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RELATIONSHIP BETWEEN PERCEPTIONS OF MATHEMATICS CLASSROOM
LEARNING ENVIRONMENT AND ACHIEVEMENT AMONG FORM TWO
STUDENTS

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RELATIONSHIP BETWEEN PERCEPTIONS OF MATHEMATICS
CLASSROOM LEARNING ENVIRONMENT AND ACHIEVEMENT
AMONG FORM TWO STUDENTS

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HUBUNGAN ANTARA PERSEPSI PERSEKITARAN KELAS MATEMATIK DENGAN PENCAPAIAN MATEMATIK PELAJAR TINGKATAN DUA

ABSTRAK

Kajian ini bertujuan untuk mengkaji perhubungan antara persepsi pelajar terhadap persekitaran kelas matematik mereka dengan pencapaian matematik mereka. Kajian lampau telah menunjukkan bahawa persekitaran kelas mempengaruhi pencapaian pelajar (Fraser, 1986, 1998a). Kajian ini ingin mendapat gambaran tentang persepsi pelajar Tingkatan Dua mengenai persekitaran kelas matematik mereka dan mengkaji samada ianya mempengaruhi pencapaian matematik mereka.

Sampel kajian ini terdiri daripada 250 pelajar Tingkatan Dua dalam 7 kelas dari dua buah sekolah menengah. Sampel kajian telah dikendalikan dengan Soal Selidik 'Personal Form of WIHIC (*What is Happening in This Class?*)' yang telah diterjemahkan kedalam Bahasa Malaysia dan Ujian Pencapaian Matematik. Satu soal selidik dengan soalan terbuka juga dikendalikan bagi mendapat lebih matlumat mengenai persekitaran kelas matematik pelajar. Korelasi hasildarab Pearson dan statistic deskriptif telah digunakan bagi menganalisa data. Kajian ini mendapati pelajar mempunyai persepsi positif mengenai persekitaran kelas matematik mereka. Mereka berpersepsi bahawa mereka berorientasi tinggi terhadap tugas matematik tetapi kurang menjalankan penyiasatan matematik dalam tugas mereka. Mereka juga berpersepsi kurang penglibatan dalam kelas dan kurang mendapat sokongan guru. Kajian mendapati hubungan yang positif dan bersignifikan ($r = 0.2, p < .001$) antara persepsi persekitaran kelas matematik dengan pencapaian matematik. Skala (Dimensi) yang mempunyai hubungan positif dengan Persekitaran Kelas Matematik adalah Skala Penyiasatan,

Penglibatan, Orientasi Tugas, Penekanan Terhadap Pemahaman, Kerjasama, dan Perhubungan. Kajian ini juga mengesahkan kebolehanpercayaan dan kesahan instrumen WHIC yang telah di terjemahkan.

ABSTRACT

The aim of the present study was to investigate the relationship between the students' perceptions of their mathematics classroom learning environment and their achievement in mathematics. It was found that classroom environment has salient effect on achievement (Fraser, 1986, 1998a). This study attempts to find what are Form Two students' perceptions of their mathematics classroom environment and how it might relate to their achievements in mathematics.

The sample comprised 250 Form Two mathematics students in 7 classrooms from 2 coeducational government schools. The sample of the study was administered with the Malay version of the Personal Form of WIHIC (*What is Happening in this Class?*) questionnaire and Mathematics Achievement Test (MAT). An open-ended response questionnaire was also given to obtain further information about their mathematics classroom environment. Pearson product-moment correlation technique and descriptive statistics were used to answer analyse the data. The study finds students have a positive perception of their mathematics classroom environment. They perceived they are task orientated but the task is low in investigative nature. However, they perceived their involvement in the classroom was low and received low teacher support. The study also finds that there is a positive significant relationship ($r = 0.2, p < .001$) between the students' perceptions of their mathematics classroom learning environment and their mathematics achievement. The scales that correlate positively to the Mathematics Learning Environment are Investigation, Involvement, Task Orientation, Emphasis on

Understanding, Cooperation and Cohesiveness. This study also confirms the validity and the reliability of the translated WIHIC instrument.

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