

Quality of supervision of Ph.D. program among public universities in Malaysia: a Rasch model analysis

ABSTRACT

This study examines Ph.D. students' satisfaction with the supervision process at four selected universities in Malaysia. In addition, the study also investigated the psychometric properties of Quality Supervision Scale (QSS); specifically the scale dimensionality, construct validity, endorsibility, and estimation of item and person score reliability of the scales. The participants were 153 Ph.D. students of these universities. The QSS includes many qualities of effective supervision such as supervisor academic competency, research methods competency, attitude towards supervisee, faculty academic and moral supports and supervisee's personal traits was distributed to the respondents. The Rasch model analysis was employed to analyze the data for reliability, fit to the model, estimation of satisfaction levels and possibility of scale to function differentially across gender. Results suggested that generally students were satisfied with the supervision processes at these universities. In addition to that, the scale satisfied psychometrics properties by maintaining unidimensionality, reliability, and internal consistency. Furthermore, Rasch analysis revealed that, for gender, differences in overall satisfaction levels between males and females were marginal. The differential item functioning showed that only 6 of 49 calibrated items function differently. This suggested that students' levels of satisfaction were constant across gender. However, the study recommended that future studies should examine the satisfaction level across different disciplines since previous studies suggested that satisfaction differs across different domains.

Keyword: Supervision; Post-graduate studies; Ph.D. students; Rasch model