

Abstract

The purposes of this study were to understand whether there was a difference between the girls and the boys in mathematics anxiety among seventh grade students in Macao, to explore the correlation between mathematics anxiety, mathematics attitude, and mathematics achievement, and to analyze the reasons which resulted in mathematics anxiety of students.

The sample of this research consisted of 357 seventh grade students in Macao. Three instruments were adopted including basic data, MARS, MAS. The reliability analysis of testing tools were tested. Various statistical technique, Pearson Product-moment Correlation Coefficient, t-test were used to test the relationships between students' mathematics anxiety and various variables. In-depth interviews were also conducted with 8 students, 4 boys and 4 girls who were taken from two groups measured as high mathematics anxiety and low mathematics anxiety.

Four main findings of this study were as follows:

1. The total mathematics anxiety of the seventh grade students was medium.
2. There was no significant difference between the girls and the boys in mathematics anxiety.
3. Mathematics anxiety was significantly and positively in correlation with mathematics attitude.
4. Mathematics anxiety was significantly and positively in correlation with mathematics achievement.
5. Four main reasons which resulted in mathematics anxiety of the seventh grade students were as follows:
 - (1) pressures from exams and tests,
 - (2) influences from teachers,
 - (3) frustrations after experiencing numerous failures,
 - (4) Difficulty in contents of curriculum.

Certain suggestions were made in accordance with the above result, which were as follows:

1. improve students' confidences,
2. help students experience more success,
3. help students of seventh grade be interested in mathematics,
4. adjust the difficulty of teaching materials,
5. improve the teaching method,
6. improve the evaluation method.