# INTRAPERSONAL AND INTERPERSONAL COMPETENCIES PREDICTING COLLEGE ENGAGEMENT, GRADES, AND RETENTION

Nicholas A. Bowman

Center for Research on Undergraduate Education
University of Iowa

## STUDY BACKGROUND AND PURPOSE

This is what you asked me to do

Competencies as simultaneous predictors and outcomes

#### DATASET: WABASH NATIONAL STUDY

Three cohorts (starting in Fall 2006, 2007, and 2008)

 Surveys in beginning of first year, end of first year, and end of fourth year

• 8,475 students and 46 four-year institutions

Institutional data on retention

# **KEY MEASURES**

Construct	Measure	Alpha
Openness to diversity and challenge	Openness to Diversity and Challenge Scale	.83
Teamwork	Group dimensions of the SRLS	.86
Intercultural competence	Miville-Guzman Universality-Diversity Scale	.85
Civic engagement	Frequency of volunteering in HS senior year	
Ethics	N2 score of the Defining Issues Test 2	.7781

# **KEY MEASURES**

Construct	Measure	Alpha
Openness to diversity and challenge	Openness to Diversity and Challenge Scale	.83
Teamwork	Group dimensions of the SRLS	.86
Intercultural competence	Miville-Guzman Universality-Diversity Scale	.85
Civic engagement	Frequency of volunteering in HS senior year	
Ethics	N2 score of the Defining Issues Test 2	.7781
Academic challenge	Perceived challenge and higher-order thinking	.88
Diversity experiences	Interpersonal, curricular, & cocurricular diversity	.80
Interactions with faculty and staff	Frequency of interactions (student affairs staff)	.83
Exposure to good teaching	Perceptions of practices and engagement	.92
Interactions with peers	Positive interactions and cocurricular activities	.85

# **KEY MEASURES**

Construct	Measure	Alpha
Openness to diversity and challenge	Openness to Diversity and Challenge Scale	.83
Teamwork	Group dimensions of the SRLS	.86
Intercultural competence	Miville-Guzman Universality-Diversity Scale	.85
Civic engagement	Frequency of volunteering in HS senior year	
Ethics	N2 score of the Defining Issues Test 2	.7781
Academic challenge	Perceived challenge and higher-order thinking	.88
Diversity experiences	Interpersonal, curricular, & cocurricular diversity	.80
Interactions with faculty and staff	Frequency of interactions (student affairs staff)	.83
Exposure to good teaching	Perceptions of practices and engagement	.92
Interactions with peers	Positive interactions and cocurricular activities	.85
College GPA	Self-reported in 1st and 4th years	
Retention to fall semester	2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> years from institutional data	

## **CONTROL VARIABLES**

- Academic achievement
  - High school GPA
  - Overall ACT/SAT score
- Intentions and views
  - Highest intended degree
  - Political orientation
- Overall health

- Demographics
  - Race/ethnicity
  - Sex
  - Parental education
  - Has dependent(s)
  - English is not first language
  - Is an international student
- Institutional fixed effects

### PRELIMINARY RESULTS: CORRELATIONS

 Openness to diversity and challenge, teamwork, and intercultural competence (.37 ≤ rs ≤ .60)

 Academic challenge, diversity experiences, and interactions with faculty/staff (.48 ≤ rs ≤ .52)

 Competencies with college engagement, grades, and retention

#### RESULTS: COLLEGE ENGAGEMENT

- Positive relationships for all non-ethics competencies
  - Entered separately (IQR: .15  $\leq \beta$ s  $\leq$  .23)
  - Entered together (IQR:  $.06 \le \beta s \le .14$ )
- Different pattern for ethics
  - One positive result (good teaching practices; entered separately)
  - Several negative results (especially when entered together)

## RESULTS: GRADES AND RETENTION

- Grades
  - Positive for ethics (βs ≈ .11)
  - Modest for other competencies (IQR:  $.01 \le \beta s \le .04$ )
- Retention
  - Positive for civic engagement (1.08 ≤ ORs ≤ 1.24)
  - Positive for teamwork when entered separately (1.10 ≤ ORs ≤ 1.13)
  - Generally nonsignificant for other competencies

#### **RESULTS: MULTIPLE MEDIATION**

 College engagement as mediators of civic engagement and retention

- Full mediation effects
  - Nonsignificant direct effects
  - Significant total indirect effects
- Individual mediators
  - Positive for interactions with peers
  - Generally nonsignificant for other forms of engagement

#### **RESULTS: MODERATION EFFECTS**

- Examined race (URM vs. non-URM), sex, first-generation status, and precollege achievement (median split of ACT)
- Mostly non-significant and inconsistent for grades and retention
- Some exceptions (all for retention)
  - Civic engagement only (+) for non-URM
  - Intercultural competence only (+) for males
  - Openness to diversity/challenge only (--) for high ACT

