Item Difficulty and Discrimination Indices in True/False, Multiple Choice, and matching questions for Faculty of Nursing fourth year students at the Nursing administration examination

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Abstract:

To examine the quality of our current Year IV (Nursing Administration) multidisciplinary MCQ, T&F, and matching questions and to see if there was any relationship between the item difficulty index and the item discrimination index values in these questions. Materials and Methods: MCQ, T &F, and Matching questions in the study taken from Year IV student in the nursing administration final examination were analyzed to obtain their difficulty and discrimination indices. The examination consisted of 10 true/false, 10 MCQs, and 15 Matching questions, items on topics drawn from different disciplines. The questions were first constructed and vetted by the individual departments before being submitted to a central committee, where the final selection of these questions was made, based purely on the academic judgment of the committee. Results: the students who have high grades in the MCQs, T&F, and matching questions they found no difficulty and distraction in answering these questions. The difficulty and the discriminating power were found among the MCQ questions number 2, 3, 8, 7, while it was found among the T&F questions number 8, 6, 10, 3, and in matching questions it was found among the questions number 5, 4 respectively. There was a non significant positive correlation was found between MCQ and T & F. While, there was a highly significant positive correlation was found between MCQ, and matching questions. It also observed that there is a non significant negative correlation between T &F and matching questions. Conclusions: MCQ items that demonstrate good discriminating potential tend to be moderately difficult items, and the moderately-to-very difficult items are more likely to show negative discrimination. T &F questions were the very difficult questions with discrimination power ranging from low to very high. Matching questions were the easiest and low discrimination power and less distractibility. There is a need to evaluate the effectiveness of our MCQ, T&F, and matching questions items.

Published In:

The New Egyptian Medicine, Vol. 36, No. 6, PP. 84-90