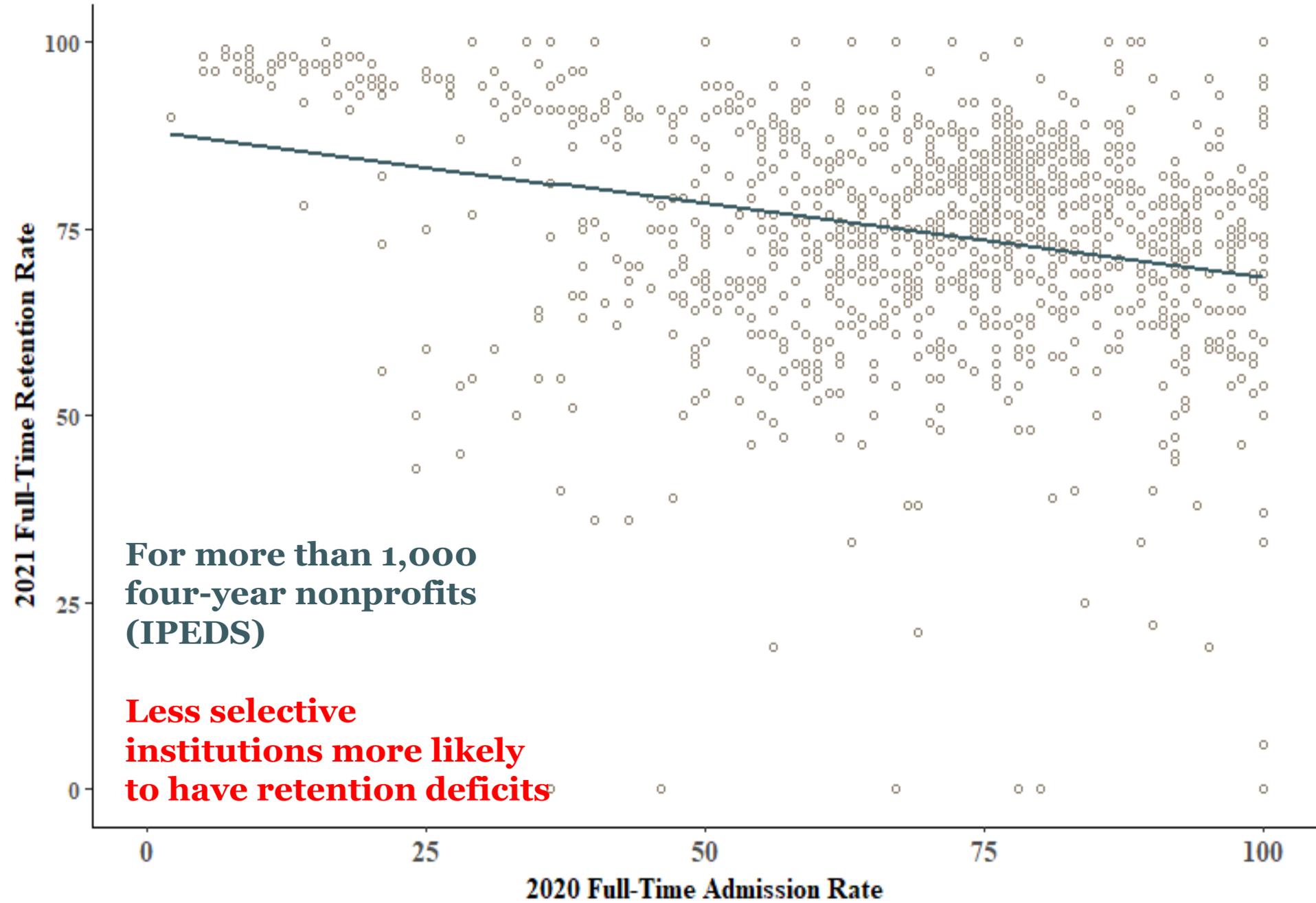# Data-Driven Assessments for Admissions, Goal-Setting, and Retention

