Creating and Validating an Entering Student Survey

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Overview

- Understanding the Purpose of Entering Student Surveys

- Selecting an Entering Student Survey

- Designing an Entering Student Survey

- Validating a Local Instrument

- Using Results

- Deploying Results
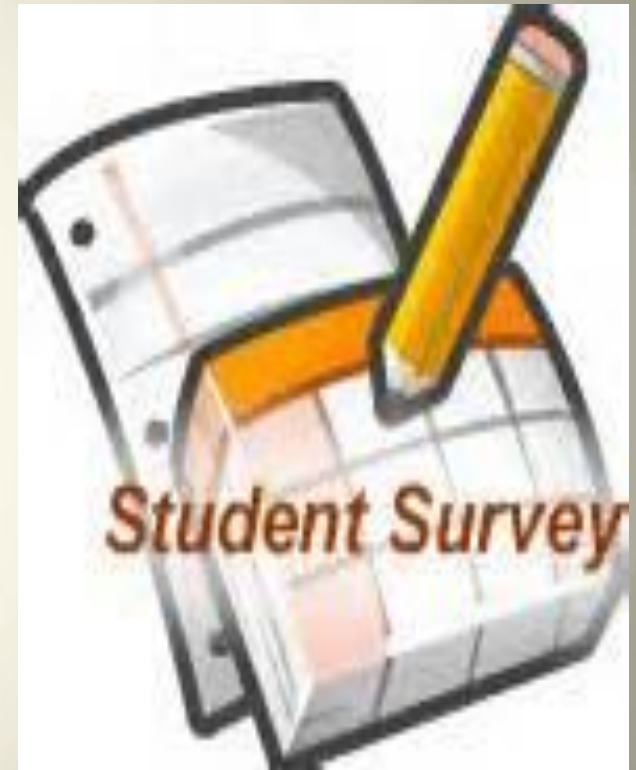
Student Survey

Purposes of Entering Student Surveys

- Assess changes in student populations over time

- Identity risk factors

- Determine student characteristics that predict student success and persistence

- Provide institution-specific benchmarks for evaluating efforts to improve academic performance, persistence and degree attainment

Student Information

- Needs
- Educational Goals
- Concerns
- Expectations
- Commitments
- Past behaviors
- Reasons for selecting institution
- Adjustment
- Beliefs/ Attitudes

Local or National Survey?

- National
  - Comparison data
  - Extensive research and validity testing
  - Time savings in terms of development
- Local
  - Can be more sensitive to institutional and program goals
  - More acceptable to institutional and program planners
  - Opportunities for stakeholder involvement

Some National Instruments to Consider

- ACT-Compass

- CIRP Freshman Survey

- Beginning College Survey of Student Engagement (BCSSE)

- Making Achievement Possible-Works (MAP-Works)

Why We Selected Local

- Local priorities

- Important constructs

- Up-front costs

- Compatibility with university IT/Early warning

Developing the Instrument

- Consulted published research literature on factors that predict student success and learning

- Met with key stakeholders in Enrollment Services, Student Affairs, University College, Faculty Members, New Student Orientation Services, etc.

- Examined IUPUI's strategic planning documents and institutional priorities

Published Literature

Commitment (Mowday, Steers, & Porter, 1979)

Hope (Snyder, 2002)

Sense of Belonging (Lee & Robbins, 1995)

Key Stakeholders

New Student orientation
- Assessment of program

Student Affairs
- Predictive analytics

Enrollment Services
- Reasons for attending IUPUI

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Institutional Priorities/ Important Considerations

Needed an instrument aligned with needs of

- Commuting students
- Transfer students
- Returning adults

Instrument Content Domains

- **Sense of Belonging**
- **Academic Hope**
- **Academic Self-Efficacy**
- **Behaviors in High School or Previous College**
- **Self-Awareness**
- **Self-Efficiency/Perseverance**
- **Expected Time Commitments/Campus Engagement/RISE Activities**
- **Goal Setting**
- **Commitment to IUPUI**
- **College Expectations**
- **Reasons for Choosing IUPUI**

Administration

- Currently paper-based and administered during New Student Orientation sessions to ensure high response rate (about 75%)

- Trained orientation team leaders in administration (emphasis on purpose and importance)

- Pilot administered during New Student Orientation Sessions (representative sample of first time beginners and transfers students)

- Pilot administered to small group of returning adults

"Validating" the Instrument

Face
- Student focus groups
- Shared drafts with key stakeholders iteratively

Construct
- Selected already validated scales such as Academic Hope and Sense of Belonging
- Alpha Reliability Coefficients (.85 -.95)

Content
- Designed to cover all relevant domains of interest to key stakeholders
- Included domains related to early predictors of student success.

Predictive
- Conducted analyses to examine what items and constructs predicted student success
- Student success defined as first year/semester cumulative GPAs and % GPAs below 2.00

Student Focus Groups

- Groups of students attending orientation

- Each group 1 section

- Entering first-year students and transfers

Student Focus Group Results

Students unsure about Sense of Belonging items

- "Everyone is nice now…"

Reduce response set

- Do students know difference between " "somewhat important" and "moderately important"?

