

Selecting a College Major

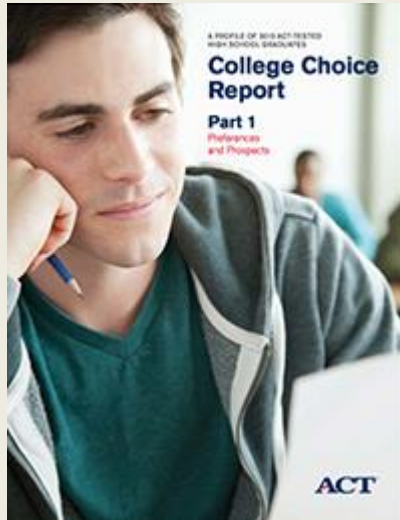
Nancy Rehling
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Brand Experience
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Overview

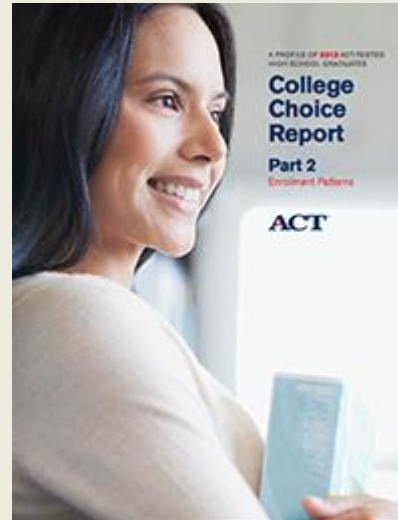
- Findings are part of *ACT's College Choice Report*
- Focus of series
 - Class of 2012: Self-reported college preferences
 - Class of 2013: Selecting a college major
 - Class of 2014: Expanding college opportunities
- Series follows a high school graduating class over time
 - High school
 - First year of college
 - Second year of college

Overview

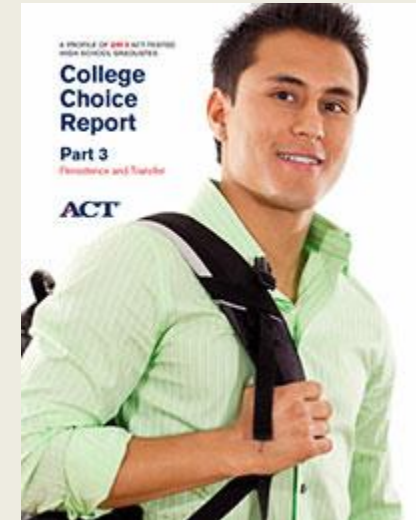
- Report released in three parts:



Preferences and Prospects
(November, 2013)



Enrollment Patterns
(July, 2014)

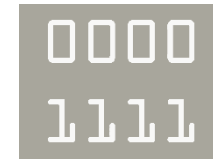
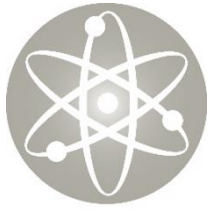


Persistence and Transfer
(April, 2015)

Overview

Road Map:

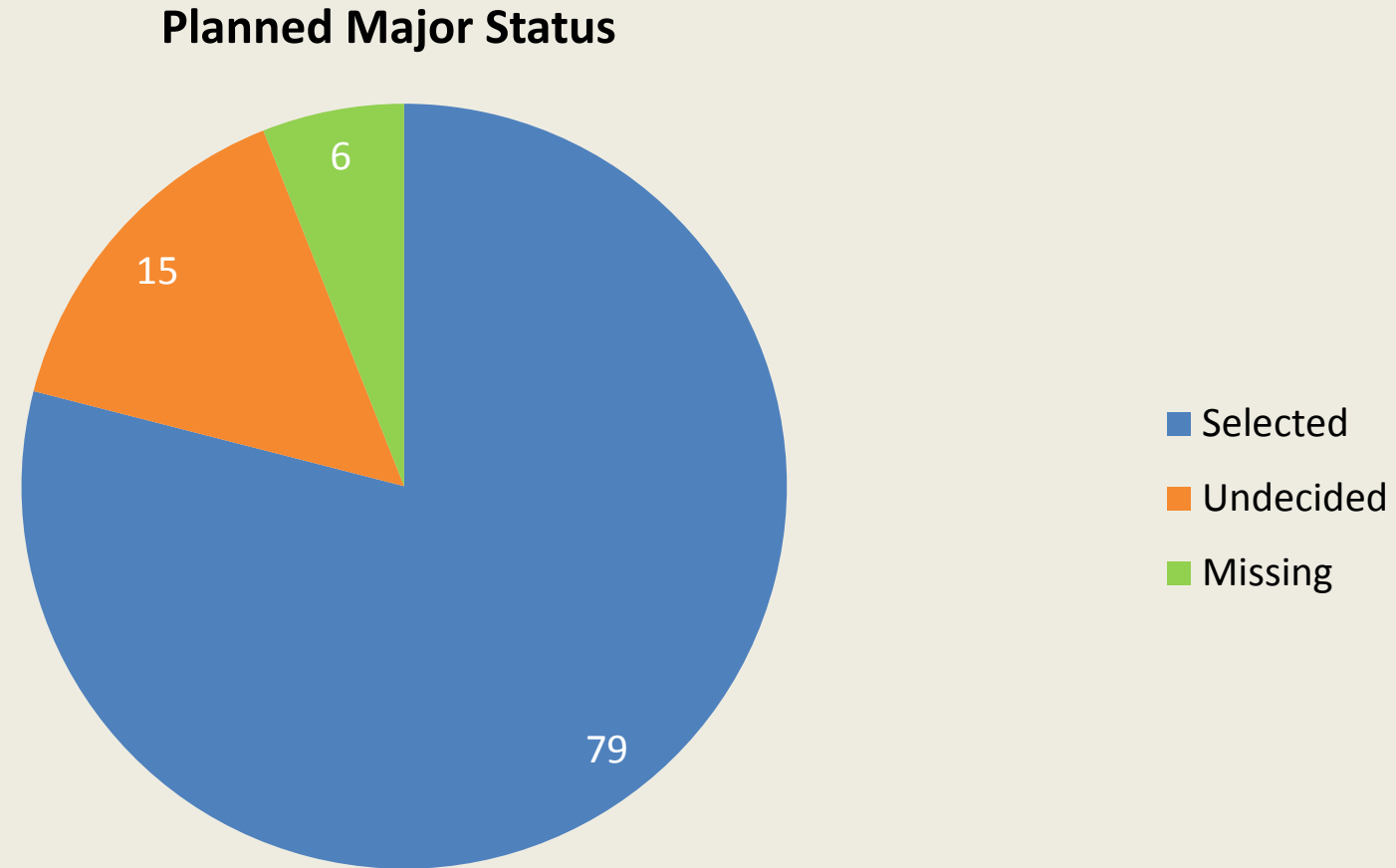
- Planning a major
- Declaring a major
- Persisting within a major
- Needing help with planning



Planning a Major

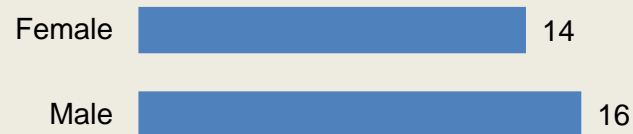
High School

How many students select a planned major?



Which students are more likely to be undecided?

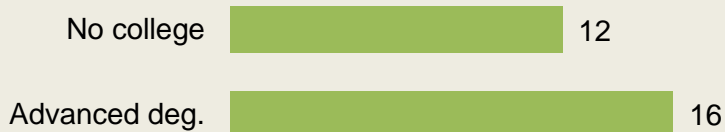
- Males



- Higher achieving students



- Students whose parents have more education



- Students whose families have more income



Which planned major areas are most/least popular?

Most popular: 294 planned majors, grouped into 18 planned major areas

- Health Sciences & Technology (24%)
- Business (11%)

Least popular:

- Area, Ethnic, & Multidisciplinary Studies (.2%)
- Philosophy, Religion, & Theology (.6%)

Which planned major areas have gender gaps?

