

## Documents

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**English Language Speaking Anxiety, Self-Confidence and Perceived Ability among Science and Technology Undergraduate Students: A Rasch Analysis**

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**Abstract**

The purpose of this paper is to analyse English language speaking anxiety, self-confidence, and perceived ability in English oral communication among Science and Technology undergraduate students. It also aims to identify any significant differences in these constructs based on selected students' demographic variables. The study employed the survey method with a 41-item questionnaire administered to a voluntary response sample of three hundred 3rd and 4th-year science and technology undergraduates from three Malaysian public universities. The Polytomous Rasch model was used to analyse the data. The analysis showed that the participants experienced English speaking anxiety, low confidence, and high perceived ability in English oral communication. There were significant mean differences in English speaking anxiety across the type of university as well as in confidence and perceived ability based on academic program. The participants were more confident and could perform better in familiar situations and communicate on familiar topics to familiar audiences. The findings suggest that the participants need more training on English oral communication. More authentic situations are also needed for them to practise and improve their proficiency levels. Other suggestions include providing lecturers with training modules, re-assessing the current language policies, and implementing certain programmes at the tertiary education level. Language programmes could be directed towards more social situations to enable undergraduates to make English a social practice, lower English speaking anxiety, and boost confidence. © Universiti Putra Malaysia Press.

**Author Keywords**

Confidence; English oral communication skill; Perceived ability; Rasch Model Analysis; Science and technology undergraduates; Speaking anxiety

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