

Analyzing Communication Apprehension of Engineering Students of Pakistan for Workplace Environment

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Abstract

Communication apprehension is present in academic and non academic settings that affect oral presentation performance of engineering students. The purpose of this research was to explore communication apprehension prevailing among engineering students of Pakistan. Ten (10) engineering students from two engineering universities of Pakistan participated in this study. Purposive sampling method was used since respondents were selected on specific criteria of only final year engineering students. All presentations were video recorded to capture communication apprehension related barriers that influenced effective oral presentation performance of engineering students. Data were analyzed qualitatively using oral presentation assessment rubric based on four communication apprehension traits such as oral communication skill, credibility or confidence, gestures or purposeful use of body and appearance nervous mannerism. Three assessors assessed these presentations to overcome researcher bias. The results of the study revealed that communication apprehension affected oral communication skill and credibility or confidence of engineering students. In addition, due to communication apprehension they faced nervousness during oral presentation performance. The findings of the study can be used as a guideline to overcome communication apprehension of engineering students to prepare them productive engineers for modern industry.

Keywords: Communication apprehension, Engineering Workplace, Engineering students

1. Introduction

Communication apprehension has been researched to improve oral communication skills of students (Aly and Islam, 2005) because it badly affects students' academic success (McCroskey et al., 1989). Thus, to develop communication skills of students first it is important to overcome communication apprehension (Hassall et al., 2000) of engineering students before they become part of workplace. High communication apprehensive engineering students tend to be less accountable for communication activities in the class. They usually complain that they face certain barriers that force them to remain silent in the class. These barriers can be poor oral communication skill, low self confidence, nervousness, low self esteem, reticence and shyness. Communication apprehension has been named with different names such as stage fright, reticence, shyness, unwillingness to communicate and audience sensitivity. McCroskey et al. (1978) illustrated that communicative apprehensive engineering students face fear and anxiety, low self confidence and stress and nervousness for oral communication and oral presentation. The most popular definition of communication apprehension comes from McCroskey (1977: 78) as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons". Although definitions of communication apprehension may differ but they contain common elements of distress, fear, anxiety and stress and nervousness (McGuire et al., 1995).

When we look at the types of communication apprehension it contains four types of apprehension such as trait-like

apprehension, generalized-context apprehension, person-group apprehension, and situational apprehension (McCroskey et al., 1986). Trait apprehension is enduring orientation based on personality and is consistent across variety of variables (McCroskey et al., 1986). Generalized apprehension is similar to trait-like apprehension, because an enduring personality orientation is base for both types of apprehension. The apprehension level in generalized-context usually differs from one context to another such as an engineering student can be highly apprehensive in oral presentation but less apprehensive in peer conversation and discussions. Context apprehension includes four types of apprehensions such as public speaking, dyadic situations (job interviews), small group discussions and meetings or classes (Richmond et al., 1982). Person group apprehension is related with individual reactions to communication with given individual or people across time. This type of fear occurs communicating with boss, teacher, or colleagues and it is relatively normal to be apprehensive communicating with a person or group of people. Situational apprehension exists at very end of communication apprehension and is experienced communicating with an individual or group of audience in a single situation. Many people experience this type of apprehension and it has been measured as temporary orientation with individual person or many persons. This type of apprehension contains a type of anxiety that students face once in a particular situation such as when teacher calls a student to explain certain topic or behaviour in a class or in his or her office.

Communication apprehension is generally considered as trait like behaviour or state like behaviour. Trait like apprehension is characterized by fear or anxiety in all types of oral communication activities such as small group or large group. On the other front, state like apprehension is “a normal anxiety response that most people experience when confronted with oral communication in some sort of public setting” (Lederman, 1982, pp. 281, 281). Engineering students with trait like apprehension generally face apprehension in oral communication activities and this apprehension varies from one context to other. According to McCroskey (1977) students with high level of apprehension avoid from oral communication interactions. He further indicated that communicative apprehensive students face low self esteem and it is accountable for their poor academic performance. High communication apprehensive students talk less compared to less apprehensive (William Jordan et al., 2007) engineering students and it affects their oral communication performance such as oral presentations. Thus, apprehensive engineering students usually fail to obtain better job opportunities following graduation due to communication apprehension.