Gaps favoring females:

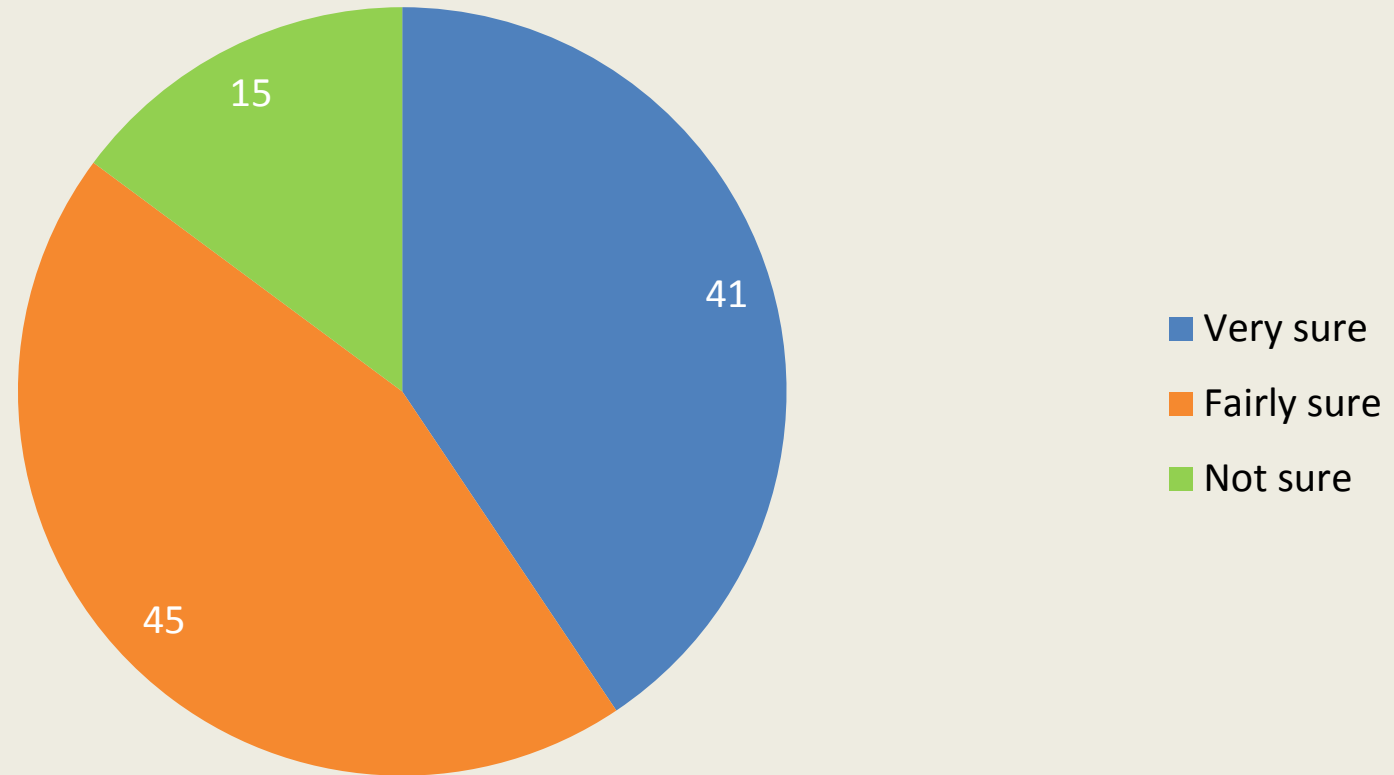
- Health Sciences & Technology: 32% female, 14% male
- Education: 9% female, 4% male
- Health Administration & Assisting: 6% female, 2% male

Gaps favoring males:

- Engineering: 17% male, 3% female
- Business: 15% male, 9% female
- Computer Science & Mathematics: 6% male, <1% female

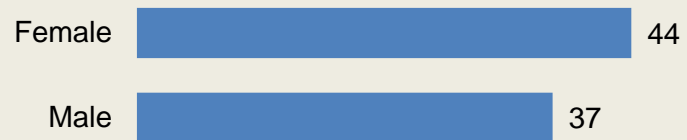
How certain are students of their planned majors?

Certainty of Planned Major



Who is more likely to be “very sure” of their plans?

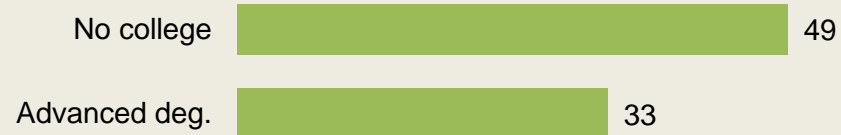
- Females



- Lower achieving students



- Students whose parents have less education



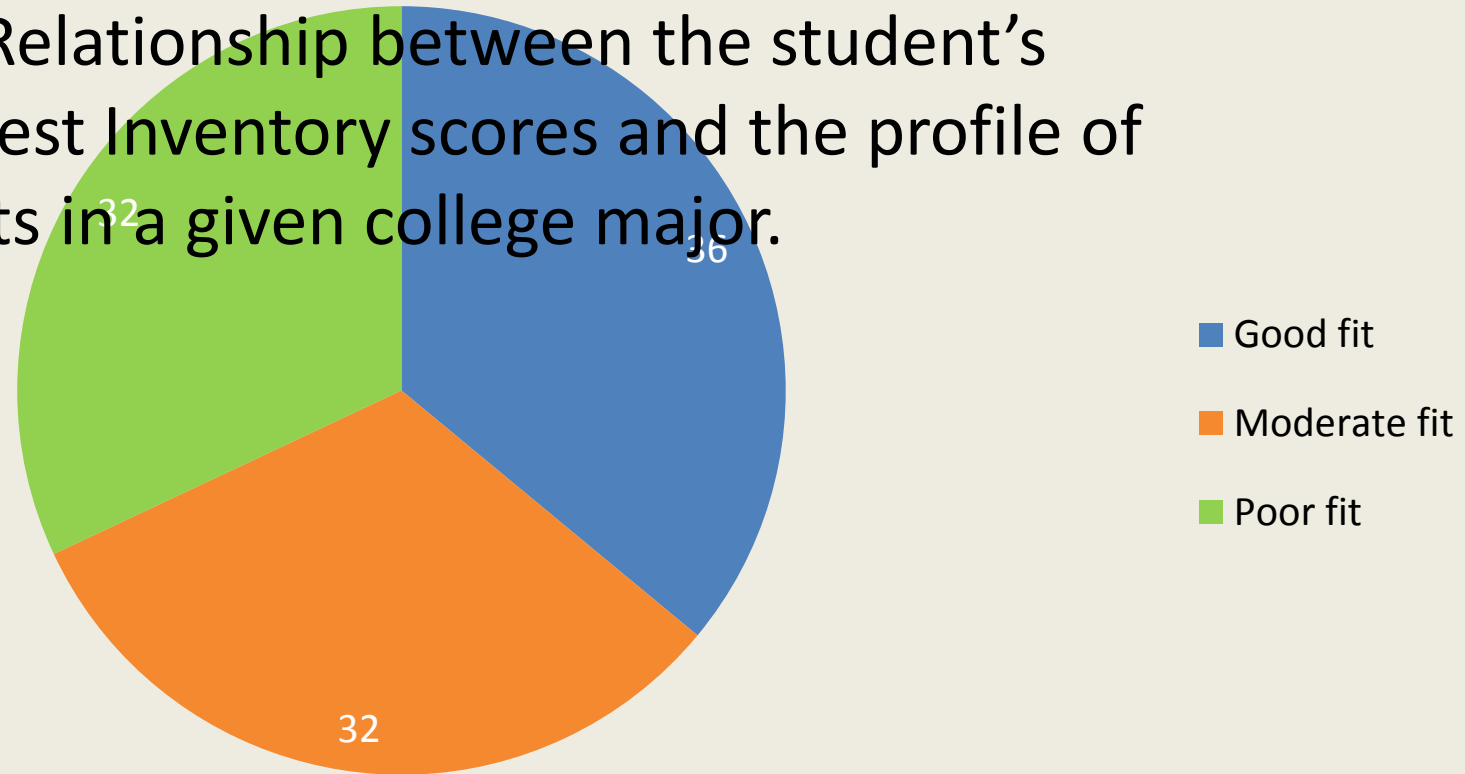
- Students whose families have less income



Is there good fit between planned major and interests?

Interest-Major Fit

Interest-major fit: Relationship between the student's profile of ACT Interest Inventory scores and the profile of interests of students in a given college major.



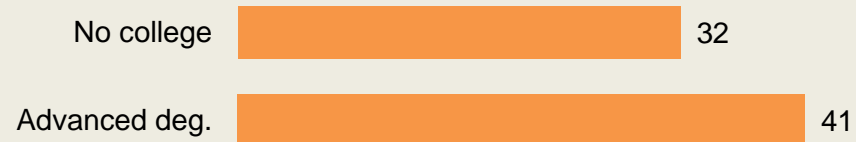
Interest-major fit: Relationship between the student's profile of ACT Interest Inventory scores and the profile of interests of students in a given college major.