General education

- Don't understand it as we do

Predictors of Success (Fall-Spring Retention)

New Beginners

- - Number of hours expected to work off-campus for pay
- - Number of hours expected to commute to campus
- - Number of hours expected to take care of household responsibilities
- + Size of IUPUI (reasons why selected)
- - Come to class late (past behavior)
- - Academic ability (confidence)
- + Ability to seek out appropriate academic help (confidence)

Covariates HS GPA, SAT score, Pell Grant

New External Transfers

- + Sense of Belonging
- + Organizational Commitment
- - Transfer Intention
- - Number of hours expected to work off-campus for pay
- - Number of hours expected to take care of household responsibilities

Covariate: Transfer In GPA

Predictors of Success (Fall GPA)

New Beginners

- + Academic Hope
- + Goal Commitment
- - Number of hours expected to work off-campus for pay
- - Number of hours expected to commute to campus
- - Number of hours expected to provide care for dependents
- - Number of hours expected to take care of household responsibilities
- + Drive to succeed (confidence)
- + Academic ability (confidence)
- + Study Skills (confidence)
- + Ability to seek out appropriate academic help (confidence)
- + Come to class with all required readings completed (past behavior)
- - Come to class late (past behavior)

Covariates HS GPA, SAT score, Pell Grant

New External Transfers

- - Number of hours expected to work off-campus for pay
- - Number of hours expected to commute to campus + Drive to succeed (confidence)
- + Academic ability (confidence)
- + Study Skills (confidence)
- - Wait until last moment to get your assignments done (past behavior)
- + Comprehend reading assignment (past behavior)
- + Revise your papers to improve writing (past behavior)

