

KAJIAN KEPUASAN PELAJAR KEJURUTERAAN UNIVERSITI DI MALAYSIA MENGGUNAKAN PEMODELAN PERSAMAAN BERSTRUKTUR

(A Study of Engineering Students' Satisfaction in Malaysian Universities
Using Structural Equation Modelling)

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ABSTRAK

Dalam makalah ini dikaji tahap kepuasan pelajar terhadap pembelajaran bidang kejuruteraan menggunakan analisis faktor penerokaan (EFA) dan persamaan pemodelan berstruktur melalui analisis faktor pengesahan (CFA). Sampel kajian terdiri daripada 500 orang pelajar daripada 6 buah universiti di Malaysia yang telah menjalani latihan industri dalam tempoh pengajian dan mereka yang mempunyai pengalaman bekerja di sektor perindustrian. Instrumen kajian adalah soal selidik yang mengandungi 24 soalan yang dibina berdasarkan domain kepuasan pembelajaran menggunakan skala Likert 7 tahap. Hasil analisis EFA mencadangkan 3 faktor yang terhasil dan seterusnya ditentusahkan melalui CFA. Indeks padanan memberikan nilai $p = 0.000$, khi-kuasa dua relatif = 3.319, CFI = 0.932, TLI = 0.924 dan RMSEA = 0.068. Berdasarkan statistik padanan ini, model CFA kepuasan pelajar terhadap pembelajaran bidang kejuruteraan dapat diterima. Pengenalpastian faktor-faktor kepuasan pembelajaran pelajar kejuruteraan dalam konteks Institusi Pengajian Tinggi (IPT) di Malaysia amat diperlukan di samping menjadi satu penanda aras kepada tahap kepuasan pelajar dalam bidang-bidang lain. Kajian hanya tertumpu kepada tahap kepuasan pelajar dalam bidang kejuruteraan dan pengitlakan perlu dilakukan dengan berhati-hati dalam merumuskan kepuasan pelajar di Malaysia. Kajian ini adalah penting untuk IPT menekankan faktor-faktor yang dikaji, iaitu *penyampaian pembelajaran*, *prestasi perkhidmatan* dan *prestasi universiti* bagi mencapai tahap kepuasan pelajar terutamanya dalam bidang kejuruteraan.

Kata kunci: tahap kepuasan pelajar; analisis faktor penerokaan; analisis faktor pengesahan

ABSTRACT

This study aimed at examining students' satisfaction on learning in the field of engineering using exploratory factor analysis (EFA) and structural equation modeling (SEM) through confirmatory factor analysis (CFA). A sample of 500 students from 6 universities in Malaysia involved in the study which had undergone industrial training and those who had working experiences in industrial sector. The instrument consists of 24 questions adopted from the previous study on learning satisfaction domain using 7-point Likert scale. The findings revealed that 3 factors are identified through EFA and further validated by CFA. The fit statistics give the value of $p = 0.000$, normed chi-square = 3.319, CFI = 0.932, TLI = 0.924 and RMSEA = 0.068. Based on the fit statistics, the CFA model on students' satisfaction towards the field of engineering is admissible. Identification of factors of students' satisfaction in Malaysian context is of great need while being a benchmark in other fields of study. This study focuses on students' satisfaction only in the field of engineering and generalisation should be made carefully to other fields in Malaysia. The study is vital for Institutions of Higher Education (IHE) to emphasise on factors i.e. *learning delivery*, *service performance* and *university's performance* in order to meet students' satisfaction particularly in the field of engineering.

Keywords: students' satisfaction; exploratory factor analysis; confirmatory factor analysis

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Kajian kepuasan pelajar kejuruteraan universiti di Malaysia menggunakan pemodelan persamaan berstruktur

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