Who is more likely to have “good” Interest-Major Fit?

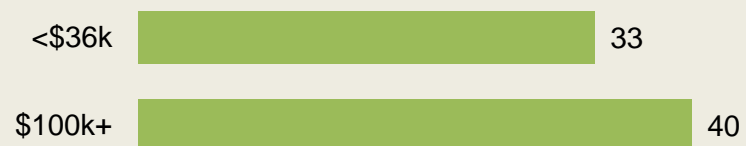
- Higher achieving students



- Students whose parents have more education

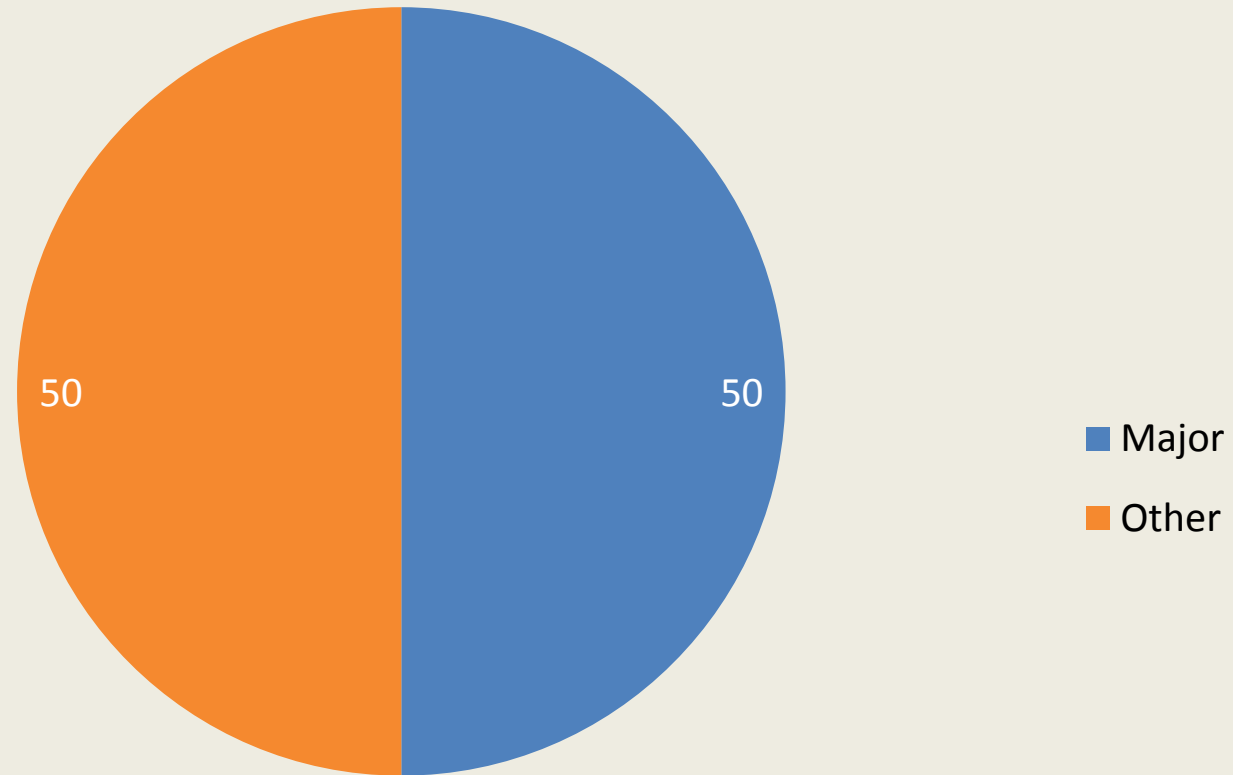


- Students whose families have more income



How important is major in choosing a college?

Most Important College Choice Factor



Who is more likely to think major is most important?

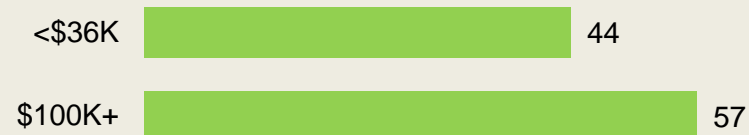
- Higher achieving students

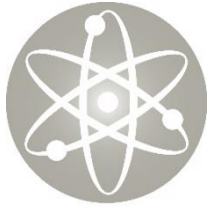


- Students whose parents have more education



- Students whose families have more income

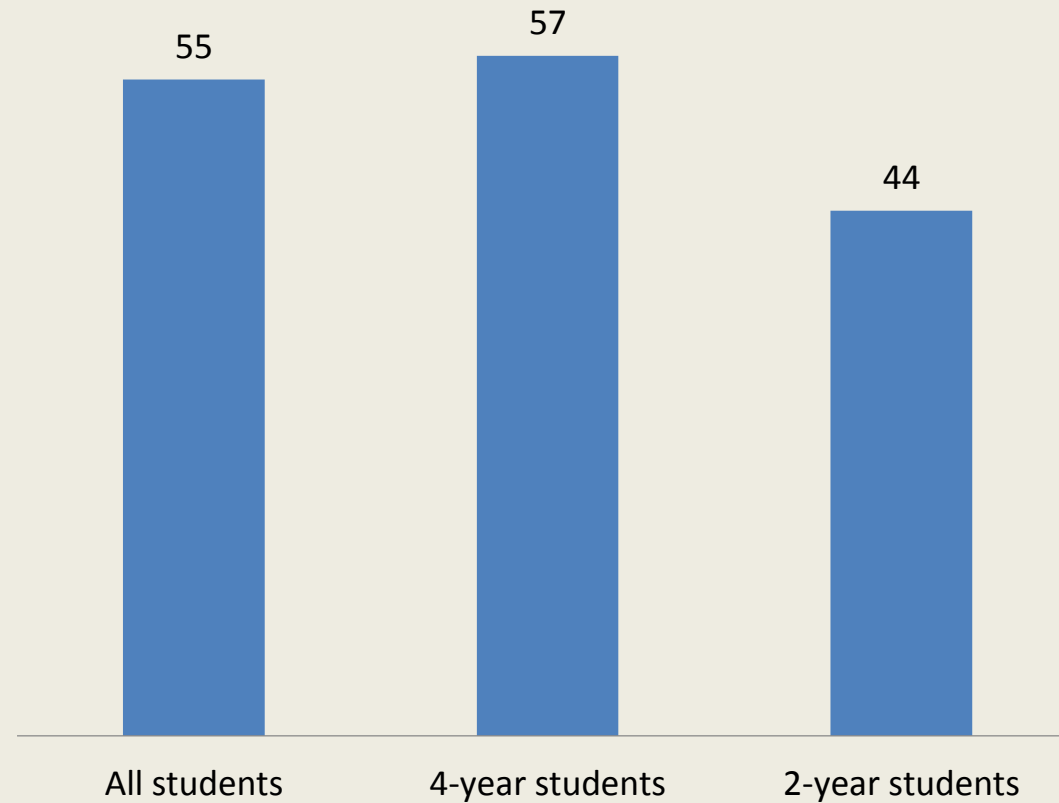




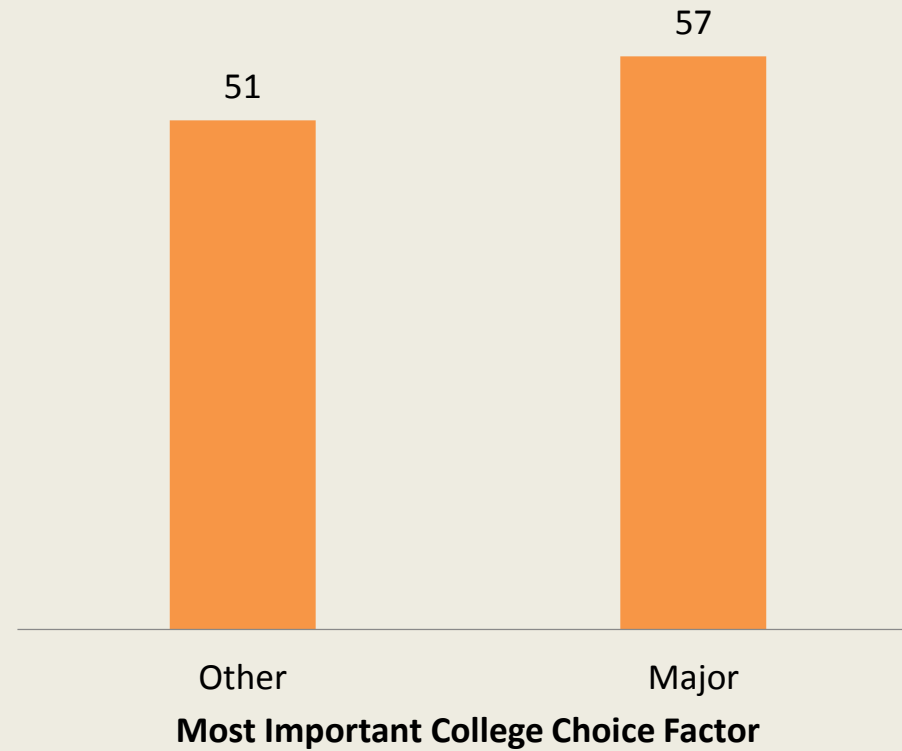
Declaring a Major

First year of college

How many declare a major in their planned major area?