**Covariate: Transfer In GPA**

Academic Hope Items

1. If I should find myself in a jam, I could think of many ways to get out of it

2. At the present time, I am energetically pursuing my academic goals

3. There are lots of ways around any school-related problems that I may face

4. Right now I see myself as being pretty successful

5. I can think of many ways to reach my current academic goals

6. I see myself meeting the goals I have set for myself

Alpha Reliability Coefficient = .88

Academic Hope Levels Predict Fall GPAs

Beginners Entering Student Survey Results 2013

■ LOW   ■ MEDIUM   ■ HIGH
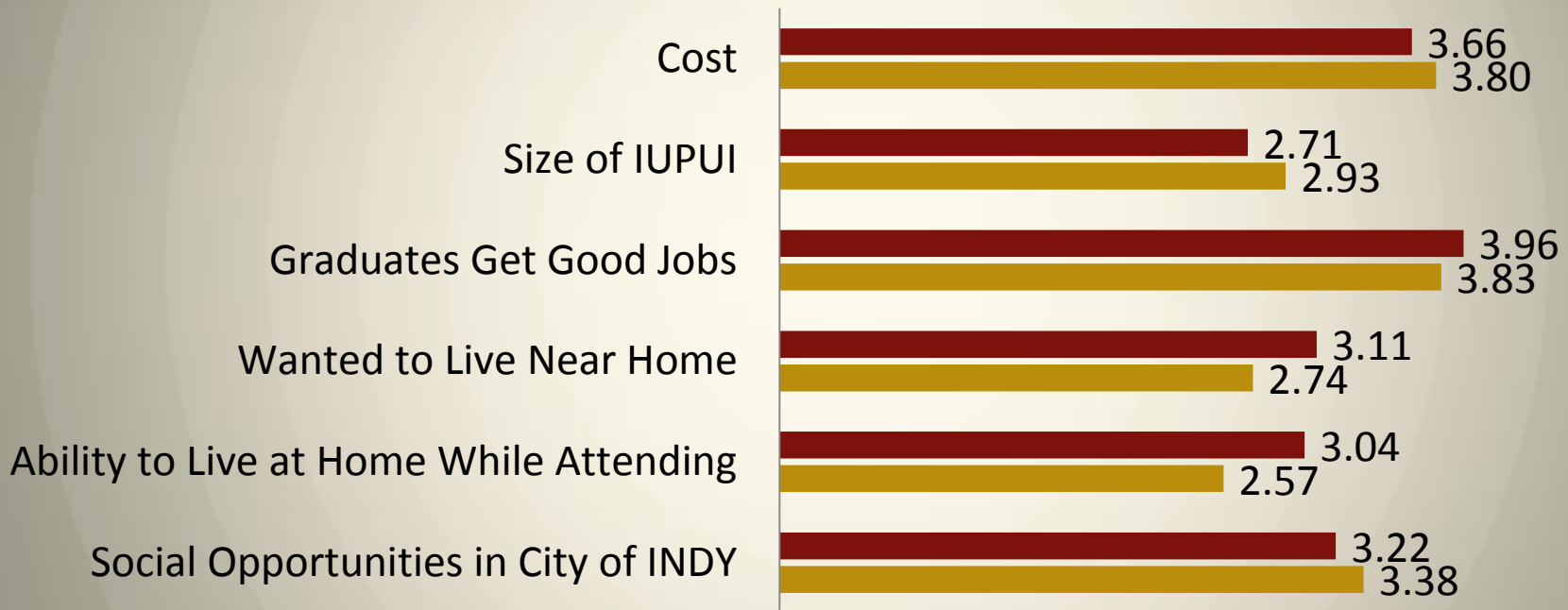

2.77   2.87   2.93

FALL GPA
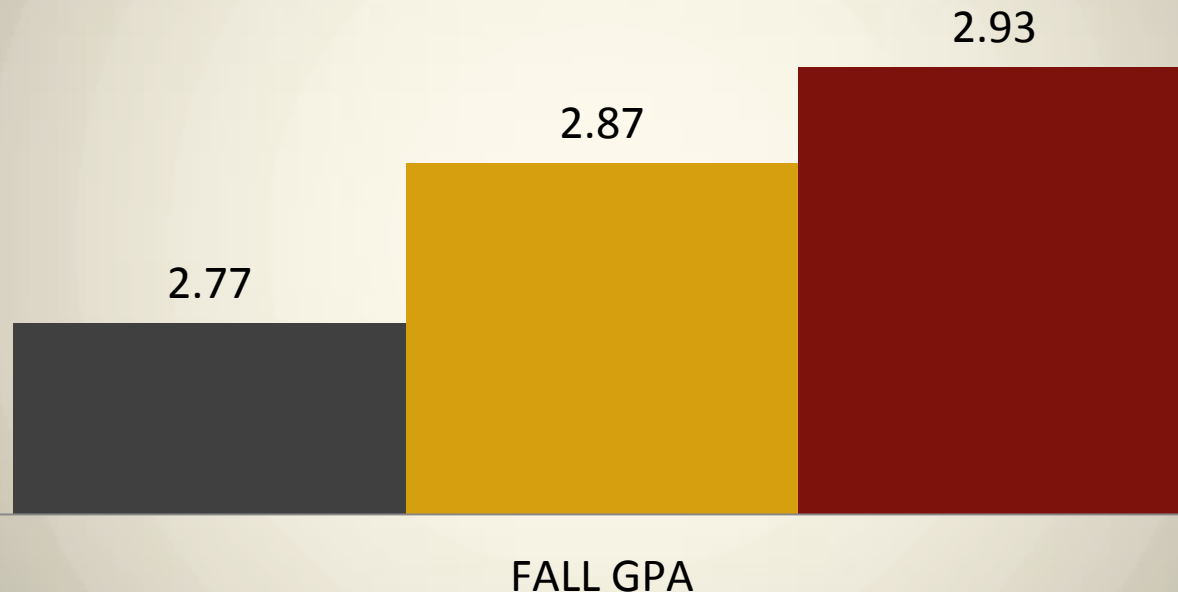
Incoming levels of Academic Hope significantly predicted fall academic performance, even when taking HS GPA, SAT Score, and First-Generation status into account (based on hierarchal logistic regression results, $p < .001$)

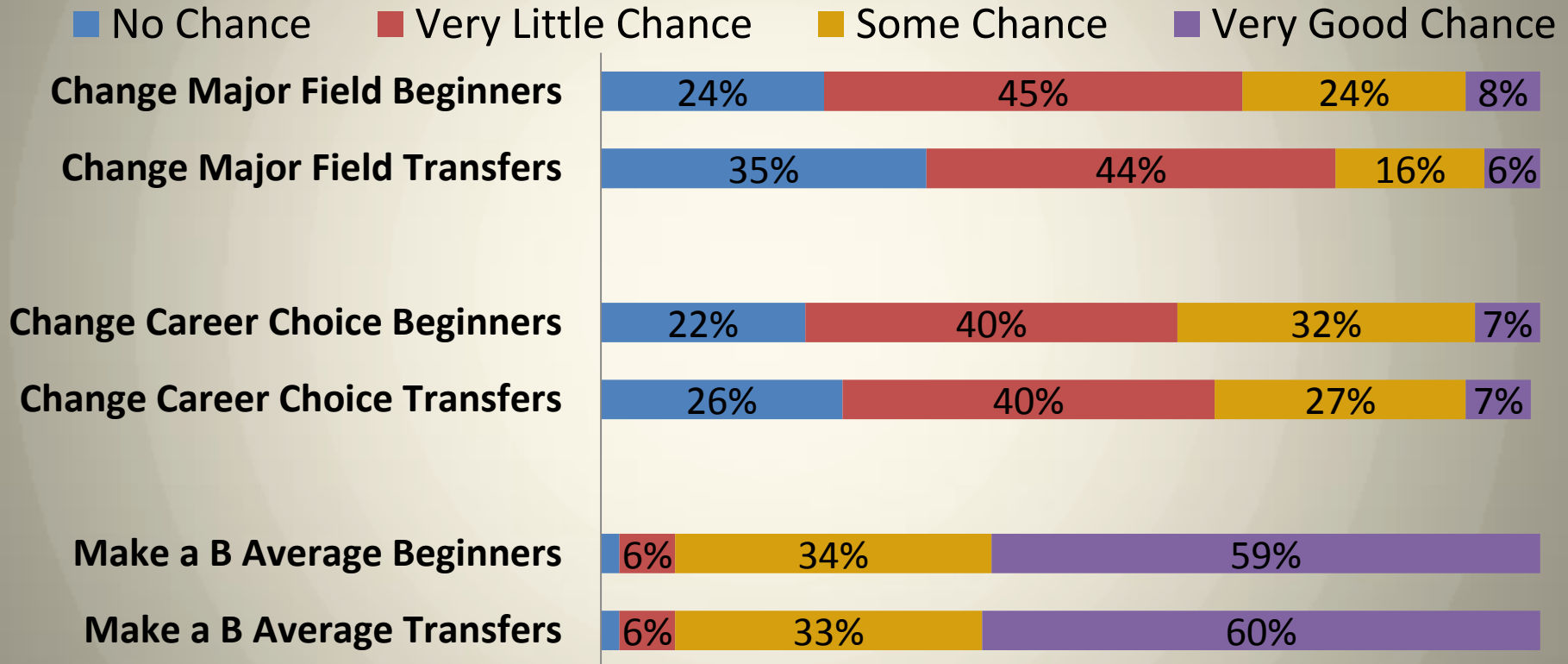# Reasons Why Choose IUPUI

Significant Mean Differences

■ New Transfers   ■ Beginners

	New Transfers	Beginners
Cost	3.66	3.80
Size of IUPUI	2.71	2.93
Graduates Get Good Jobs	3.96	3.83
Wanted to Live Near Home	3.11	2.74
Ability to Live at Home While Attending	3.04	2.57
Social Opportunities in City of INDY	3.22	3.38