**CIC Presidents Institute**

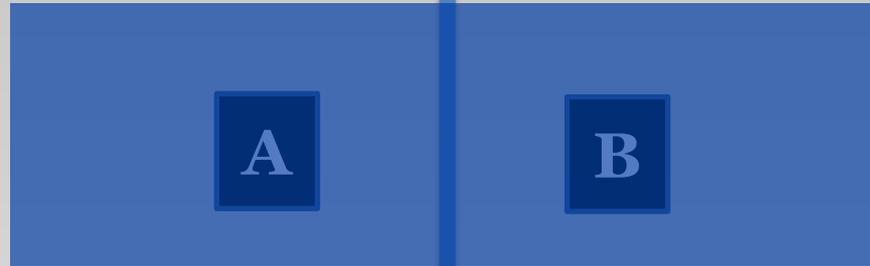**January 6, 2023**

Research Round Robin

# Relationship between Admission Rate and Retention Rate

2021 Full-Time Retention Rate (y-axis)

2020 Full-Time Admission Rate (x-axis)

**For more than 1,000 four-year nonprofits (IPEDS)**

**Less selective institutions more likely to have retention deficits**

High Cognitive Ability

Standardized tests for admissions focus on identifying these students

A     B

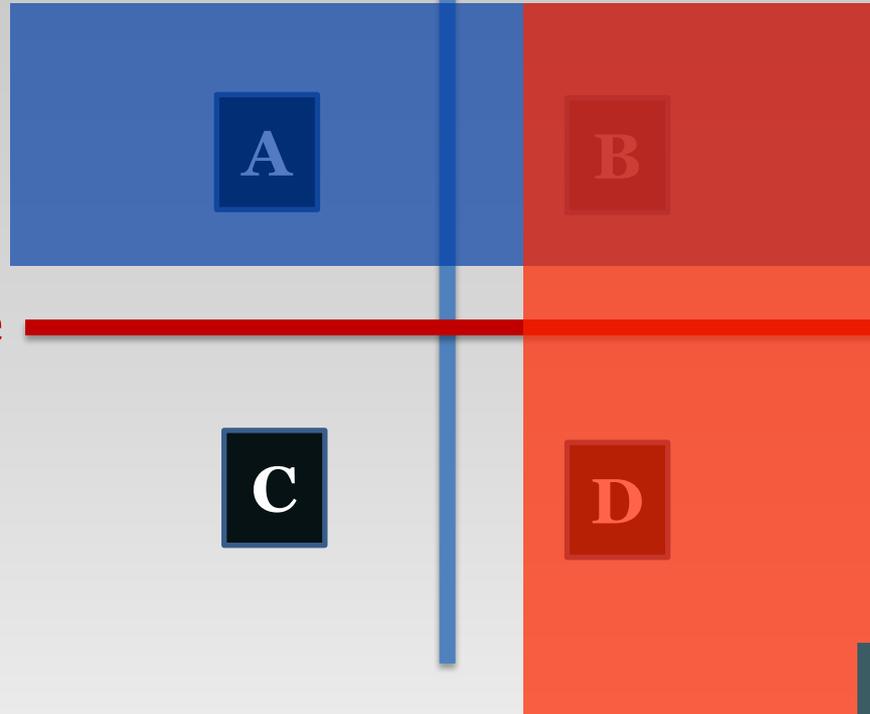Low Non-Cognitive Attributes

High Non-Cognitive Attributes

C     D

Low Cognitive Ability

We assume these students will do better in college (or be more prepared!)

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High Cognitive Ability

Non-cognitive assessments focus on identifying these students

A

B

Low Non-Cognitive Attributes

High Non-Cognitive Attributes

C

D

Low Cognitive Ability

We may *try* to measure this with admissions essays and extracurricular activities, but those aren't very standardized

