ELSEVIER

Assessing practical intelligence in business school admissions: A supplement to the graduate management admissions test

Jennifer Hedlund [a,*], Jeanne M. Wilt [b], Kristina L. Nebel [b],
Susan J. Ashford [b], Robert J. Sternberg [c]

[a] *Department of Criminology, Central Connecticut State University, 1615 Stanley Street, New Britain, CT 06050, United States*
[b] *University of Michigan Business School, United States*
[c] *Yale University, United States*

Abstract

The Graduate Management Admission Test (GMAT) is the most widely used measure of managerial potential in MBA admissions. GMAT scores, although predictive of grades in business school, leave much of the variance in graduate school performance unexplained. The GMAT also produces disparities in test scores between groups, generating the potential for adverse impact in the admissions process. We sought to compensate for these limitations by adding measures of practical intelligence to the admissions process in an MBA program. We developed two approaches to measuring practical intelligence, one knowledge-based and the other skill-based. We administered the resulting measures to two samples of incoming MBA students (total $N = 792$). Across the two studies, we found that scores on both measures predicted success inside and outside the classroom and provided small, yet significant, increments beyond GMAT scores and undergraduate GPA in the prediction of variance in MBA performance. We further found that these measures exhibited less disparity across gender and racial/ethnic groups than did the GMAT. These findings, although preliminary, suggest the potential value of considering a broader range of abilities in admissions testing.

* Corresponding author. Tel.: +1 860 832 3005.
   E-mail address: Hedlund@ccsu.edu (J. Hedlund).

1. Introduction

The admission process in Masters of Business Administration (MBA) programs involves assessing each candidate's demonstrated and potential abilities to be a successful student and business leader. The Graduate Management Admissions Test (GMAT) is perhaps the most widely used uniform criterion in business school admissions (Dobson, Krapljan-Barr, & Vielba, 1999; Hancock, 1999; Wright & Palmer, 1994). Like many standardized admission tests, the GMAT consistently explains about 20% of the variance in graduate GPA (Ahmadi, Raiszadeh, & Helms, 1997; Graham, 1991; Hancock, 1999; Nilsson, 1995; Paolillo, 1982; Wright & Palmer, 1994; Youngblood & Martin, 1982). Although 20% is impressive in regard to psychological measurement, 80% of the variance in school performance remains unexplained. Furthermore, there is evidence to suggest that the GMAT's predictive validity may be limited largely to performance in graduate school (Bretz, 1989).

Another potential limitation with the use of standardized admissions tests is their potential for adverse impact (Bracey, 2001; Darling-Hammond, 1991). Researchers have consistently found mean differences on tests of general cognitive ability and related abilities for different racial/ethnic groups; most notably, blacks tend to score one standard deviation lower than whites on these tests (Hartigan & Wigdor, 1989; Jensen, 1998; Schmidt, 1988; Williams, 2000). The GMAT, in particular, has been found to exhibit disparities in test scores across both gender and racial/ethnic subgroups (Dobson et al., 1999; Hancock, 1999). These differences tend to favor males over females and whites over blacks. Most notably, blacks tend to score more than one standard deviation lower than whites on the GMAT. Identifying a supplement to the GMAT that could potentially reduce, or compensate for, these differences while at the same time increasing prediction, could be of great benefit to business school admissions.

The purpose of our research was to explore alternative ways to assess a business school candidate's potential for success that address, although certainly do not fully circumvent, some of the limitations identified above. The goal is not to replace the GMAT or comparable assessments, but rather to supplement them and thus to improve the process of business school admissions. Our efforts focused on the incorporation of measures of practical abilities as complements to the analytically oriented GMAT, with the aim of improving the prediction of business-school performance and, ultimately, business success. This article presents the development and preliminary validation of measures of practical intelligence for use in MBA admissions.

2. Exploring alternatives to conventional standardized admissions tests

Before pursuing a supplement to the GMAT, it was important to consider what constructs the test purports to measure, and thus, what constructs it does not intend to assess. The GMAT is comparable to other standardized admissions test (e.g., SAT, LSAT) in that it consists of multiple-choice questions that measure verbal and quantitative skills. The GMAT further includes an essay component aimed at measuring analytical skills. According to Jaffe and Hilbert (1994), "The purpose of the GMAT is to measure your ability to think systematically and to employ the verbal and mathematical skills that you have acquired throughout your years of schooling" (p. 3). Thus, like the SAT (Frey & Detterman, 2004), the GMAT can be characterized as a traditional measure of intelligence, or a test of general cognitive ability (g).