Mean responses based on a 5-point scale where 1=Not Important, 2 = Somewhat Important, 3 = Moderately Important, 4= Very Important, 5 = Extremely Important

Student Expectations

Beginners and External Transfers' College Planned Behaviors

Legend: ■ No Chance ■ Very Little Chance ■ Some Chance ■ Very Good Chance

	No Chance	Very Little Chance	Some Chance	Very Good Chance
Change Major Field Beginners	24%	45%	24%	8%
Change Major Field Transfers	35%	44%	16%	6%
Change Career Choice Beginners	22%	40%	32%	7%
Change Career Choice Transfers	26%	40%	27%	7%
Make a B Average Beginners		6%	34%	59%
Make a B Average Transfers		6%	33%	60%

Transfer students are significantly less likely to expect to change their majors compared to Beginners (based on independent samples t-test $p < .05$)

Expectations and Reality?
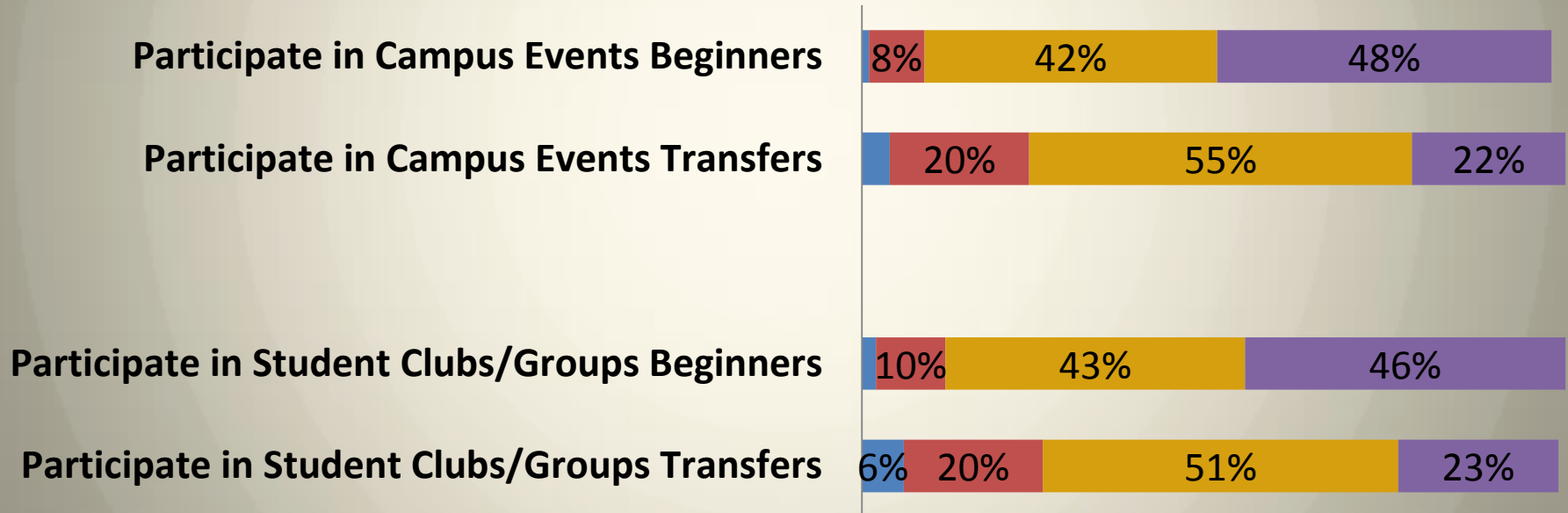
**Expected Chance of Making a B Average
by Actual Fall GPA**

Student Expectations

**First-Time Beginners' and External Transfers'
College Expectations and Planned Behaviors**

■ No Chance   ■ Very Little Chance   ■ Some Chance   ■ Very Good Chance

Participate in Campus Events Beginners
8% | 42% | 48%

Participate in Campus Events Transfers
20% | 55% | 22%

Participate in Student Clubs/Groups Beginners
10% | 43% | 46%

Participate in Student Clubs/Groups Transfers
6% | 20% | 51% | 23%

Transfer students are significantly less likely to expect to participate in campus events and join student organizations compared to Beginners (based on independent samples t-test p< .05)