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Relationship between Admission Rate and Retention Rate
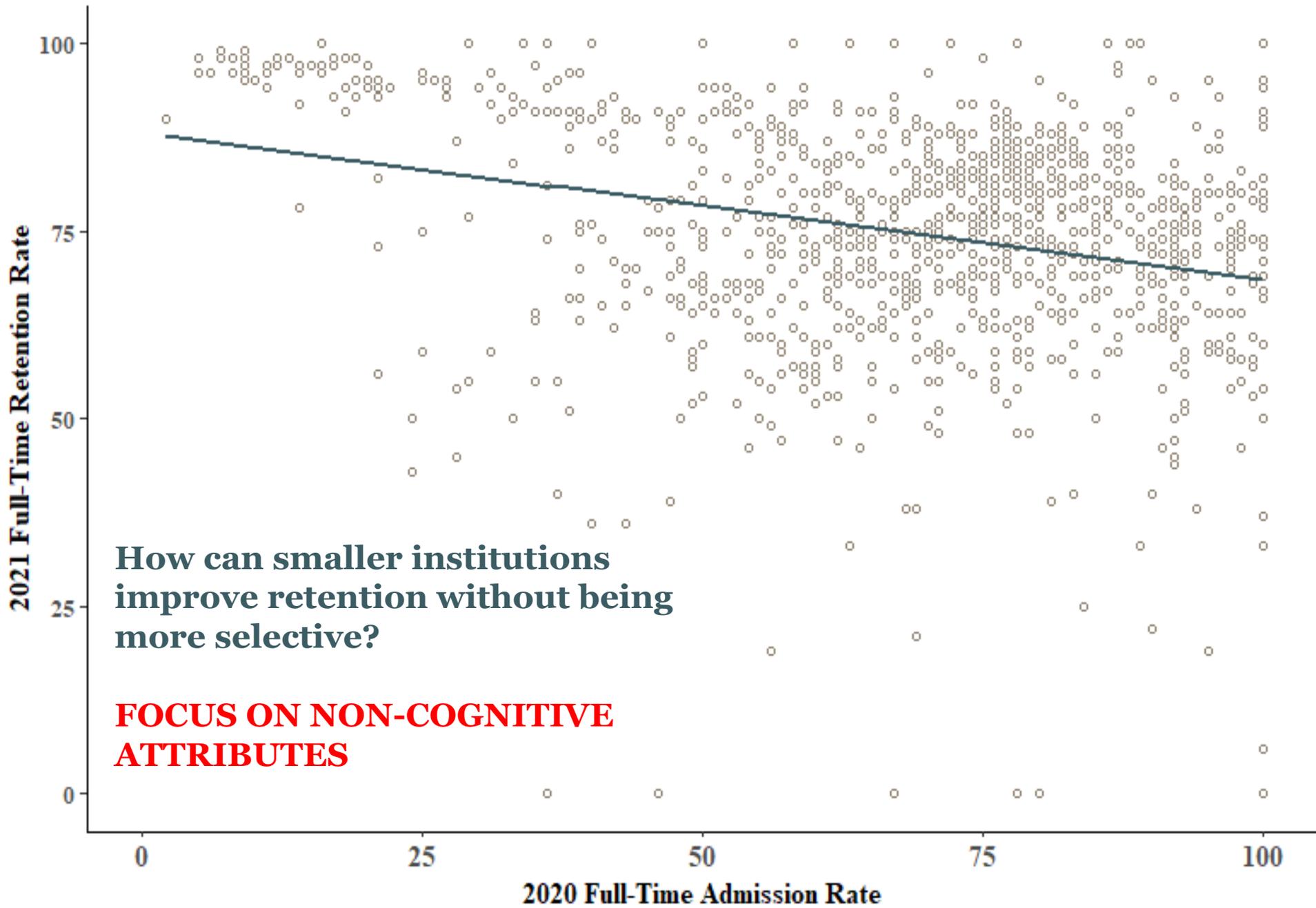
How can smaller institutions improve retention without being more selective?

FOCUS ON NON-COGNITIVE ATTRIBUTES

# Non-Cognitive Variables Predict Real Outcomes

| Non-Cognitive Variables Predict: |
|---|
| Career Success |
| Healthy Relationships |
| Physical Health |
| ***Academic Performance and Retention*** |

- Career success & positive career outcomes (Roberts et al., 2003)

- More positive relationship interactions, better relationship quality (Donnellan et al., 2005)

- Better physical health (Cohen & Williamson, 1991; Jerram & Coleman, 2010)

- ***Some non-cognitive variables are associated with <u>better academic performance</u>, even after accounting for intelligence (Gasser et al., 2004; Poropat, 2009)***

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# What is the Applicant Success Assessment (ASA)?

