ABSTRACT

The complexity of human communication makes English language learning in India, one of the greatest challenges in the field of education. Today, in this technologically advanced world, the goals of language learning at higher level, particularly, in professional education, have become more specific. The ability to use the language intelligently involves mastering the skills of reading, which is one of the basic skills towards acquiring the proficiency in English language. The learners are expected to cope with the growing demands of the engineering curriculum and understand the complex technical materials to succeed in all their educational endeavours. With a view to meeting these demands, the English language teachers need to identify the distinctive and compatible teaching methods and to adapt appropriate strategies to enhance the reading skills of the learners. Further, a number of factors such as perception, attention, attitude, motivation, interest, and individual differences (performance of male and female) influence the reading process. Though much research has been devoted to identify the influence of factors which affect reading process, only few studies have been conducted to find out the influence of certain specific reading strategies and their use in reading comprehension tests across the stages of learning at the tertiary level. The proposed study attempts to find out the following objectives: (1) to investigate the relationship of different reading strategies / constructs and their use in reading comprehension tests and (2) to assess the performance of male and female students of first year engineering in various reading comprehension tests.

Based on the objectives of the present study, the hypotheses are developed as follows: (1) there will be a mean score difference in the performance of male and female students of first year engineering of the selected institutions in various reading comprehension passages and the readers' strategic use and (2) there will be a mean score difference in the impact of independent reading strategies such as Planning, Paying attention, Inference, Comprehending and Reflection. In order to meet the issues related to the objectives and hypotheses, a large scale data collection / survey research design is selected for generating the primary data for the study. 402 students (204- female and 198-male) from the selected engineering institutions -- PSG College of Technology (PSGCT), Kumaraguru College of Technology (KCT) and Sri Krishna College of Engineering and Technology (SKCET) -- are taken as sample for the study. The data are collected by using five reading comprehension passages with 150 questions (each passage with 30 questions). For each passage, a variety of question types – Identifying topic sentences, Multiple Choice questions, Inserting the sentence, Matching the vocabulary and Identifying True / False / Not given statements – are constructed along with a reading strategy use questionnaire (65 questions) in order to find the readers' use of strategies. The strategies are clustered into five major constructs such as Planning, Paying Attention, Inference, Comprehending and Reflection. The sub constructs such as Prediction, Background Knowledge, Rereading, Checking Comprehension, Summarising, Identifying Difficulties, Judging and Reflecting the practices are also identified. Rigorous statistical methods are used to assess and validate the constructs. The methods used are one-way ANOVA, Tukey HSD Post Hoc Tests and Independent sample tests (using SPSS v.16) and structural equation modeling (SEM) and composite reliability using PLS path modeling software.

The findings of the study reveal that there are significant differences between and within the group of students of the selected institutions. Both the male and female students perform differently in different reading passages. The female students performed slightly better than the male students irrespective of the selected institutions. The overall performance of the students of PSGCT is better than the other two institutions – KCT and SKCET. Further, PLS path modeling using SEM reveals that all the proposed constructs used in this study significantly influence the performance of the students' reading comprehension tests. Limitations of this study are discussed and recommendations for future research are presented.