How many declare a major in their planned major area?



Which major areas have best/worst consistency rates?

Best rates: The percentage of first-year students who declared a major in their planned major area.

- Business (68%)
- Health Sciences & Technologies (64%)
- Engineering (63%)

Worst rates:

- Engineering Technologies & Drafting (15%)
- Area, Ethnic, & Multidisciplinary Studies (8%)
- Health Administration & Assisting (7%)

Where are the biggest gender gaps in consistency rates?

Gaps favoring females:

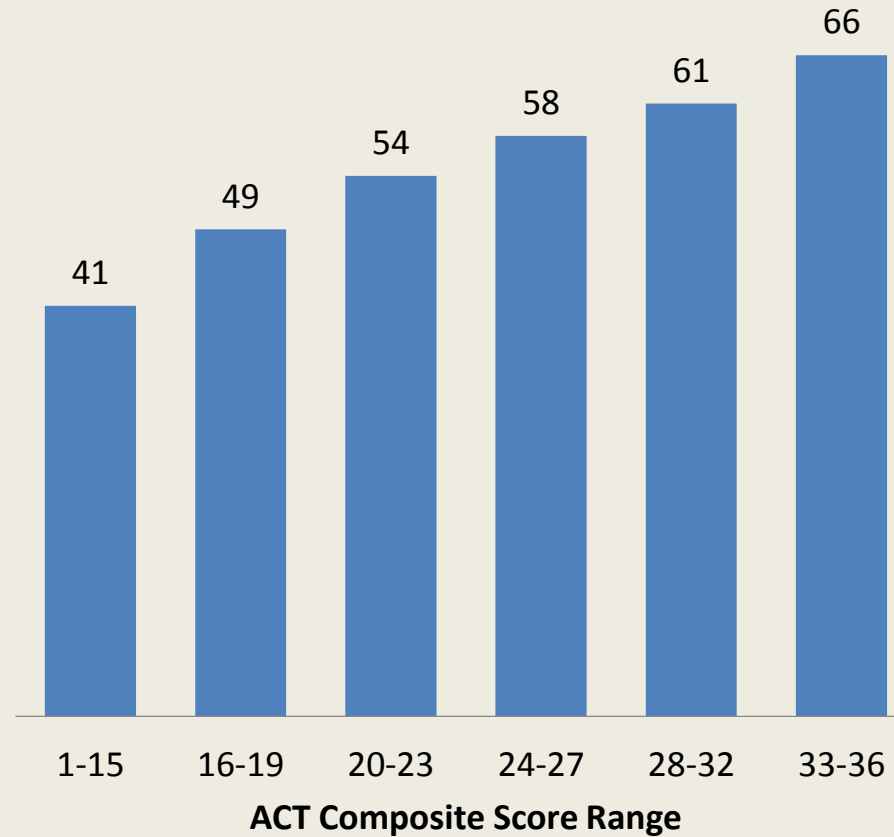
- Health Sciences & Technology: 67% female, 54% male
- Education: 55% female, 34% male
- Health Administration & Assisting: 8% female, 5% male

Gaps favoring males:

- Repair, Production & Construction: 58% male, 40% female
- Philosophy, Religion & Theology: 38% male, 23% female
- Engineering Technology and Drafting: 16% male, 9% female

What predicts consistency rates?

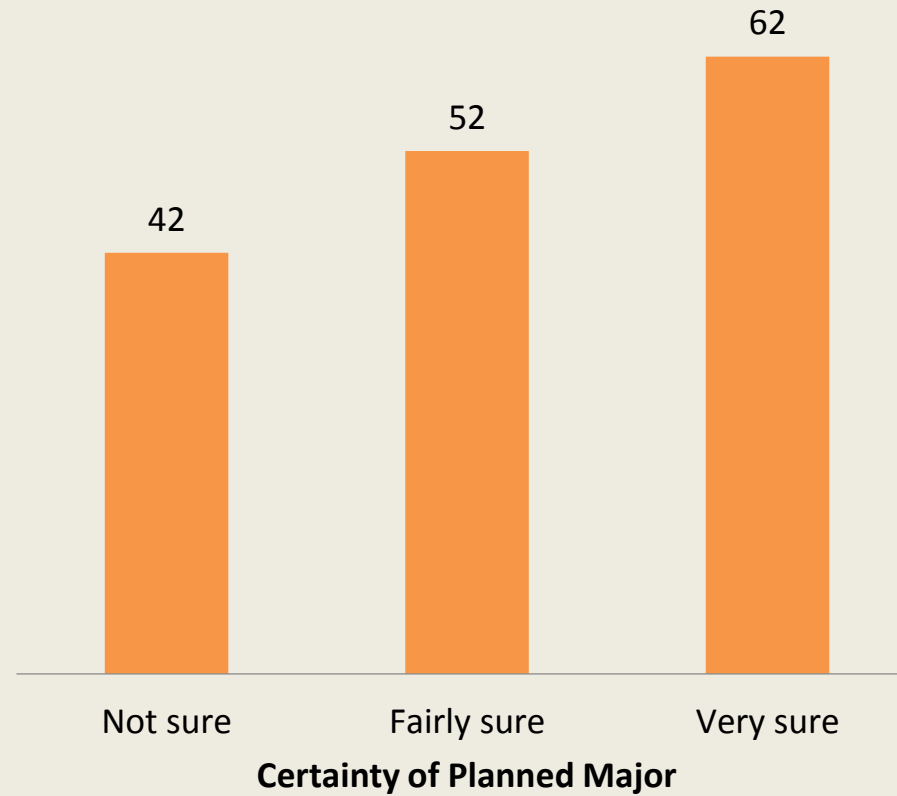
Academic achievement



What predicts consistency rates?

Academic achievement

Certainty of planned major

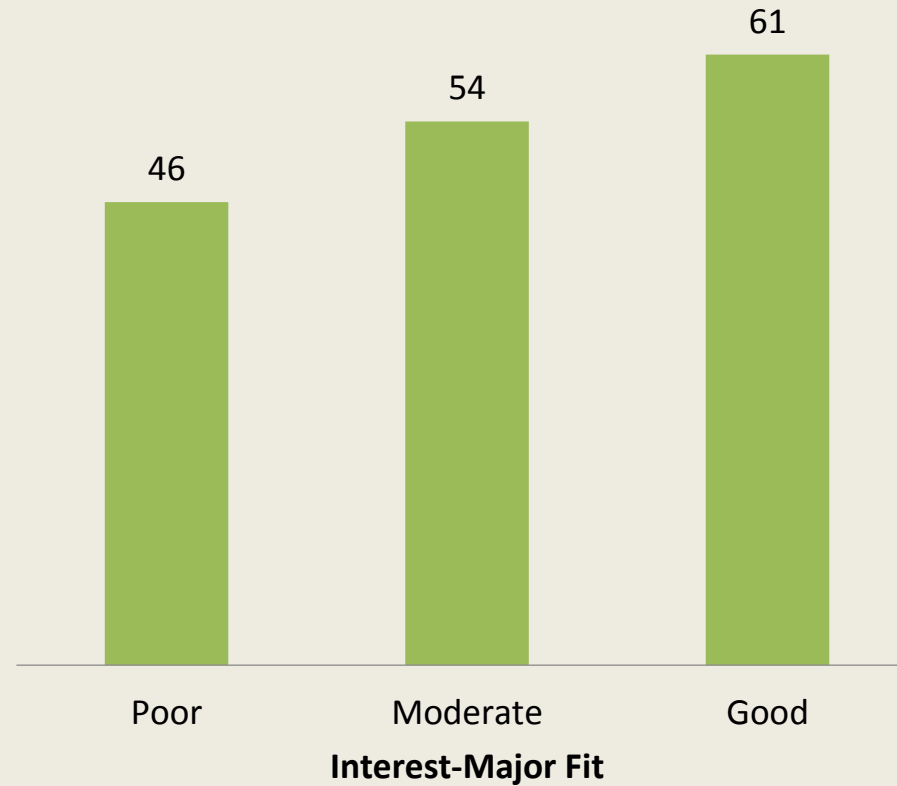


What predicts consistency rates?