Student Expectations: Get Tutoring Or Mentor Help

First-Time Beginners' College Expectations and Planned Behaviors

Legend:
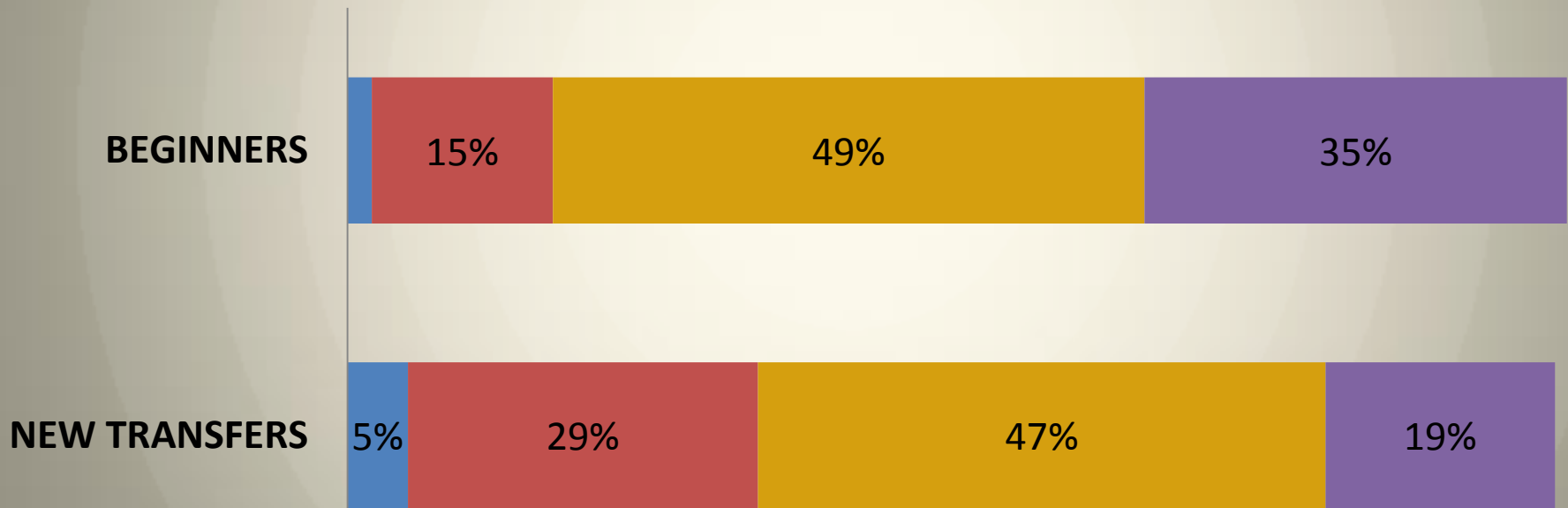- ■ No Chance
- ■ Very Little Chance
- ■ Some Chance
- ■ Very Good Chance

BEGINNERS
Very Little Chance	Some Chance	Very Good Chance
15%	47%	37%

NEW TRANSFERS
Very Little Chance	Some Chance	Very Good Chance
21%	47%	30%
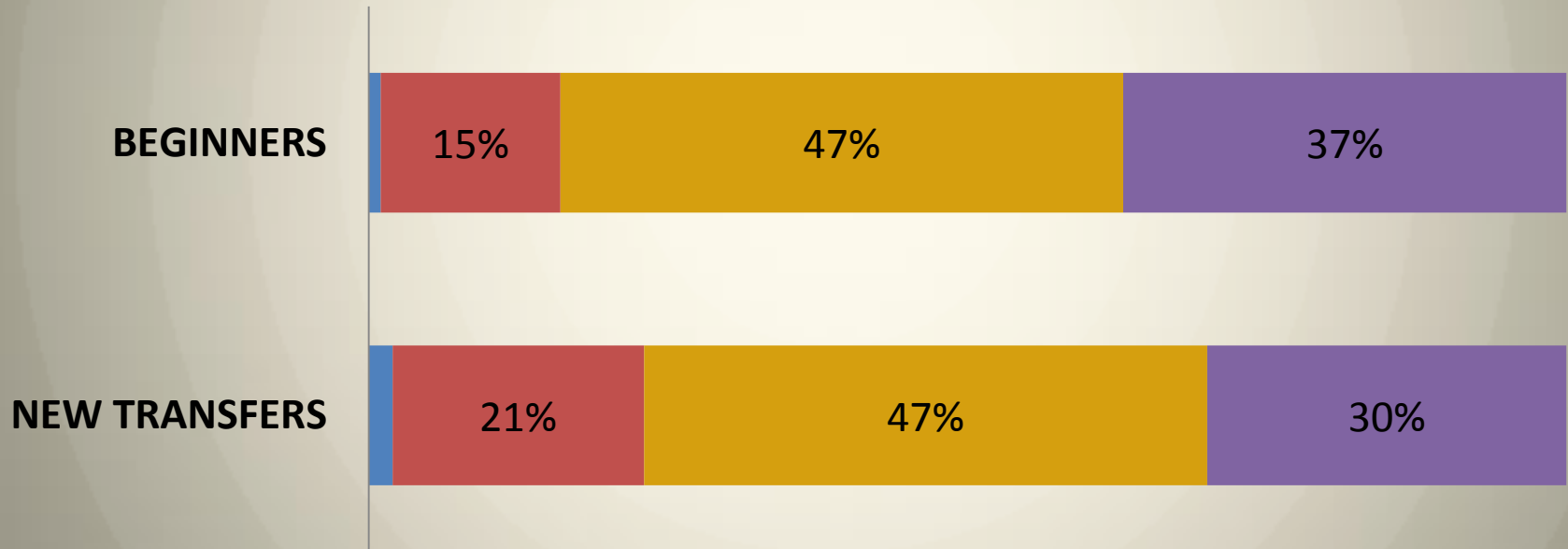
Transfer students are significantly less likely to expect to get tutoring or peer mentor help in specific courses compared to Beginners (based on independent samples t-test $p < .05$)

High Impact Practices: Service Learning or Community Service

Full-Time Beginners' and External Transfers' College Expectations and Planned Behaviors

