

An Empirical Study of Computerized Adaptive Test in Macau

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Abstract

This is a report on an empirical study of Computerized Adaptive Test (CAT) in Macau, China. After calibrating 170 multiple-choice items in Chinese with 779 students in six schools, a total of 104 items are selected according to item total correlations and difficulties. In the main study, a group of 163 students in two schools are chosen, and each student is asked to conduct a paper-and-pencil test with 54 items and a simplified computerized adaptive test with 20 items from a pool of 50. All students in a class were tested together in computer networks instead of individually. Data collected will include not only the response of each student in each item, but also the corresponding response time in centi-seconds. This will allow estimating students' abilities according to both responses and response times. Experience gathered in this survey will form a good reference for similar studies in Macau. Data collected provides valuable resources for further research and development. Correlation between paper-and-pencil test and computerized adaptive test is not high enough for predictive purpose, which indicates possible effects in using computer as a mean of testing. (185 words)

References

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