CAE

Predictive Validity of a Critical Thinking Assessment for Post-College Outcomes

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Introduction

Do "generic" skills (Clanchy & Ballard, 1995) such as critical thinking and written communication matter in the workplace? A recent study indicates that, in addition to a student's major in college and the selectivity of an institution, better performance on an assessment of critical-thinking and written-communication skills is associated with higher rates of employment (Arum & Roksa, 2014). Since the financial crisis of 2008, greater emphasis has been given to college success and career-readiness because employers expect college graduates to possess writing, critical-thinking, and problem-solving skills (Hart Research Associates, 2006, 2013, 2015) in response to the changing demands of available jobs (Autor, Levy, & Murname, 2003). In tandem with employer demands, the educational community has begun to emphasize "21st-century skills" in addition to knowledge in specific content domains (Arum & Roksa, 2011; Porter, McMaken, Hwang, & Yang, 2011; Silva, 2008; Wagner, 2008) in hopes of fostering the development of critical-thinking, problem-solving, communication, collaboration, creativity, and innovation skills (Porter et al., 2011).

Other findings routinely show that employers are most concerned with critical-thinking and communication skills (Hart Research Associates, 2009, 2013; National Association of Colleges and Employers, 2013). These higher-order skills are not captured on academic transcripts, which is problematic given grade inflation over the past two decades (Eiszler, 2002; Johnson, 2003; Mansfield, 2001; Sabot & Wakeman-Linn, 1991).

The question of whether these skills are empirically predictive of post-college outcomes remains. CLA+ data from graduating seniors will help answer questions about the importance of these skills and the effectiveness of using CLA+ as a tool for leveling the playing field for high-ability graduates from less- and non-competitive institutions.

Method

The data used in this study come from college seniors who took CLA+ in spring 2014. These students were surveyed three times, at three, six, and 12 months, respectively, after college graduation. Of the approximately 13,000 students who took CLA+ in spring 2014, 1,585 agreed to participate in the survey, and 993 persisted through all three phases.

Results

CLA+ is predictive of multiple positive post-college outcomes. However, CLA+ alone does not explain graduates' post-college outcomes. For example, students in the STEM fields are more likely to have higher salaries, whereas business majors are more likely to have full-time employment three months after graduating. Race and ethnicity are also significant for predicting post-college outcomes, although it does not appear favorable for minority students. Specifically, Hispanics, African Americans, and Asians were less likely to be employed than their White peers. This is likely a reflection of biases in hiring (Nunley, Pugh, Romero, & Seals, 2014), salary, and graduate school admissions.

		Post-college outcomes (all)	Salary	Employment	Full-time employment	Graduate school
CLA+ and	CLA+ only	*	*	*	*	*
	EAA		*		*	
	Barron's				*	
	Field of study		*		*	
	Gender		*			
	Parent education					
	Race	*	*	*	*	*

Table 1: Predictive Validity of CLA+ and Other Variables on Post-college Outcomes

Discussion and Conclusion

CLA+ is predictive of post-college outcomes such as employment, salary, and enrollment in continuing education. Use of CLA+ scores can address some of the challenges employers and recent graduates face by highlighting important skills. Despite approximately 1.8 million individuals graduating each year (Hussar & Bailey, 2014), employers are still finding a skills gap (Hart Research Associates, 2015). Recent graduates struggle to find appropriate entry-level jobs and wonder if they are getting a good return on their investment (Abel, Deitz, & Su, 2014). Additionally, traditional career services and job-search resources typically do not provide students with a platform to demonstrate higher-order skills to employers.

CAE's research indicates that there are racial biases with respect to hiring, salary, and enrollment in continuing education. However, these biases may be conflated with whether students from underrepresented groups attend selective or non-selective colleges. CLA+ results can prove useful for alleviating bias by predicting candidate performance once hired or admitted into a graduate program.

In general, the percentage of minority students in less- or non-competitive institutions from CAE's sample is almost double (50.6%) that of the competitive institutions (26.8%). Yet, about 40% of students with proficient scores, as measured by CLA+, at the less- and non-competitive institutions are minorities. This means that there is a large group of qualified college graduates who may be overlooked as viable candidates due to the school they attended.

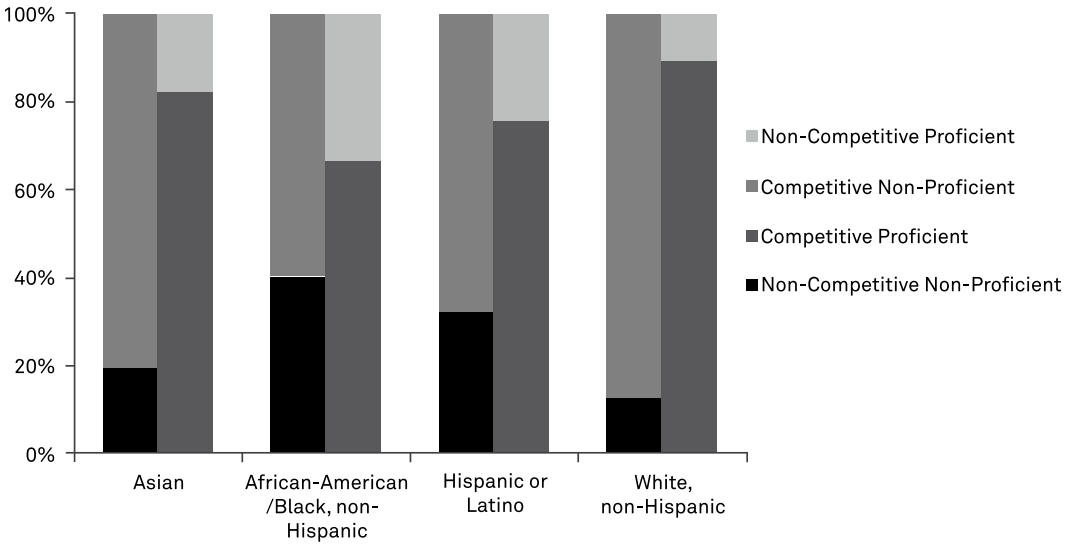

Figure 1: Distribution of CLA+ proficiency and institution competitiveness by race/ethnicity; n = 12,476.

There are potentially millions of students graduating from less- and non- competitive institutions (Benjamin, 2015) who are proficient in the skills that employers say they desire (Hart Research Associates, 2013, 2015). Given that there is increasing enrollment at these less- and non-selective institutions, which have higher proportions of minority students (Benjamin, 2015), employers should expand their recruitment searches beyond the elite colleges and universities in order to have a more representative and diverse workforce.

Findings from this study offer support for the conclusion that critical-thinking and written-communication skills are important in predicting career placement and workplace success (Arum & Roksa, 2014). Additionally, CLA+ can serve as both an effective instrument for identifying high-achieving students from less- and non-competitive institutions and for making their skills more visible to perspective employees. The high-performing students who attend less- and non-competitive institutions (Hoxby & Avery, 2012) do in fact have the same critical-thinking skills that can potentially lead to positive post-college outcomes as their peers at competitive institutions. CLA+ Career Connect (CAE, 2015) is a cutting-edge service that matches high-performing students with potential employers. CLA+ Career Connect levels the playing field between the high-ability students who are overlooked due to factors, such as the competiveness of an institution, and students who are being judged solely on the name of the institution they attended.

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