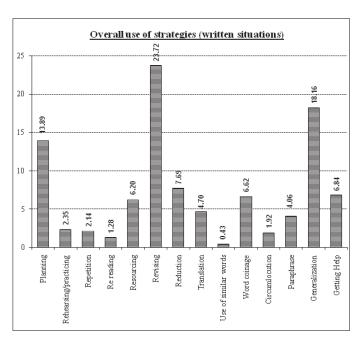


Figure 1.1 Overall percentage of use of CSs in written communicative situations

After analyzing the selected students' use of CSs in written communicative situations it is found that these selected engineering students used more strategies in letter writing task compared to email and report. In comparison with other strategies these students used revising (23.72%), generalization (18.16%), and planning (13.89%) frequently. As they got enough time to think low anxious students tried to make their task attractive by using different words; while high anxious and those who are poor in sentence construction and grammar tried to be grammatically correct by revising and restructuring utterances.

It was also observed that students have coined inappropriate words when they did not get suitable words. Very few students re-read the task after completion. Though they had time they did not take effort to reread the task and correct their errors.

Most of the time high anxious students were thinking 'what would happen if they would make mistake'; 'is researcher going to ask them to read their task loudly'; 'if there are mistakes, other students would laugh at them', etc. So rather than completing task with full concentration these students were engaged in thinking such unnecessary things.

Almost all the students did planning to solve the tasks. Many times their planning steps were appropriate but while writing they made mistakes. According to some students they had thoughts in their mind but they were not able to express them in writing due to vocabulary and construction problems. Some students really knew the importance of practice of such task but other students practiced these tasks from exam point of view only.

Reduction (7.69%) was used moderately in all the tasks. It can be concluded that the students tended to reduce the content as they could not write grammatically correct sentences. Instead of using circumlocution and paraphrase the students choose to reduce the content. The percentage of paraphrase (4.06%) and circumlocution (1.92%) is less than the percentage of reduction (7.69%) in all the tasks.

Translation (4.70%) was used only in letter and email. The students were in habit of thinking in their mother tongue. So, they translated the content. But in report they did not use it. Getting help (6.84%) was also moderately used in all the tasks. The low anxious students initiated to clarify their doubts but high anxious students used reduction strategies rather than taking help. Resourcing (6.20%) was also moderately used strategy. Many of the selected engineering students were found not taking extra efforts to add correctness, and novelty to their tasks.

# Comparing high anxious and low anxious students' use of CSs in written communicative situations

In written communicative situations high anxious students have used more strategies than low anxious students.

Low anxious students used planning for 46.15% and high anxious students used it for 53.85%. Low anxious students were found confident in written tasks also. While solving written tasks some of the low anxious students directly started writing their tasks. They did not plan their task

beforehand. But, as high anxious students had a kind of fear in their mind they first planned the task, thought over it and started writing.

Low anxious students used rehearsing for 72.73% and high anxious students 27.27%. Low anxious students were aware of the importance of rehearsing in writing tasks. But high anxious students were not found sincere about rehearsing.

Both types of students used repetition equally that is 50% each. It means repetition is useful for both high and low anxious students. Re-reading was used for 33.33 % by low anxious students and 66.67 % by high anxious students.

Low anxious students used 58.62% resourcing and high anxious students 41.38%. It can be concluded from this data that low anxious students took extra efforts to improve their knowledge of English language. In retrospective interviews they revealed that they use dictionaries and grammar books to solve their doubts in language problem.

Revising strategy was used for 20.72% by low anxious students and 79.28% by high anxious students. It was observed that high anxious students had revised some words and sentences frequently. It can be concluded from it that high anxious students might be confused and as they had sufficient time to write, they revised their utterances to make their task meaningful and grammatically correct. On the other hand, low anxious students were so confident that they used revising strategy less.

