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Modelling the predictive Validity of Selection Test

John F Bell
Research Division
Cambridge Assessment
1 Hills Road
Cambridge
bell.j@cambridge.assessment.org.uk
01223 553849

Abstract

The evaluation of selection tests is difficult because the available data is usually only for the selected applicants. This means that usual method of assessing predictive validity, i.e., calculating the correlation coefficient, can be seriously misleading. Depending on the circumstances of selection it is possible to obtain negative correlations between selection tests scores and course outcomes. In this paper, it will be demonstrated that modelling the data can be more useful. In particular, the role of sensitivity analysis in predicting how the rejected applicants would have behaved is considered.

One feature of selection tests that is often ignored in their evaluation is the fact that they are repeated with different cohorts. This has two important advantages in that it allows the assumptions made in the modelling process to be assessed and allows the weight given to a selection test to be determined incrementally.