Legend:
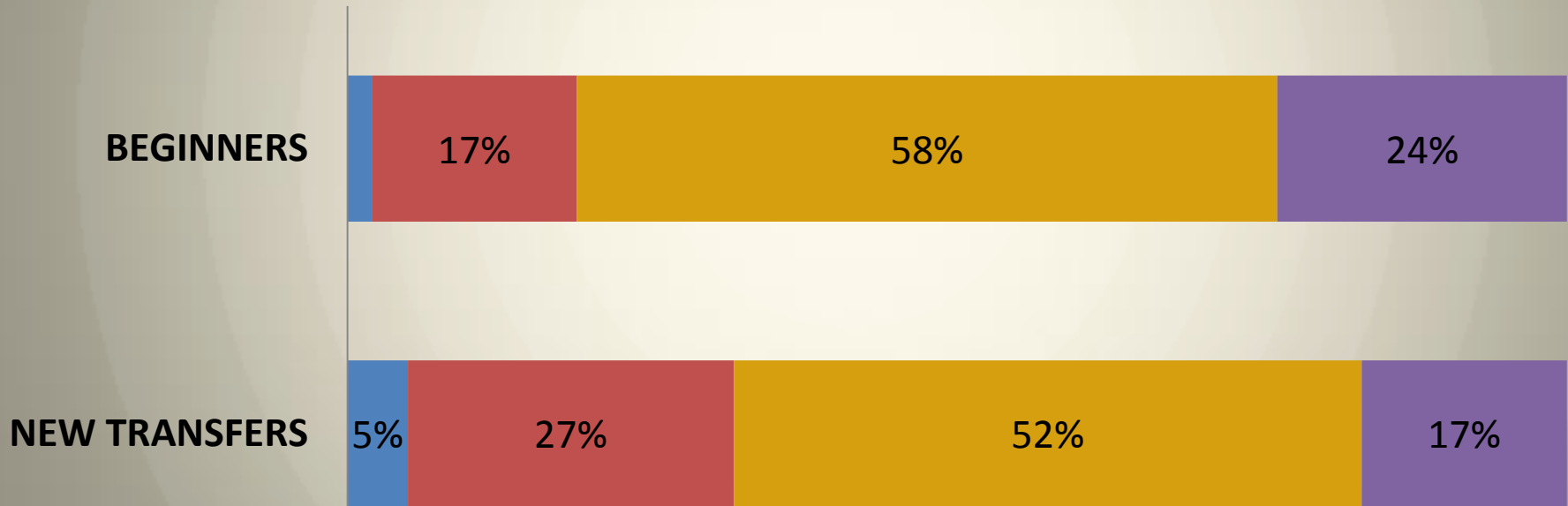- ■ No Chance
- ■ Very Little Chance
- ■ Some Chance
- ■ Very Good Chance

BEGINNERS
- Very Little Chance: 15%
- Some Chance: 49%
- Very Good Chance: 35%

NEW TRANSFERS
- No Chance: 5%
- Very Little Chance: 29%
- Some Chance: 47%
- Very Good Chance: 19%

Transfer students are significantly less likely to expect to participate in service learning compared to compared to Beginners (based on independent samples t-test $p < .05$)

High Impact Practices: Research Project With a Professor

Full-Time Beginners' and External Transfers' Bachelor Degree Seeking College Expectations and Planned Behaviors

■ No Chance   ■ Very Little Chance   ■ Some Chance   ■ Very Good Chance

BEGINNERS
Very Little Chance	Some Chance	Very Good Chance
17%	58%	24%

NEW TRANSFERS
No Chance	Very Little Chance	Some Chance	Very Good Chance
5%	27%	52%	17%

Transfer students are significantly less likely to expect to participate research project with a professor compared to compared to Beginners (based on independent samples t-test p< .05)

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High Impact Practices: Study Abroad or Internal Travel

Full-Time Beginners' and External Transfers' College Expectations and Planned Behaviors

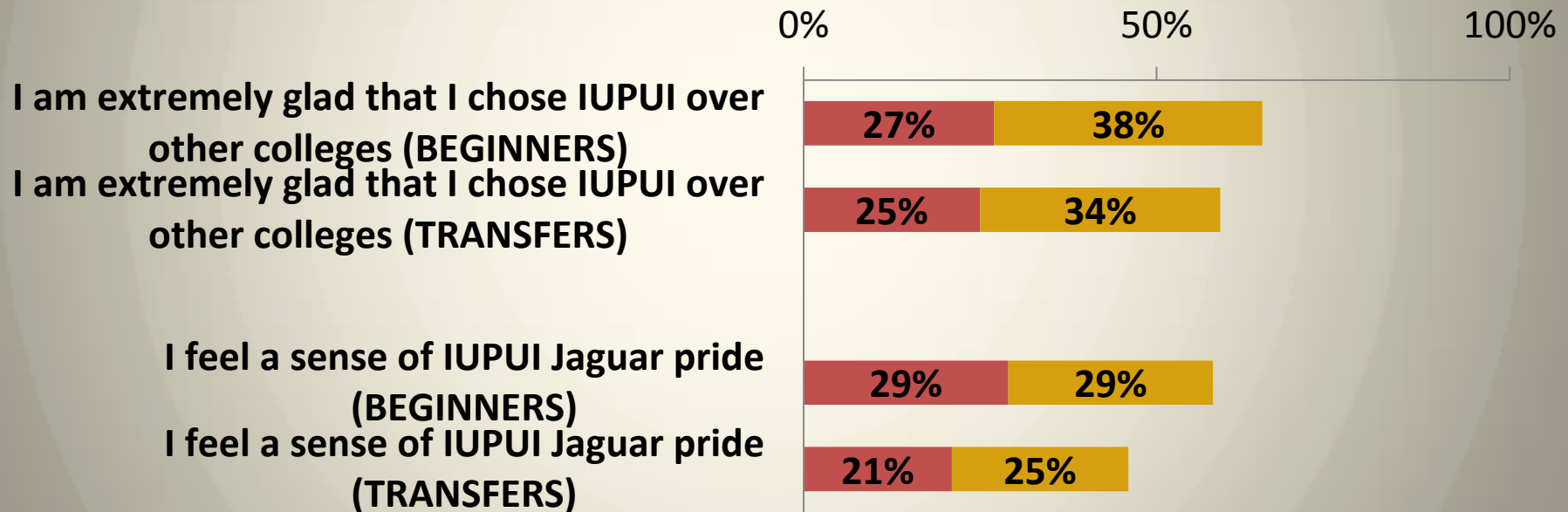■ No Chance   ■ Very Little Chance   ■ Some Chance   ■ Very Good Chance