Low anxious students used reduction for 47.22% and high anxious students 52.78%. Whenever high anxious students found difficulties in explaining, they reduced the message instead of taking risk of writing. Low anxious students also tended to reduce the message but the reason for their reduction was different. They reduced content of their tasks because they were confident about clarity of the message conveyed.

Low anxious students used literal translation for 22.73% and high anxious students 77.27%. Low anxious students knew the structure and elements of all written tasks; those who did not know they got clarified their difficulties and completed their tasks. As their vocabulary and sentence construction was good they did not use literal translation frequently. But high anxious students' anxiety level was less in written tasks compared to oral tasks so they used literal translation frequently in written tasks.

Use of similar words was used equally by both types of students. Word coinage was used for 32.26% by low anxious students and 67.74% by high anxious students. High anxious students had problem of vocabulary. They did not get suitable words; so to complete tasks they coined new words. Most of the time those words were inappropriate.

Circumlocution was used for 33.33% by low anxious students and 66.67% by high anxious students. As high anxious students'

anxiety level was comparatively less in written tasks they dared to describe things and paraphrased some content also. So paraphrase, generalization, getting help these strategies they also used more than low anxious students.

Paraphrase was used 42.11% times by low anxious students and 57.89% by high anxious students. High anxious students used it more as they were not confident about clarity of their message as well as they were not able to extend their messages in more details. Comparatively, low anxious students paraphrased less as they were aware about the exact terminology to be used for transferring the message.

Generalization was used for 27.06% by low anxious students and 72.94% by high anxious students. Here also it is very clear that because of their low competence high anxious students tried to overgeneralize the rules of vocabulary and syntax.

Getting help was used for 31.25% by low anxious students and 68.75% by high anxious students. HA students most of the time depended on a kind of help from others for completing their tasks. Sometimes, they were right in selecting words and syntax. Still, because of high anxiousness and low confidence they sought for help from their peers.

Following graph represents strategywize overall usage of CSs in written communicative situations by HA and LA students.

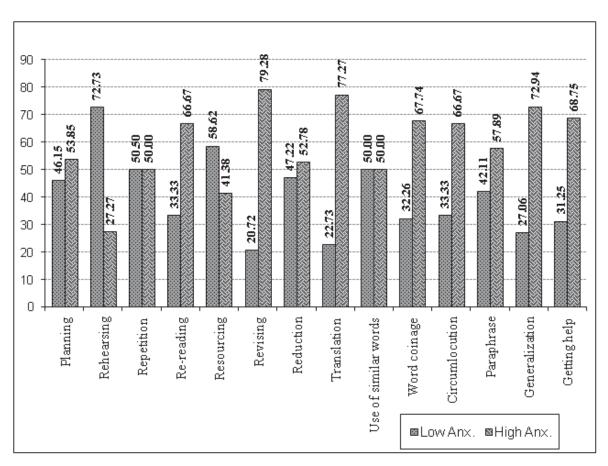


Figure 1.2 Comparison of overall usage of CSs (written situations) by LA & HA students

The above figure shows that planning, rereading, revising, literal translation, word coinage, circumlocution, paraphrase, generalization and getting help are used more by high anxious students. Rehearsing and resourcing are used more by low anxious students whereas; repetition and using similar words are used equally by both high and low anxious students.

#### Conclusion

Amongst the written communicative situations, students experienced comparatively less fear in letter writing than in email writing and report writing. In

comparison with other strategies these students used revising (23.72%), generalization (18.16%), and planning (13.89%) frequently.

The present research has remarkable pedagogical implications. The basic reason of students' poor performance in various written tasks is 'anxiety'. Therefore, if engineering students are made aware of reasons for anxiety in communication and certain remedies on them by implementing CSs that low anxious students use, it will help them increase their confidence level and performance in communication.

It will be better if a chapter on reducing anxiety and using communication strategies is included in the syllabus of engineering courses. This view corroborates Dörnyei (1995) who suggests that communication strategies need to be taught. He also suggests procedures for strategy training which will surely help engineering students reduce their communication anxiety and help improve their communication competence and performance.

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