Universiti Teknologi MARA

Measuring Students' Perception on Mathematics Learning by using Fuzzy Conjoint Analysis Method

Case Study: Undergraduate Students of Management Mathematics and Applied Chemistry in UiTM Arau, Perlis

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STUDENT'S DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

This study focuses on the fuzziness in students' perception toward mathematics learning with the use of fuzzy set conjoint analysis model in analysing students' perceptions towards mathematics learning. This study found that students from both courses recorded the highest similarity of degree at level of agreement "neutral" with value of similarity 0.5827 for Management Mathematics and 0.5909 for Applied Chemistry. This implies that the major influenced attributes student's attitudes shows they are not confident with their answer whether to agree or not regarding to their preparation on studying notes before begin the class session thus showing a neutral perception toward mathematics learning. Besides, on the role of lecturers, students of both courses indicated a similar level of agreement with a rating of "strongly agree" but for different attributes. The most influenced attributes among Management Mathematics students strongly agreeing that their lecturers always give extra exercises while Applied Chemistry student strongly agreeing on effort from lecturers that always return back the entire test as students' reference and it conclude that lecturers perform well in their lessons. For students' perspective, the most influenced attributes shows neutral perceptions on their interest to learn mathematics for Management Mathematics student's while Applied Chemistry students' shows neutral perceptions toward difficulties to learn mathematics in short period. This report helps to rank the most influencing attributes of the students' perception toward mathematics and offers suggestions on approaches that can be applied to promote positive views of mathematics.

Keyword: Fuzzy Conjoint Analysis; Fuzzy set; Mathematics; Students' Perceptions

TABLE OF CONTENTS