- Assessment tool
  - Applied people analytics and psychological science
  - 55 questions, web-based
  - Tailored report for each student
  - 7 dimensions + Student Success

- Identifies risk factors for non-persistence
  - Based on non-cognitive factors (unlike standardized tests)
  - Useful for *mitigating risks* to improve retention

- Predicts likelihood of success at *any* higher education institution

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# The ASA's Predictive Validity

- Based on two institutions in the northeast (both small, nonprofits)

- Completion of the ASA predicts retention

- The ASA "Student Success Score" predicts GPA

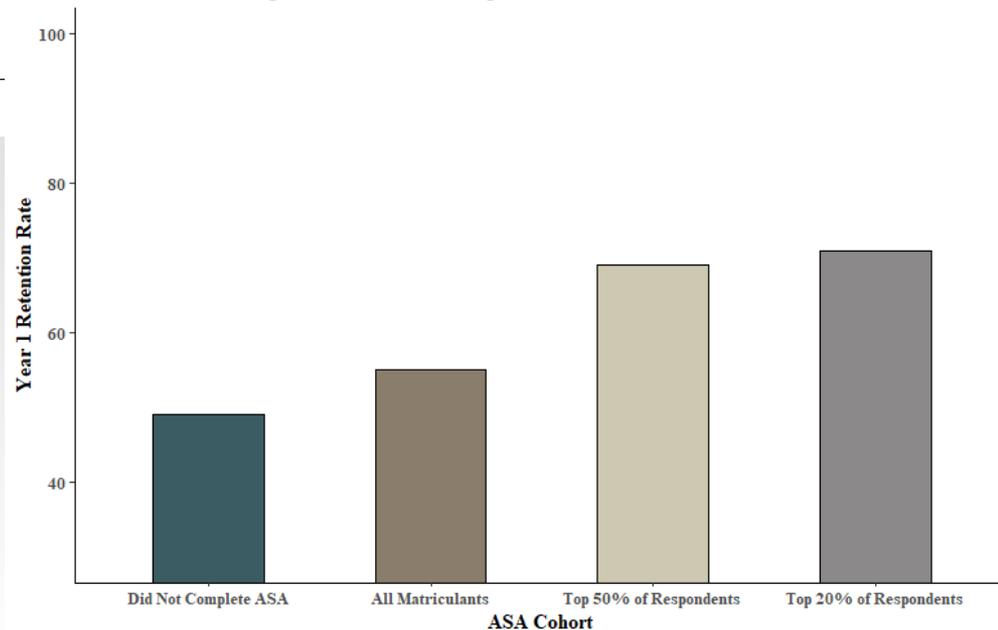- Including the ASA in statistical modeling improves prediction (beyond cognitive tests)

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# The ASA's Predictive Validity



Relationship between ASA Completion and Retention Rate - Beta Client A

At both institutions, retention was **highest** for students with a "success score" in the top 20%.

At both institutions, retention was **lowest** for students who didn't take the ASA when invited
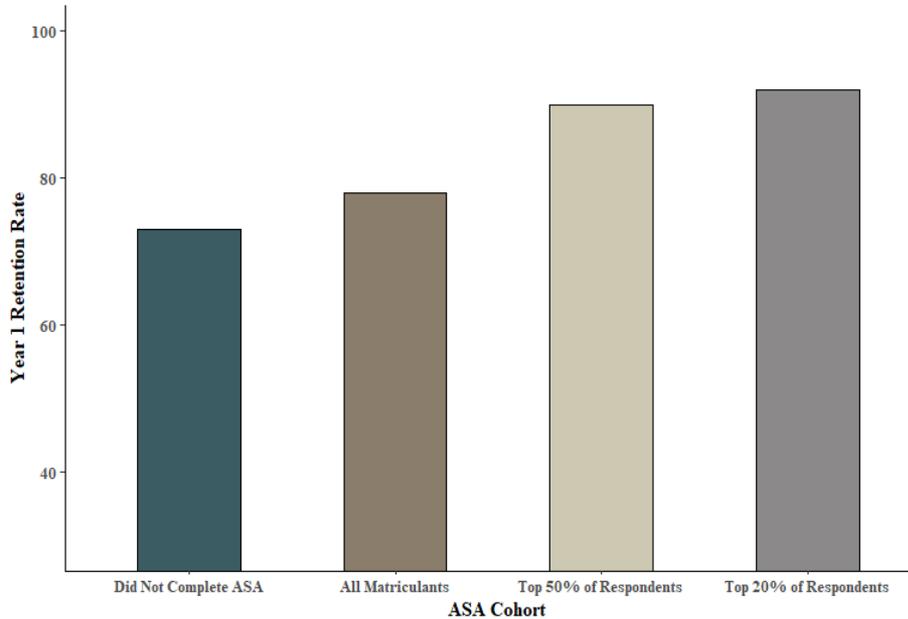


