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THE EFFECTS OF MATHEMATICS ANXIETY TOWARDS STUDENTS' BEHAVIOUR AND PERFORMANCE IN PRE-UNIVERSITY STUDIES

by Emmerline Shelda Siaw, George Tan Geok Shim, Farah Liyana Azizan, and Norhunaini Mohd Shaipullah



Introduction

It is normal for students to treat mathematics as a difficult subject and this causes students to avoid solving problems that involve counting and numbers (Ashcraft, 2002). The on-edge sentiment one experiences when dealing with numerical issue is called mathematics anxiety. Mathematics anxiety appears to be seen in students at schools at all levels and unfortunately it keeps on expanding as school years advance (Yurtcu & Dogan, 2003). Hence, it is logical to say that mathematics anxiety can be increased once students enter pre-university studies. As mathematics is one of the core subjects for all programmes in pre-university, the level of Mathematics anxiety can be a good predictor of students' performance in their academics (Venkatesh & Karimi, 2010). This study focuses on discovering the mathematics anxiety level through questionnaires, interviews and studying its effects on students learning behaviour in pre-university studies. A study of mathematics anxiety and its impacts towards students' conduct can give an understanding of the most proficient method to decrease mathematics anxiety and subsequently influence the class to reduce anxiety in managing mathematical problems.

Methodology

A total of 545 pre-university students from two different groups, which are Life Sciences (LS) and Physical Sciences (PS) participated in the study. This research project used quantitative approaches to analyse the data. For the quantitative approach, an online survey was used to elicit students' responses. There are two parts to the questionnaire. The first part of the questionnaire used in this study is adapted from the Mathematics Anxiety Scale – UK (MAS-UK), which consists of 23 items. The newly devised MAS – UK includes a series of statements concerning situations involving mathematics developed by Hunt, Carter, and Sheffield (2011). For each statement, participants were required to