Communication literature suggests that oral communication plays important role for graduate placement (Aly and Islam, 2005). In this perspective, engineering students are required to practice oral presentations to overcome this barrier before they join the workplace. Daly et al. (1989) stated that 75% of people face public speaking apprehension, 25% small group, and 10% dyadic conversation apprehension. Employees with communication apprehension are less productive and cost more expenditure for organizations (Richmond, 2009). Richmond further stated that communication apprehensive employees no longer stay in one organisation. This is because due to communication apprehension they tend to be less productive and employers terminate their jobs following employment. Thus, apprehensive engineering graduates tend to increase unemployment in engineering profession of Pakistan. Employees with communication apprehension are less productive for organizations (Shockley-Zalabak, 2006).

High communication apprehensive engineering students usually avoid taking part in oral presentations due to nervousness and due to this barrier they perform short presentations. Moreover, due to communication apprehensive they usually take back seats in the class to escape from direct communication with teachers. Thus, these graduates following graduation desire low communication with people at workplace. Ayres et al. (1998) noted that graduates with communication apprehension avoid for job interviews and try to engage less communication during job employment interviews. They desire a job position that requires lower communication with people even they get poor salaries with poor job positions. Graduates with high communication apprehension avail lower job opportunities (Daly et al., 1975).

If engineering graduates of Pakistan desire a better job position with better salary packages they have to overcome communication apprehension in order to perform workplace jobs successfully and uplift business of organizations at international level. Employers give importance to all communication skills but generally they give more importance to oral communication and oral presentation skill (Hynes & Bhatia, 1996) of engineering graduates. Oral

communication is a major deficiency (Burk, 2001) of engineering graduates. Communication apprehension is directly related with oral communication performance of engineering students and it is a most cited barrier in various communication studies. Communication anxiety, stage fright, social anxiety, performance anxiety, poor confidence, unwillingness to communicate, reticence, shyness, confusion, fear, low self esteem, stress and nervousness and audience sensitivity all are directly related with communication apprehension of engineering students.

2. Methodology

The research approach used for this study carried qualitative methods in terms of recording of oral presentations. Video recordings provided better insights to explore barriers pertaining to communication apprehension that affected oral presentation performance of engineering students.

2.1 Sample

Ten (10) engineering students from 2 engineering universities of Pakistan participated in this study. Purposive sampling method was used because participants were drawn on specific criteria of only final year engineering students. Purposive sampling assists researchers to select suitable respondents for the study (Creswell et al., 2007).

2.2 Instruments

The instruments used for this study were video recordings. Participants selected topic of presentation according to their own choice because the main objective of this researcher was to assess communication apprehension that affected oral presentation performance of engineering students.

2.3 Participant Characteristics

All participants were undergraduate final year engineering students. These participants come from the discipline of civil engineering and electrical engineering.

3. Data Analysis

Data were analysed qualitatively but results were presented quantitatively in terms of percentages for each communication apprehension trait included in the assessment rubric. This assessment rubric was partially adopted from "*Impact of Digital Video on Communication Skills in Business Education*" (Leeds Elke M., 2007). This assessment rubric was relatively related with communication apprehension barriers of engineering students. Leeds Elke M. (2007) assessments contained the traits of 'credibility or confidence', 'eye contact or absence of reading', 'appearance nervous mannerisms', 'gestures or the purposeful use of the body' and 'vocal variety'. However, the assessment rubric used for this study contained '*oral communication skill*' (speaker communicates his ideas clearly, effectively and skilfully), '*credibility or confidence*' (presenter appears credible and knowledgeable about subject matter), '*gestures or the purposeful use of body*' (Speaker purposefully uses hands, arms, shoulders and head to reinforce presentation purpose) and '*appearance nervous mannerisms*' (Presenter displays non purposeful body movements and nervous gestures). A 5 point likert scale ranging from 'disagree', 'strongly disagree', 'undecided', 'agree' and 'strongly agree' was used to compute these percentages.

4. Study Results

The results provided valuable insights related to communication apprehension barriers that affected oral presentation performance of engineering students. These findings are presented in percentages on the basis of assessors' agreement and disagreement for each trait included in the rubric used for this study.

4.1 Oral Communication Skill

The results for oral communication skill indicated that 46% responses were recorded as disagreed, 10% strongly disagreed, 7% undecided, 27% agreed and 10% strongly agreed (Fig.4.1). Thus, results indicate that communication apprehension affected oral communication skill of engineering students during oral presentations.