Relationship between ASA Completion and Retention Rate - Beta Client B

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# The ASA's Predictive Validity
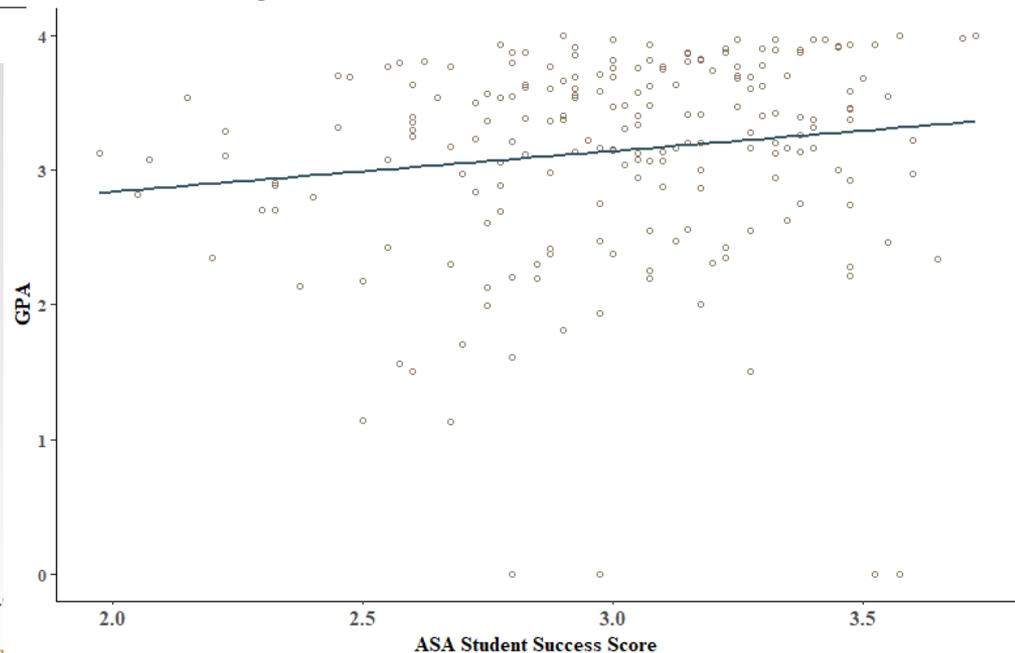


Relationship between ASA Student Success Score and GPA - Beta Client A

At both institutions, there's a positive correlation between ASA Student Success and GPA.



