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Test-taking skills of secondary students: the relationship with motivation, attitudes, anxiety and attitudes towards tests

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Test-taking skills are cognitive skills that enable students to undergo any test-taking situation in an appropriate manner. This study is aimed at assessing the relationship between students' test-taking skills and each of the following variables: motivation to learn mathematics: mathematics anxiety; attitudes towards mathematics; and attitudes towards tests. The study was conducted on a random sample of 626 (372 males and 254 females) secondary school students. The following instruments were used in the data collection: the Test-taking Skills Scale (TSS); the Mathematics Motivated Strategies for Learning Questionnaire (MMSLQ); the Mathematics Anxiety Scale-Revised (MAS-R); the Mathematics Attitude Inventory (MAI); and the Attitude towards Tests Scale (ATS). A positive and significant relationship was reported between students' test-taking skills and each student's motivation to learn mathematics, attitudes towards mathematics, and attitudes towards tests; while mathematics anxiety was shown to have a significant negative relationship with test-taking skills. Test-taking skills account for more than 30% of the variation in motivation to learn mathematics, 25% in attitudes towards mathematics, 17% in mathematics anxiety, and more than 40% in attitude toward tests. The study concluded the improvement of secondary students' testing skills to be significantly correlated with variables that play a substantial role in a student's level of achievement in mathematics.

Keywords: attitudes toward mathematics; attitudes toward tests; mathematics anxiety; motivation to learn mathematics; test-taking skills

Introduction

Test-taking skills are cognitive skills that allow students to undertake any test-taking situation in an appropriate manner, and to know what to do before, during, and after the test (Dodeen, 2009). These skills help students to translate their knowledge from classroom learning to answering and responding to questions when taking tests. Test-taking skills positively affect students' test-taking competency and hence impact upon their academic achievement. Test-taking skills are transferable skills (Sefcik, Bice & Prerost, 2013), where once acquired, students may be enabled to use these skills across a variety of subjects and within different settings and conditions. Moreover, most test-taking skills are useful in a students' practical life, where they may benefit their effective use of time, ability to set priorities, ability to work both fast and accurately, and to make sure ideas become directly evident.