

## The Predictive Validity of a Two-Step Selection Process to Medical Schools

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### Abstract

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**Background:** A two-step selection process, consisting of cognitive and non-cognitive measures, is common in medical school admissions.

**Aim:** To estimate the validity of this process in predicting academic performance, taking into account the complex and pervasive effect of range restriction in this context.

**Method:** The estimation of the validity of the two-step process included a sequential correction for range restriction and an estimation of the predictive validity of the process in its entirety. Data were collected from 1,002 undergraduate students from four cohorts (2006/07-2009/10) at three medical schools in Israel.

**Results:** The predictive validity of the composite of the cognitive measures with respect to Year 1 performance was high, resulting entirely from the predictive validity of the admission test (a standard measure of ability). The predictive validity of the non-cognitive measure was moderate. The predictive validity of the process in its entirety was high, its value dependent on the weights given to the cognitive and non-cognitive measures.

**Conclusion:** A cognitive admission test has a high predictive validity with respect to Year 1 performance. The addition of a non-cognitive measure in the second step does not markedly diminish the predictive validity of the selection process with respect to academic achievement.