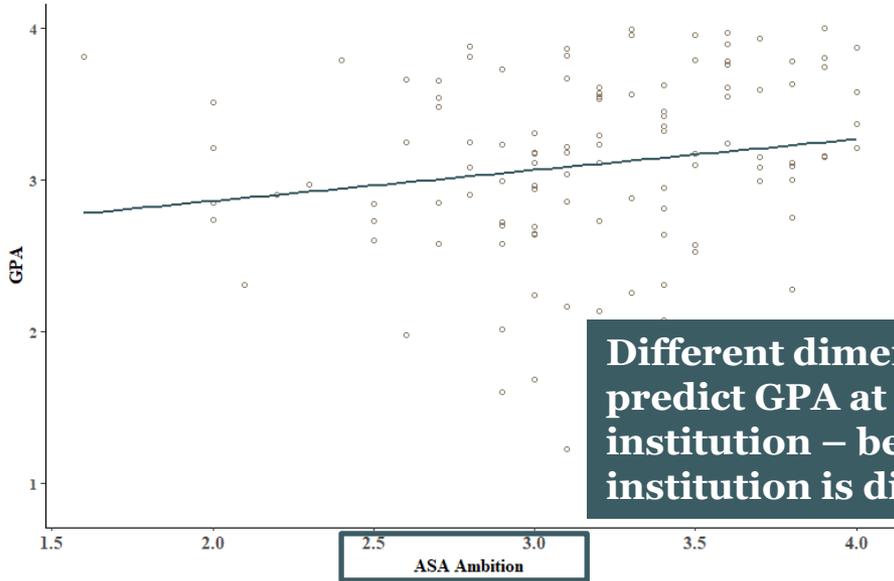Relationship between ASA Student Success Score and GPA - Beta Client B
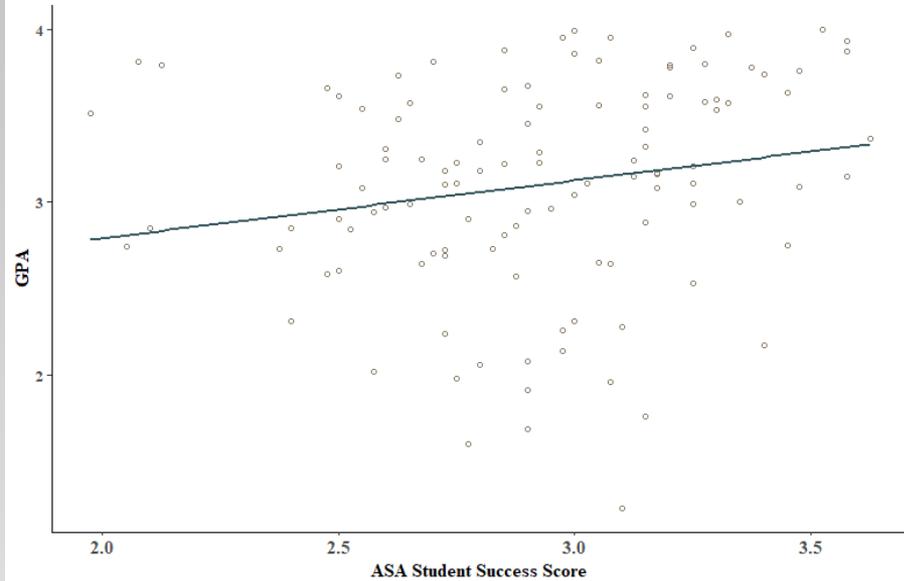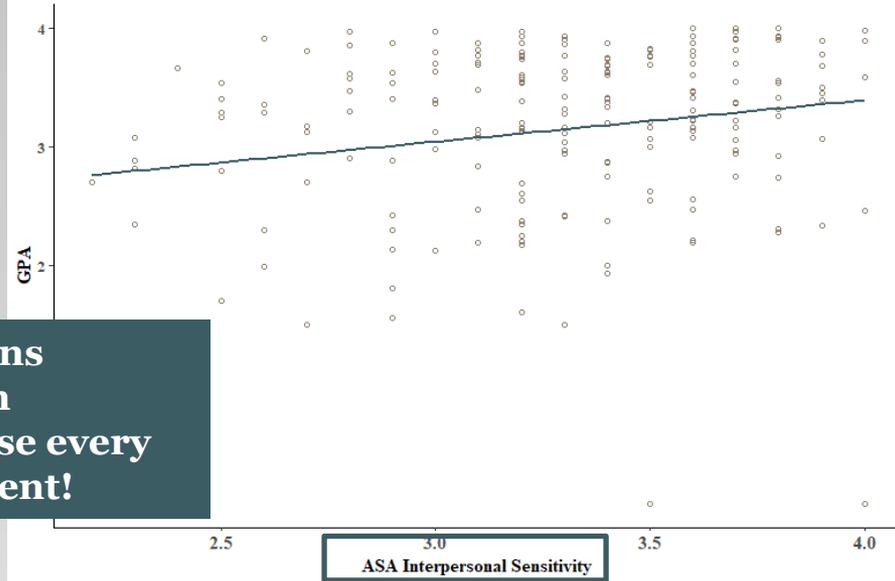
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# The ASA's Predictive Validity