Academic achievement

Certainty of planned major

Level of Interest-Major Fit



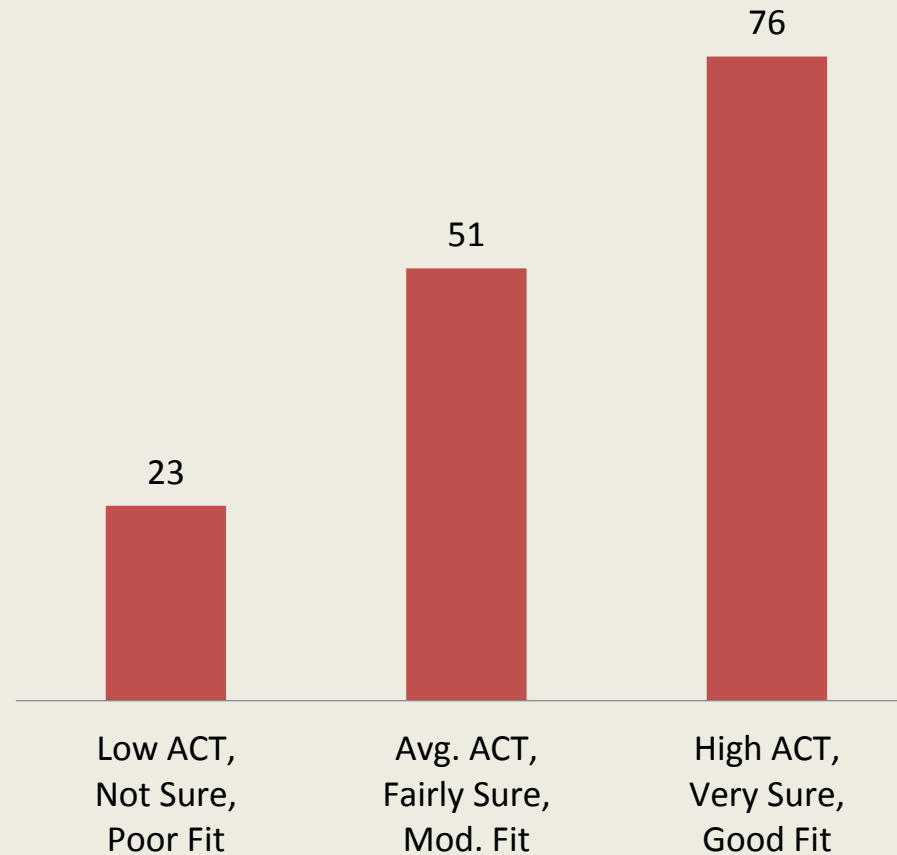
What predicts consistency rates?

Academic achievement

Certainty of planned major

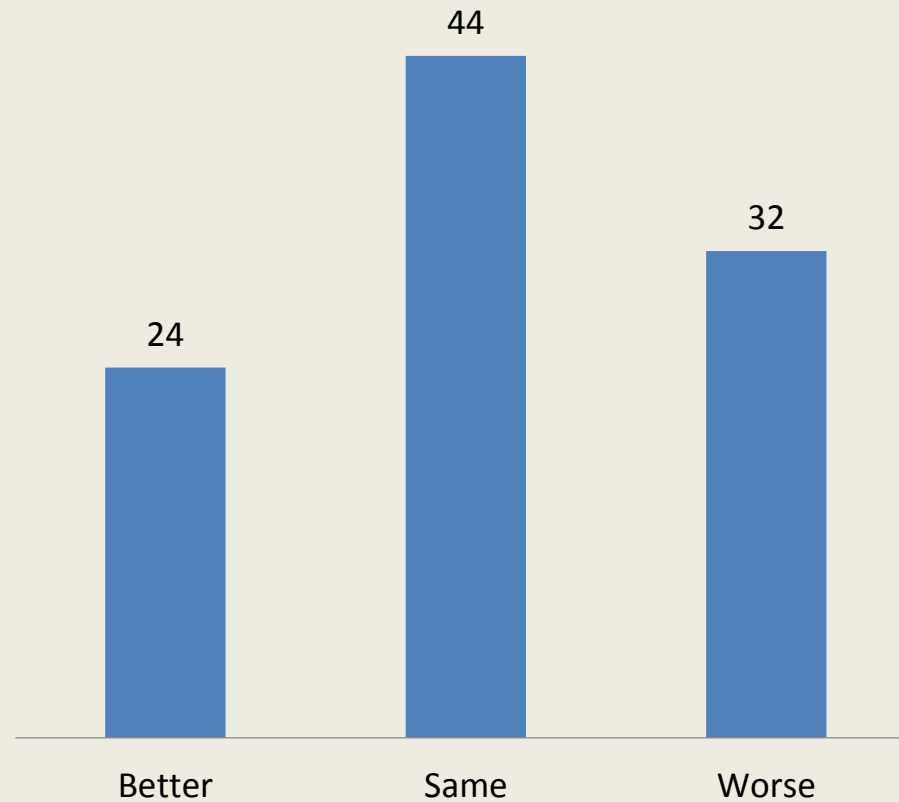
Level of Interest-Major Fit

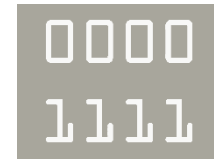
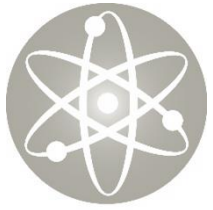
All of the above



Does Interest-Major Fit change with declared major?