4.2 Credibility or Confidence

The results for credibility or confidence indicated that 30% responses were recorded as disagreed, 20% strongly

disagreed, 3% undecided, 40% agreed and 7% strongly agreed (Figure, 4.2). Thus, results indicate that due to communication apprehension engineering students possess poor credibility or confidence during oral presentations.

4.3 Appearance Nervous Mannerisms

The results for appearance nervous mannerisms indicated that 7% responses were recorded as disagreed, 20% strongly disagreed, 10% undecided, 50% agreed and 13% strongly agreed (Figure, 4.3). Thus, results indicate that due to communication apprehension engineering students faced nervousness during oral presentations.

5. Discussion

The first finding of the study indicated that due to communication apprehension engineering students possessed poor oral communication skill. For 'oral communication skill' 56% responses were recorded that engineering students possessed poor oral communication skill. Resultantly, it affected their oral presentation performance. The second finding of the study was that due to communication apprehension engineering students' possessed poor credibility or confidence during oral presentations. For 'credibility or confidence' 50% responses were recorded that engineering students possessed poor credibility or confidence during oral presentations. In addition, the third finding of the study was that due to communication apprehension engineering students faced nervousness during oral presentations. Thus, for 'appearance nervous mannerism' 63% responses were recorded that due to communication apprehension engineering students faced nervousness during oral presentations. This clearly indicates that communication apprehension largely affected oral presentation performance of engineering students. It is envisaged if the problem of communication apprehension of engineering students is not redressed at graduation level, it shall affect their job performance at workplace. In other words, it shall affect workplace productivity of organizations and employers shall never bear this financial loss. If the situation is analysed engineering students possess communication apprehension due to poor oral presentation practice. Additionally, communication courses do not focus communication apprehension of engineering students. It is a fact that engineering universities of Pakistan have added some English or communication courses in engineering curriculum to develop communication skills of engineering students. Unfortunately, these courses do not focus how to overcome communication apprehension of engineering students. As a result, majority of engineering students face communication apprehension during oral presentations. Thus, communication teachers should provide ample opportunities of oral presentation to engineering students to overcome their communication apprehension before they join workplace. Thus, it shall assist engineering students to perform oral communication and oral presentation tasks in the workplace in a befitting manner following graduation at workplace.

6. Conclusion

The results for the study indicated that communication apprehension affected oral communication skill and credibility or confidence of engineering students. Additionally, due to communication apprehension engineering students faced nervousness during oral presentations. This means if communication apprehension of engineering students is not checked at university level it shall affect their job performance at workplace which is never in the better interest of organizations as well as engineering students. In view of this, it is the responsibility of engineering universities to provide oral communication skills trainings to engineering students to prepare them productive engineers for organizations. It is envisaged that if the problem of communication apprehension of engineering students of is not addressed at university level organizations shall not hire them for workplace jobs; resultantly it shall increase unemployment in engineering profession of Pakistan.

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Biographical Notes

Inayatullah Kakepoto earned his Master of Arts (English Literature) from Shah Abdul Latif University Khairpur (Sind) Pakistan. His teaching experience is spread more than over a decade as Lecturer at Cadet College Petaro (Pakistan Navy) and as Assistant Professor Quaid-e-Awam University of Engineering Science and Technology Nawabshah (Sind) Pakistan. Currently he is a doctoral student at Universiti Teknologi Malaysia. His research interests include workplace communication, soft skills, business communication and engineering education.