	No Chance	Very Little Chance	Some Chance	Very Good Chance
BEGINNERS	15%	31%	32%	22%
NEW TRANSFERS	21%	31%	32%	16%
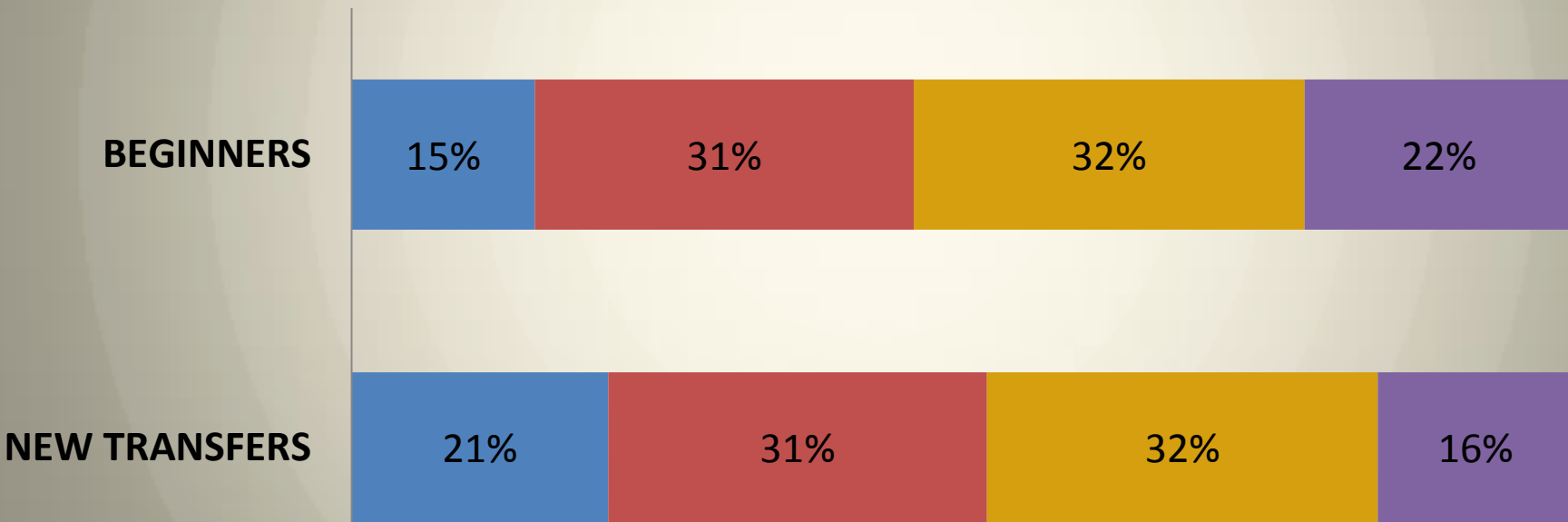
Transfer students are significantly less likely to expect to participate study abroad or international travel related to school compared to compared to Beginners (based on independent samples t-test p< .05)

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Commitment to IUPUI

**New Beginners' and Transfers'
Entering Student Survey Responses**

■ Moderately Agree   ■ Strongly Agree

| | 0% | 50% | 100% |

It is important for me to graduate from IUPUI (rather than another college) (BEGINNERS)
24% | 43%

It is important for me to graduate from IUPUI (rather than another college) (TRANSFERS)
22% | 51%

Transfer students are significantly more likely to report that it is important to graduate from IUPUI compared to compared to Beginners (based on independent samples t-test p< .05)

Commitment to IUPUI

New Beginners' and Transfers' Entering Student Survey Responses

■ Moderately Agree   ■ Strongly Agree

| | 0% | 50% | 100% |

I am extremely glad that I chose IUPUI over other colleges (BEGINNERS) — 27% | 38%

I am extremely glad that I chose IUPUI over other colleges (TRANSFERS) — 25% | 34%

I feel a sense of IUPUI Jaguar pride (BEGINNERS) — 29% | 29%

I feel a sense of IUPUI Jaguar pride (TRANSFERS) — 21% | 25%

Transfer students are significantly less likely to report they are extremely glad that they chose IUPUI or feel a sense of pride compared to Beginners (based on independent samples t-test $p < .05$)