Among students who declare a major outside of their planned area



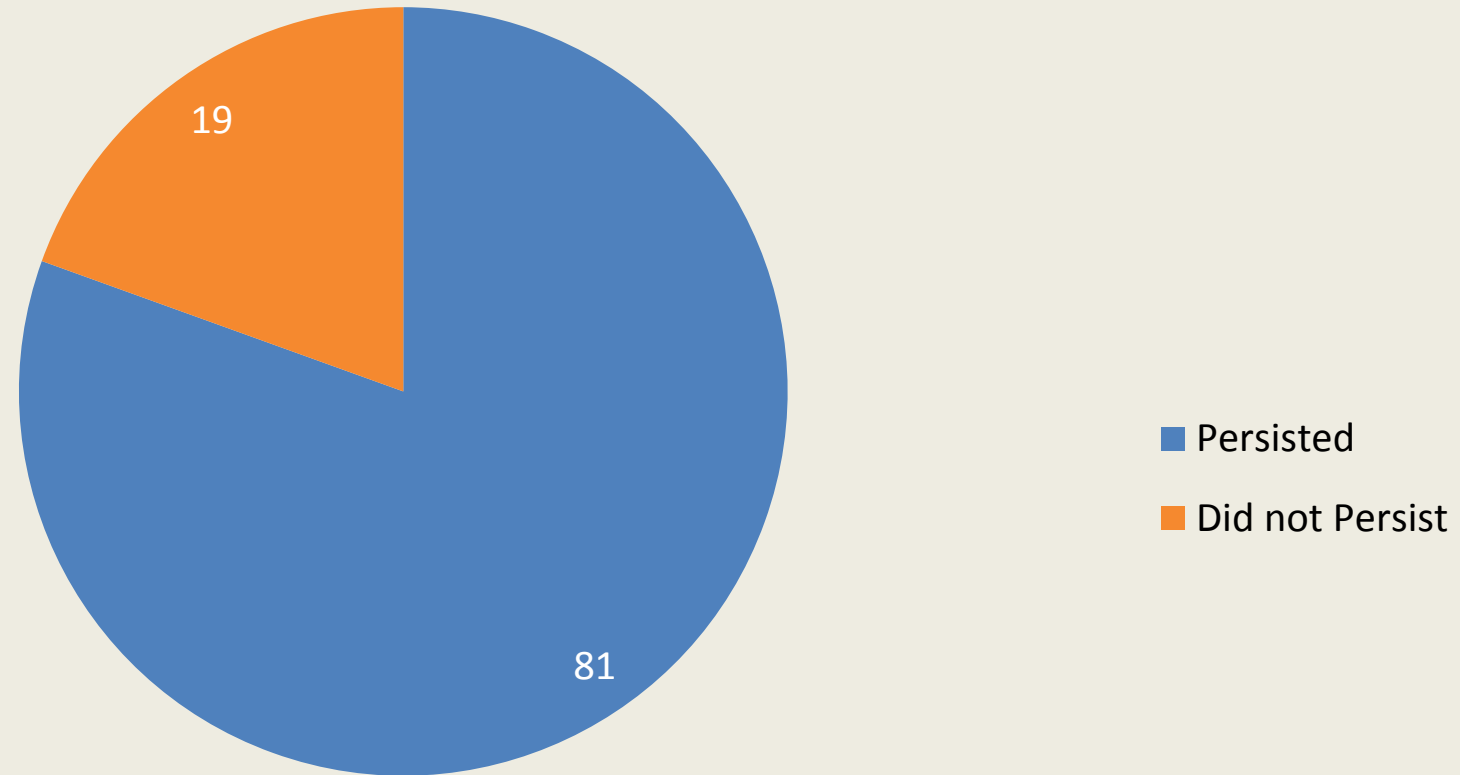


Persisting Within a Major

Second year of college

How many students persist within their major?

Within Major Persistence



Which major areas have best/worst persistence rates?

Best rates:

- Repair, Production, & Construction (90%)
- Business (87%)

Worst rates:

- Area, Ethnic, & Multidisciplinary Studies (66%)
- Health Administration & Assisting (67%)

Where are the biggest gender gaps in persistence rates?

Gaps favoring females:

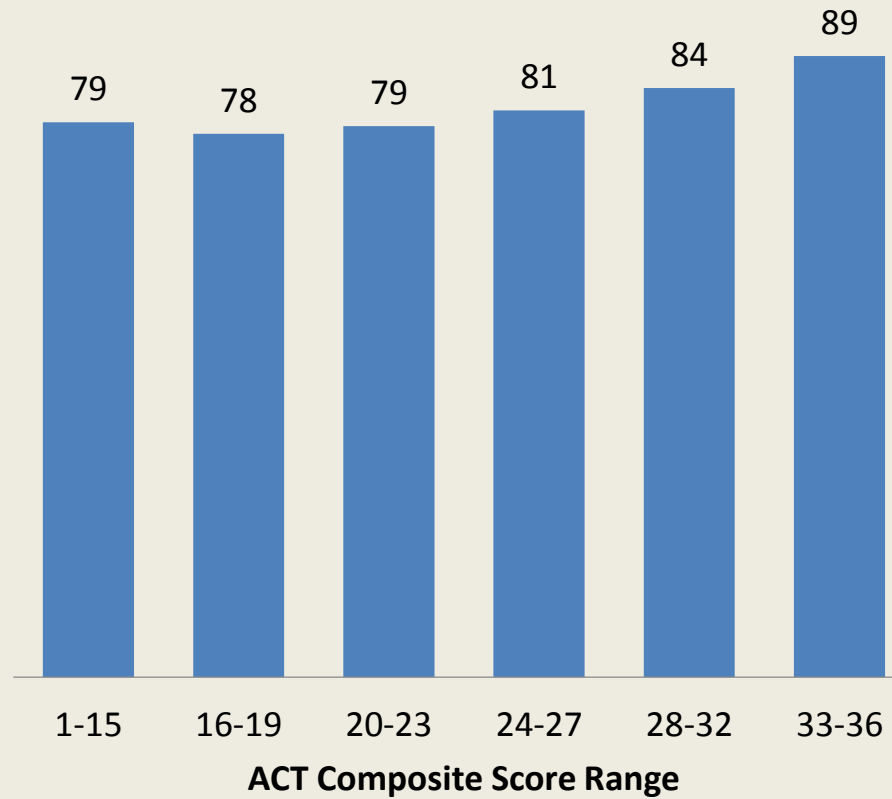
- Health Administration & Assisting: 70% female, 57% male
- Health Sciences & Technology: 79% female, 67% male

Gaps favoring males:

- Engineering Technology and Drafting: 78% male, 67% female
- Computer Science & Mathematics: 82% male, 73% female

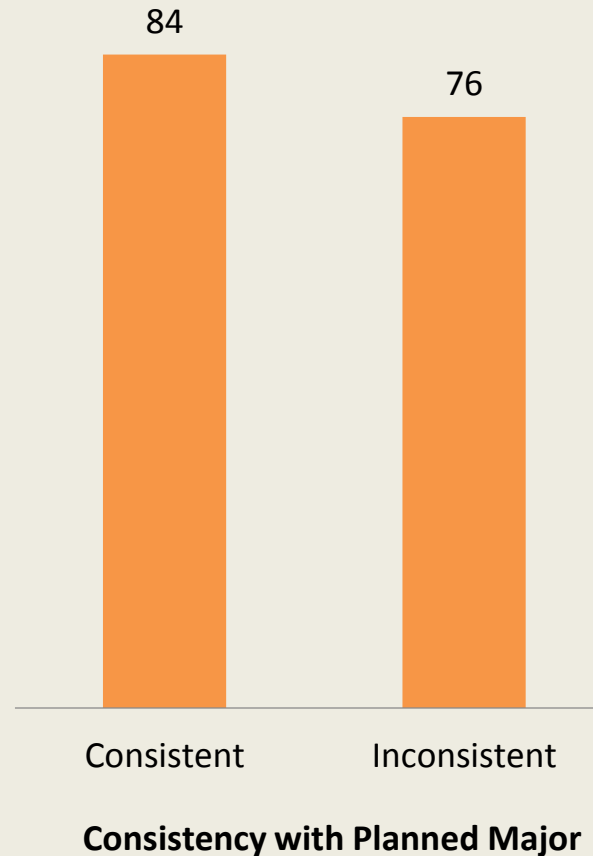
What predicts within-major persistence?

Academic achievement



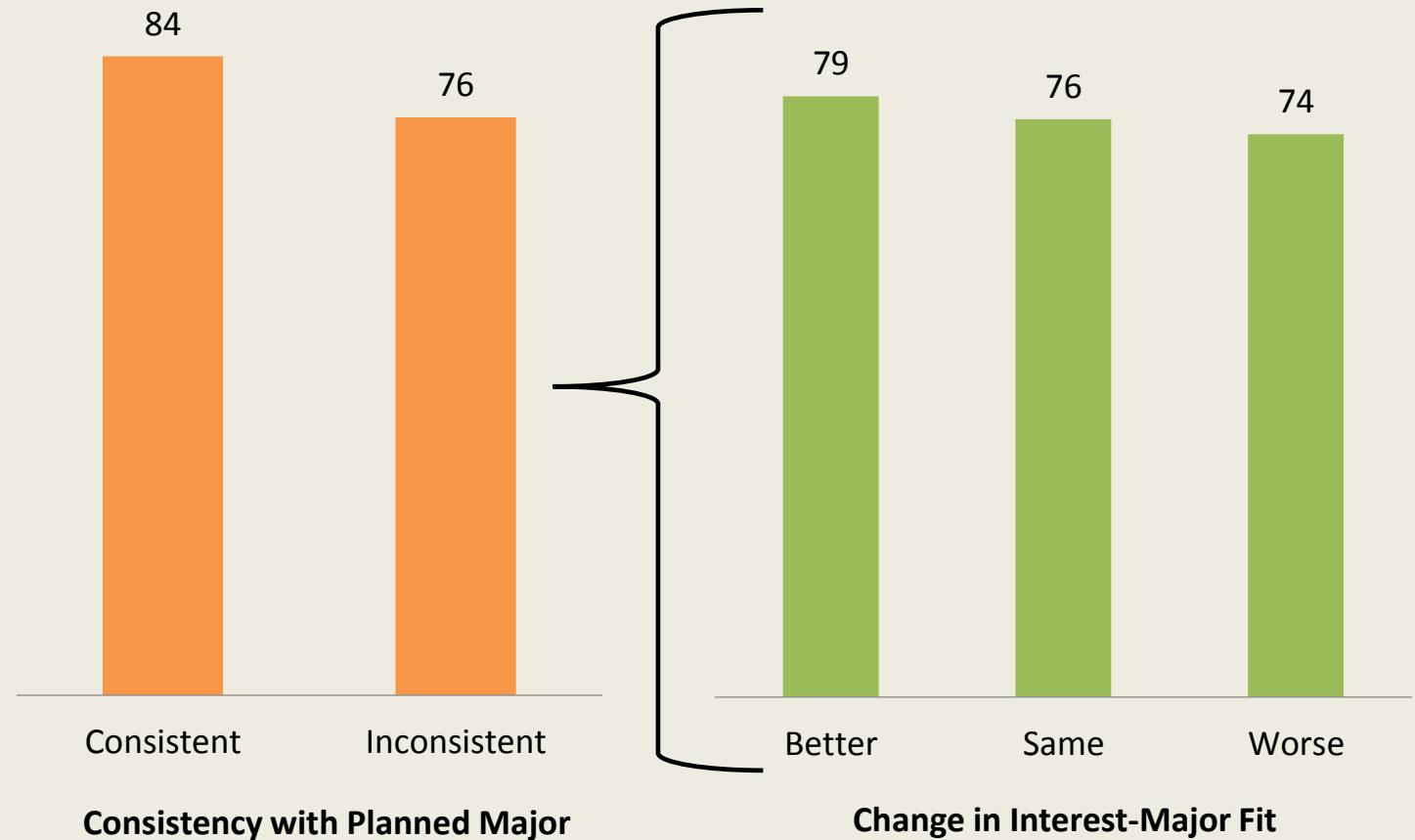
What predicts within-major persistence?