Relationship between ASA Ambition and GPA - Beta Client A

Relationship between ASA Interpersonal Sensitivity and GPA - Beta Client B

Relationship between ASA Prudence and GPA - Beta Client A
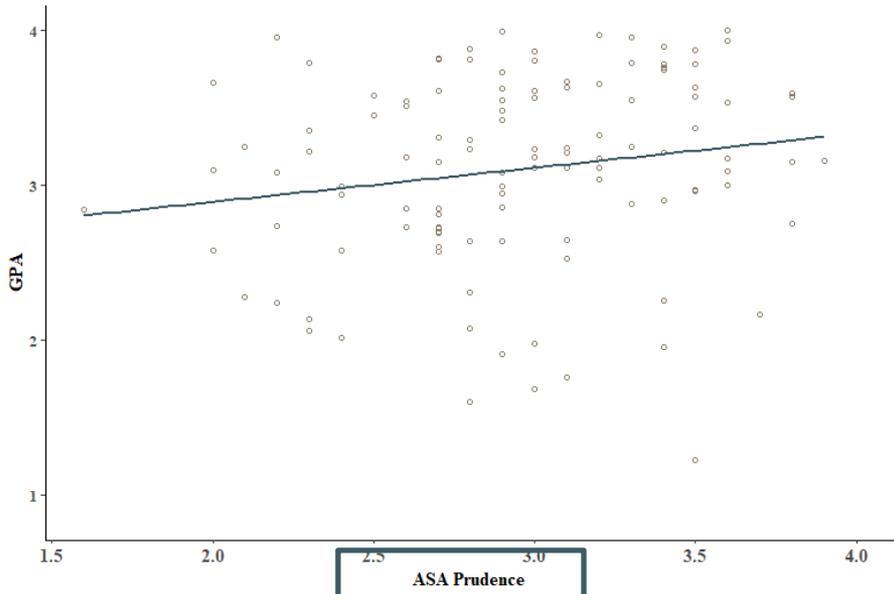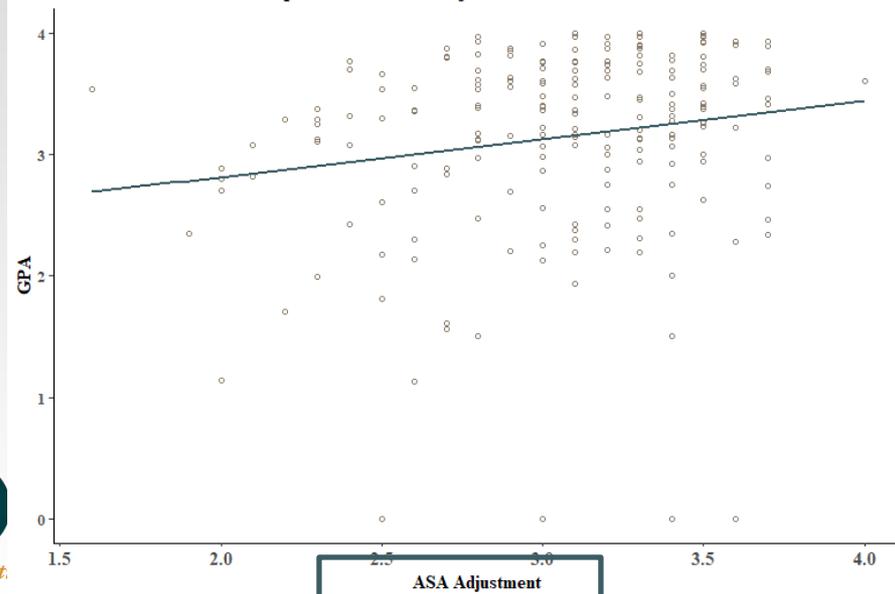
Relationship between ASA Adjustment and GPA - Beta Client B

**Different dimensions predict GPA at each institution – because every institution is different!**

# A Model for Using the **ASA**

| Take the ASA (those who don't already have a "red flag") | → | Review ASA with advisor or counselor; discuss risk factors | → | **At least 1** session to brainstorm strategies for *mitigating risks, building on strengths* | → | Student journals or keeps track of strategy deployment and effectiveness | → | Follow-up sessions |

## During First Year

**Stevens *Strategy* consultants can train your advisors on how to use the ASA with students**

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# Learn More About the ASA

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https://www.stevensstrategy.com/consultants/rachel-pauletti/

Curious about the ASA? Scan this code to take the ASA and get your tailored report.

## Rachel Pauletti, Ph.D.
Director of Consulting for Stevens *Strategy*

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