ABSTRACT

An Analysis of the Effects of Testwiseness on Scores in Multiple-Choice Tests

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This study concerned a subject's ability to recognise and make use of cues that distinguished a correct answer from incorrect options on a multiple-choice test. Two forms of a 60-item, four-option multiple-choice test were constructed. Item construction principles were purposely violated in 25 items of Test X. Among the 25 flawed items were questions in which: (a) a grammatical inconsistency existed between the stem and the incorrect options, (b) the key was consistently longer than the incorrect options, and (c) implausible options were used as distractors.

These flaws in test item construction, also called testwiseness cues, were found to make the overall test easier. This finding was in agreement with those of Dunn and Goldstein (1959), Millman, Bishop, & Ebel (1965), McMorris, Brown, Snyder, and Pruzek (1972), Weiten (1984), and Evans (1984).

One hundred and fifty-one subjects participated in the experiment. Seventy-six subjects were tested using Test X and 75 subjects were tested using Test Y. These subjects attended 11 secondary schools located in the educational districts of St. Patrick and Victoria. Of the 151 subjects tested, 77 were girls and 74 were boys.

The girls in the sample were found to be significantly testwise, however the boys were not. This finding was not in agreement with that of McMorris et al. (1972) who found no significant difference between girls and boys in terms of testwiseness ability. This investigation also found the reliability of the test was not reduced by the presence of item construction flaws.
This finding, although in agreement with those of Dunn and Goldstein (1959), McMorris et al. (1972), and Weiten (1984), was contrary to those of Board and Whitney (1972), and Sarnacki (1979).

ACKNOWLEDGEMENTS

Sincere appreciation is hereby expressed to all the principals, teachers, and students who participated in this project. This researcher wishes to express his heartfelt thanks to the following people who contributed to this project: Linda Murphy, Rosemary Sieck, Ronald Ramjal, Brian March, Vernell Fersad, Anil Ramroopsingh, and Jennifer Bodge. Special thanks are extended to Eric Headley and his staff at the computer centre of the University of the West Indies, St. Augustine for their invaluable assistance with the data analysis and Mr. Kelvin Jarvis, Librarian/Documentalist, Faculty of Education, The University of the West Indies, St. Augustine.

This researcher also salutes his supervisor, Professor M.G.A. Epejaliya, for the freedom afforded him during his investigation and the courtesy with which he was treated at all times. Finally, the author acknowledges his indebtedness to all those researchers whose investigations and admonitions were of help in this project.