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## Likert's 4- management system instrument psychometric properties - University management - Malaysia (Article)

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### Abstract

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This current study revitalizes the spirit of research in the field of management, especially an education setting, by using Rasch analysis and Confirmatory Factor Analysis (CFA) to determine the reliability of Likert's management 4- system to measure organizational leadership style. Likert's instrument was tested on academic staff at five public universities in Malaysia to determine their perceptions of the management style used by administrators at their institutions. The instrument was tested from 2014 to 2016, with 1114 faculty members in various disciplines participating. Results indicated that the item and person reliability were (0.99 & 0.87) and the item and person separation indexes were (12.08 & 2.62). All items for management styles yielded infit MNSQ values that ranged from 0.66 to 1.44, and outfit MNSQ values of 0.68 to 1.47 respectively. CFA was run and checked for four indexes for item goodness of fit through AMOS software. The results show good reliabilities, and the items fit the model. Therefore, it can be said that the instrument in Likert's 4- system scale can be used to measure trust and communication and to describe the characteristics of that organization, while also measuring productivity. The research also sheds new light on Likert's management 4- system instrument for use in an educational setting in nations with evolving knowledge-age economies to examine university leadership effectiveness and characteristics and to develop methods to align the objectives of leaders and managers with those of academics. © Universiti Putra Malaysia Press

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