Consistency of
planned major choice



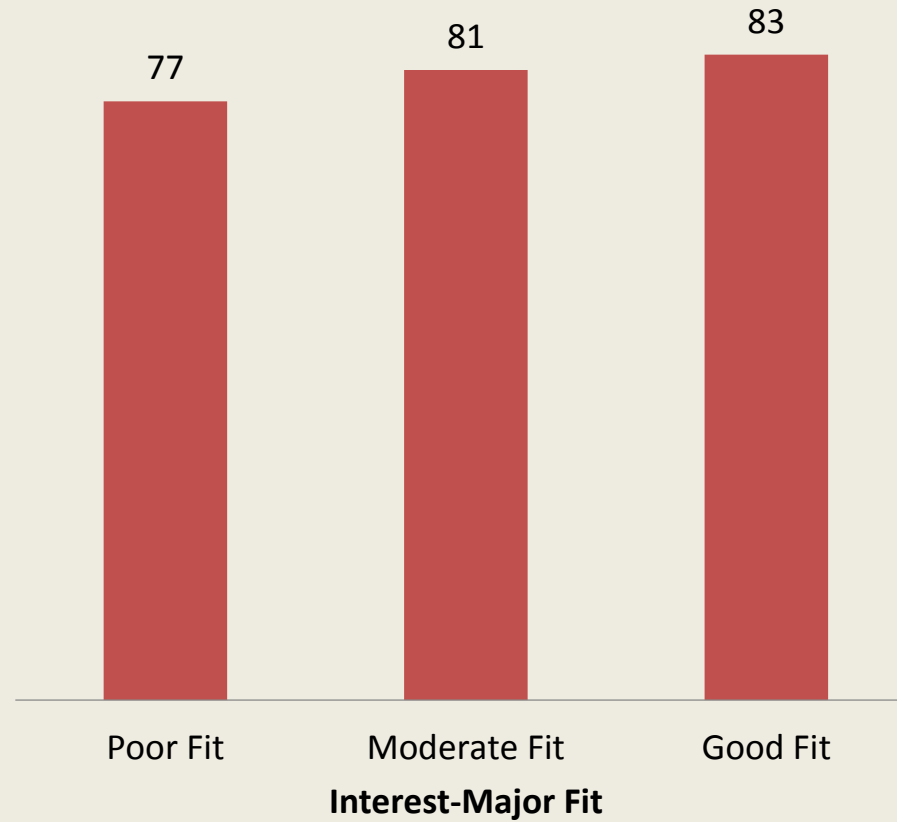
What predicts within-major persistence?

Consistency of
planned major choice
& change in
Interest-Major Fit



What predicts within-major persistence?

Interest-Major Fit
for declared major



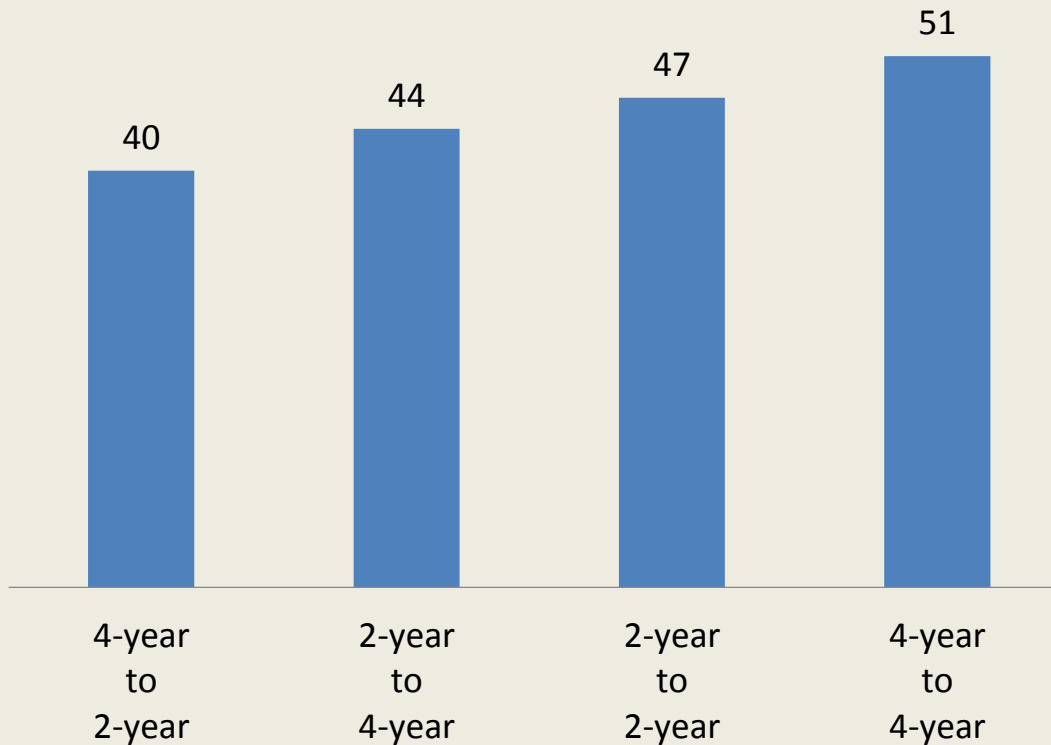
How does within-major persistence differ by transfer?

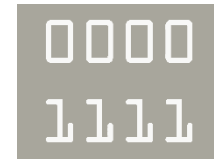
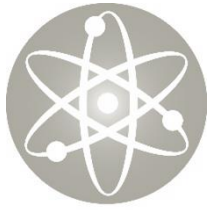
To what extent are students:

1) Changing majors as a result of transferring?

OR

2) Transferring as a result of changing majors?



