

Prediction of Item Difficulty in English Subtest of Israel's Inter-University Psychometric Entrance Test

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Abstract

The aim of this study was to gain a greater understanding of the factors affecting the level of difficulty of the multiple-choice items, particularly the reading comprehension items, appearing in the English subtest of Israel's Inter-university Psychometric Entrance Test. Isolating these factors would result in a number of practical benefits (designing an item pool in accordance with specific needs, writing items for a text that would be tailored to the difficulty level of that text, etc.) as well as provide support for the construct validity of the test items.

Reading comprehension text variables (level of vocabulary and level of grammatical complexity) were found to have the greatest effect on item difficulty, thus providing evidence for the construct validity of multiple-choice reading comprehension tests. Other variables that were found to be significantly correlated with reading comprehension item difficulty were amount of processing (a text-by-item variable), type of item, length of distractors, and level of vocabulary in stem and distractors (item variables). It was found that the correlation between raters' predictions of item difficulty and actual item difficulty (for reading comprehension items) increased from 0.24 to 0.82 following a detailed process of analyzing texts and items. It seems that this type of process contributes to a greater understanding of the factors affecting item difficulty, and that this knowledge can be implemented effectively by raters in the predictions they make. It is highly probable that item writers would also be able to make use of this knowledge.