

## **Management practices and organisation performance in Malaysian public sector: Construct validity using Rasch measurement model**

### **Abstract**

This pilot study was performed to analyse the instrument's validity and reliability based on Rasch model. The purpose of this instrument analysis is to measure the six main study constructs, which are: (1) organisation performance; (2) talent management practices; (3) management innovation practices; (4) knowledge management practices; (5) top management commitment; and (6) dynamic capabilities. A set of questionnaires consisting of 111 items from 6 construct related to this study were compiled based on the literature search. The questionnaires are distributed to one hundred (N=100) senior managers in Malaysian Public Sector and completed the questionnaires. Respondents used a five-point Likert-scale coded as strongly disagree=1; disagree=2; neither agree nor disagree =3, agree=4, and strongly agree =5. The Winsteps software Version 4.4.7 is used to check the functionality of items and the items removal accordingly to the item's polarity statistics as well as suitability. The findings showed that most of the items are found to be suitable with the model because MNSQ values are 0.60 - 1.40 [1] except for seven items with one item indicated a negative point measure correlation, thus confirming that overall items discrimination is good. The findings also found that seventeen (17) items are dropped due to same correlation of residuals for two items and another fourteen (14) items are dropped as the result indicate that the item measuring the same logit with ZSTD value beyond the range [1]. Item reliability and separation is 0.92 and 3.33 respectively. Meanwhile, person reliability is 0.98 and person separation 7.68. In total, thirty-eight (38) items were dropped based on the Rasch analyses with 73 items remain. The statistical analysis proved strong indicator that is in support of the scale validity as well as reliability for the instrument construct. Hence, instrument is valid and reliable to investigate the six constructs of the study.