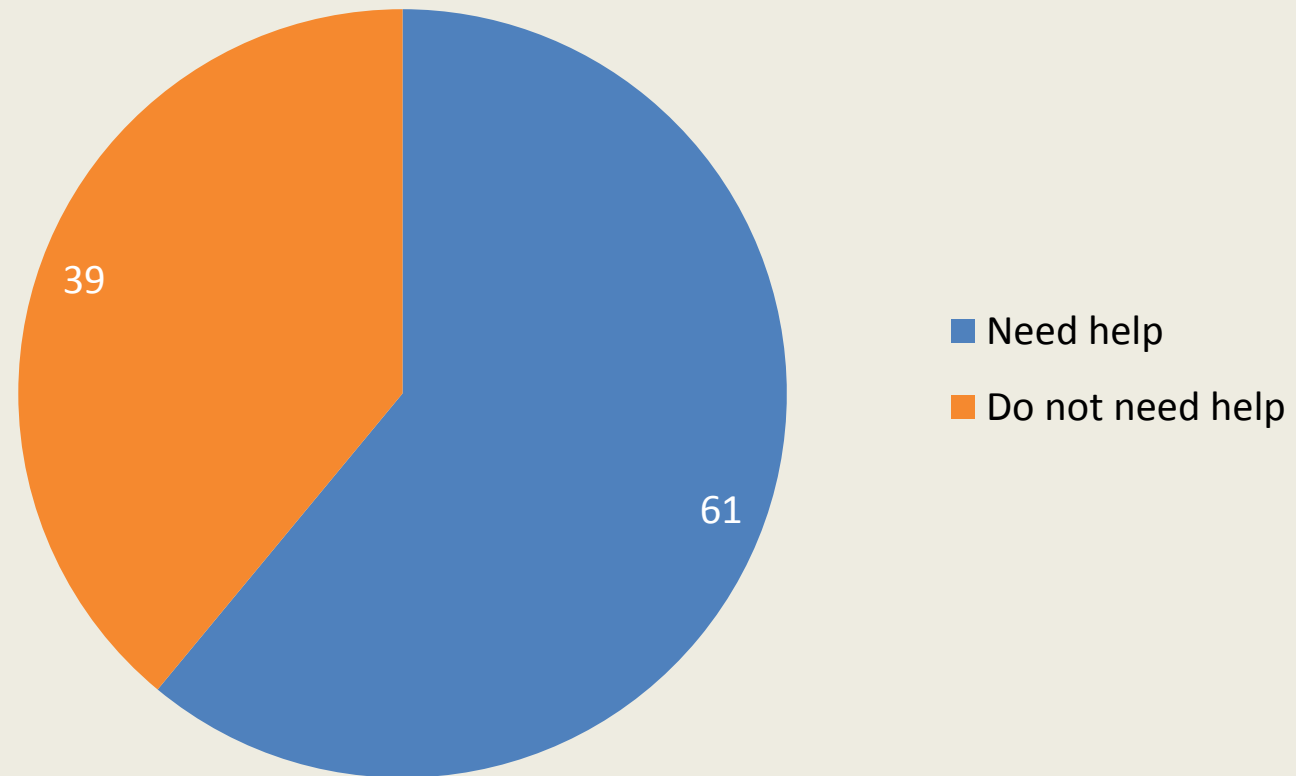


Needing Help With Planning

High School

How many students need help with their planning?

Educational/Occupational Planning



Which students are more likely to report needing help?

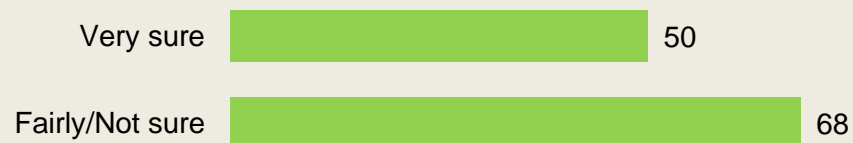
- Higher achieving students



- Students who are undecided about their planned major choice



- Students who are not “Very sure” of their planned major choice



Take Aways

During High School...

- Many students are either undecided about their major or are uncertain of their choice.
- Students with higher achievement, income, and parent education are less certain but tend to have better fit with their interests.
- Students with lower achievement, income, and parent education are more certain but tend to have worse fit with their interests.
- Most students need help, but those needs may differ depending on their academic preparation, certainty, and fit

Take Aways

During First Year of College...

- Having higher achievement, greater certainty, and better fit means more likely to declare as planned.
- Most students who declare outside of their planned area have the same or worse fit.

Take Aways

During Second Year of College...

- Students who declare a major that is consistent with their plans are more likely to persist within that major area.
- Among students who declare a major that is inconsistent with their plans, those who improve the fit with their interests are more likely to persist within that major area.

College Major Tool

- Visualize the movement of students among 18 major areas from:
 - Pre-college plans to first-year declared major
 - First-year declared major to second-year declared major.
- Examine student flow both
 - Into each major area
 - Out of each major area

Planned Engineering majors: Where do they go?

Select different major area

Engineering

Select different direction

Planned to College year 1

Time

Planned

College year 1

Engineering

Engineering

Business

Sciences

Engin. Tech.

Comp. Sci. & Math

Repair/Construction

Health Sciences

Social Sci.

Community Services

Agriculture

Arts

Education

Communications

Architecture

Languages

Health Assist.

Philos/Religion

Area/Eth. Studies

ACT score range

1-15

16-19

20-23

24-27

28-32

33-36

0K 5K 10K

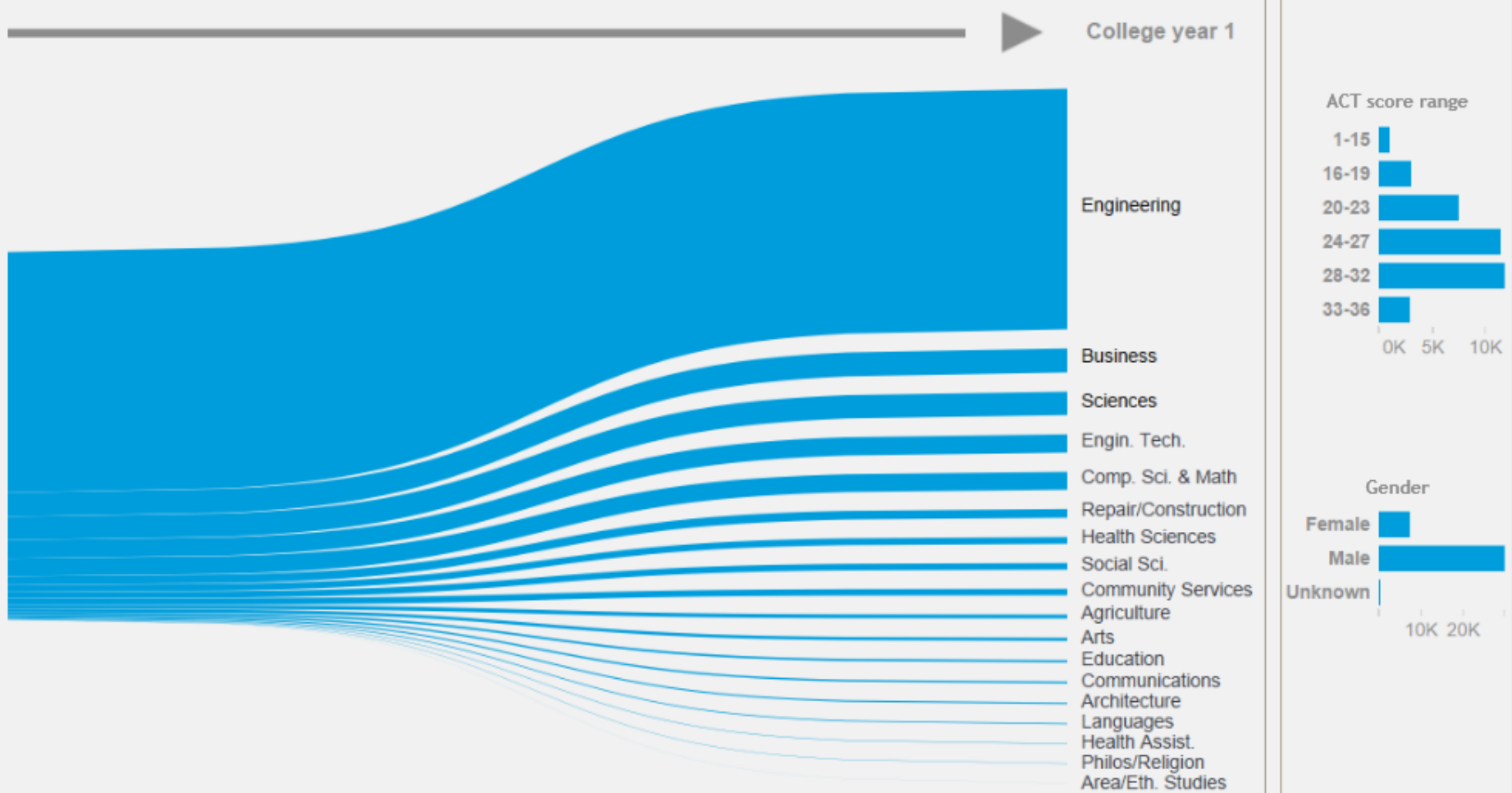
Gender

Female

Male

Unknown

10K 20K



Just Released



Enrollment Planners Conference
Chicago, IL
July, 2015

Expanding Opportunities
Enrollment Patterns
Class of 2014

Contact Information

- ACT's College Choice Report

<http://www.act.org/collegechoice/>

- College Major Tool

<http://www.act.org/collegechoice/13/studentmovement.html>

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