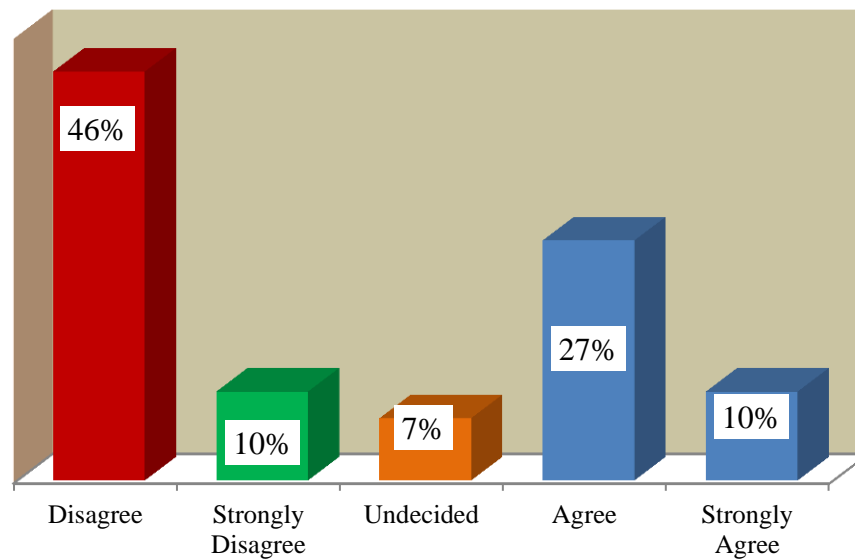


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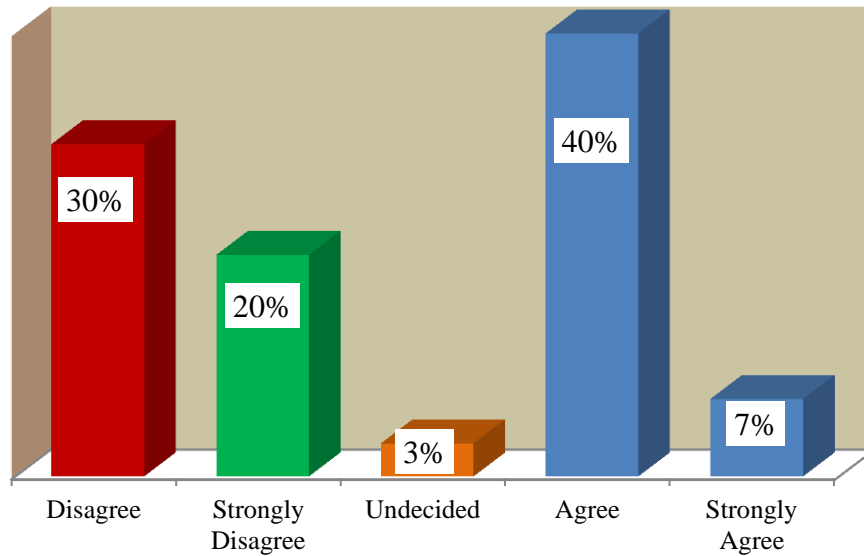
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Oral Communication Skill



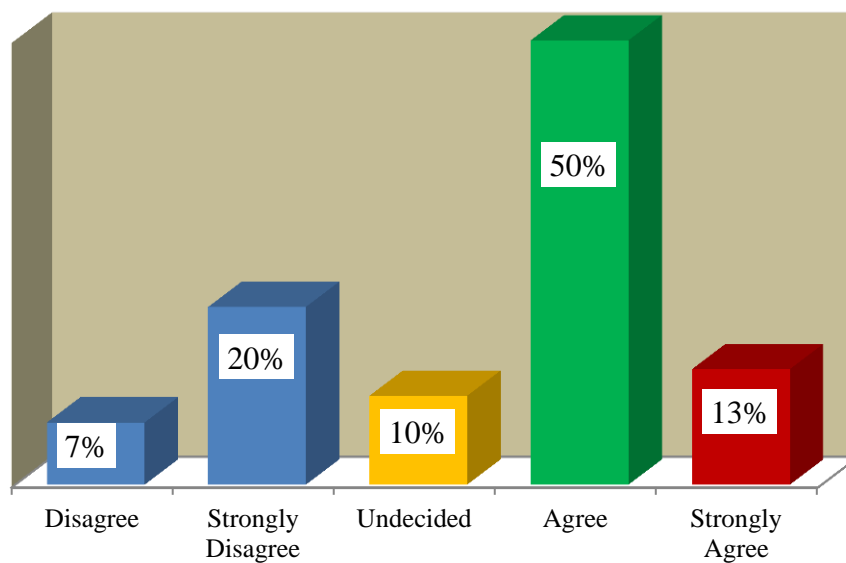
Figure, 1: Poor oral communication skill as communication apprehension for engineering students

Credibility or Confidence



Figure, 2: Poor credibility or confidence as communication apprehension for engineering students

Appearance Nervous Mannerisms



Figure, 3: Appearance of nervous mannerisms as communication apprehension for engineering students