See Myself As Part of the IUPUI Community

New External Transfers and Beginners Entering Student Survey Responses
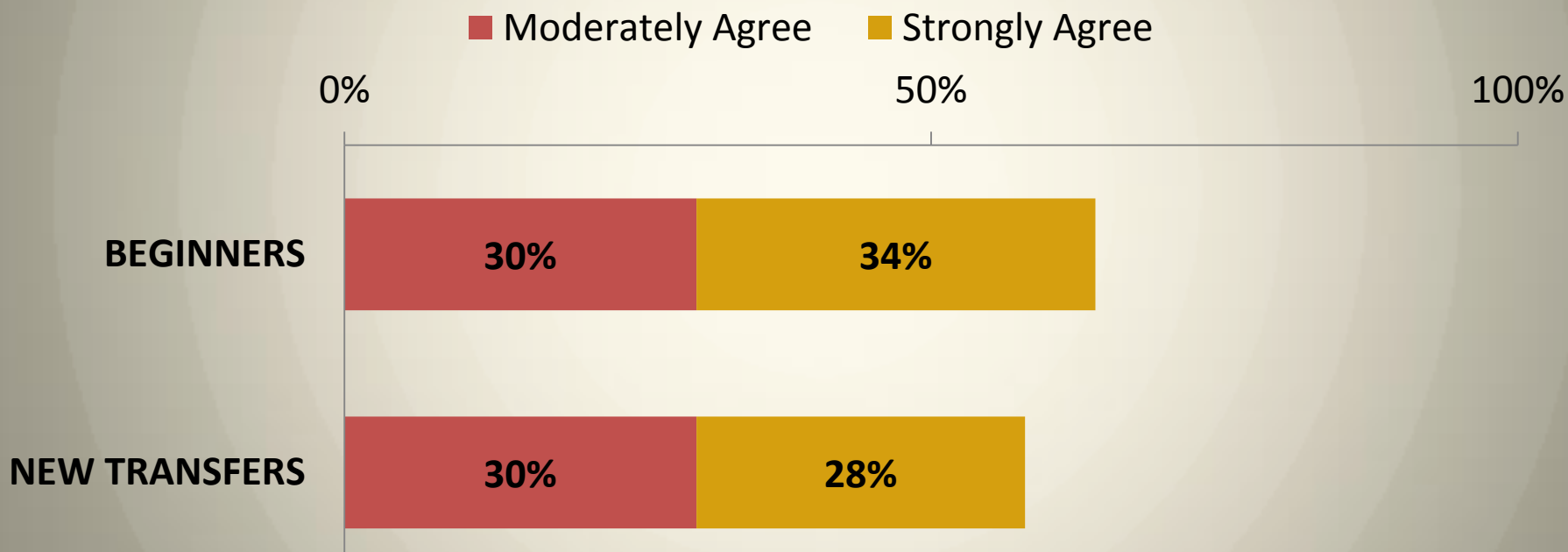
Transfer students are significantly less likely to report that they see themselves as part of the IUPUI community compared to Beginners (based on independent samples t-test p< .05)

Perseverance

Transfer Students Have Significantly More Resilience than Beginners
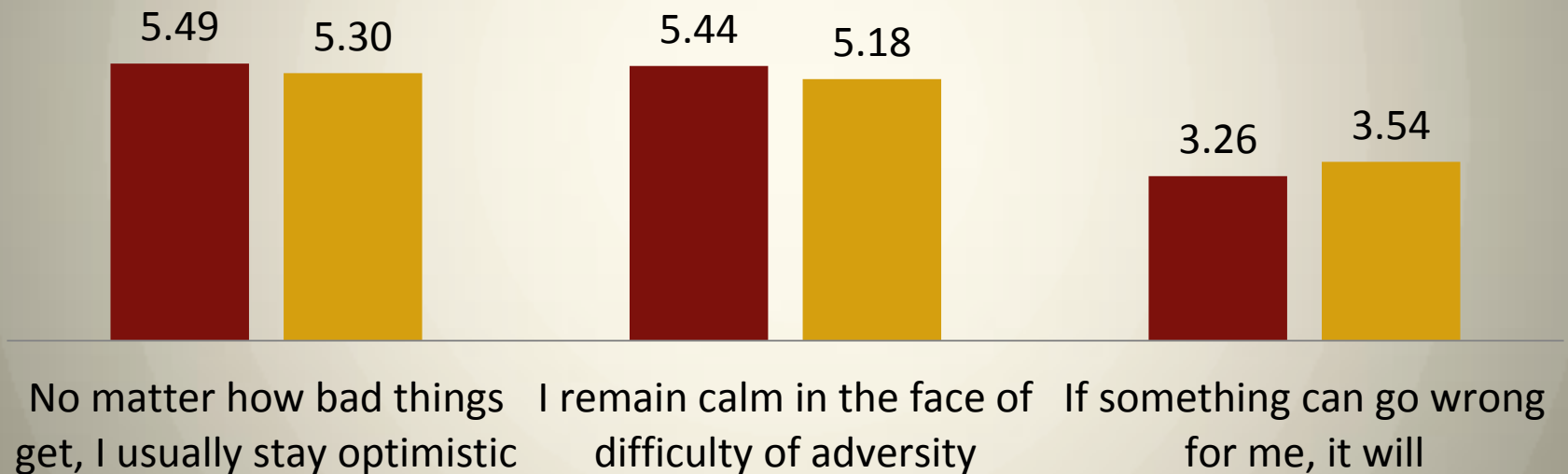
Mean ratings on a 7-point scale from 1 = Strongly Disagree to 7=Strongly Agree

Confidence

% Reporting Above Average or Highest 10%
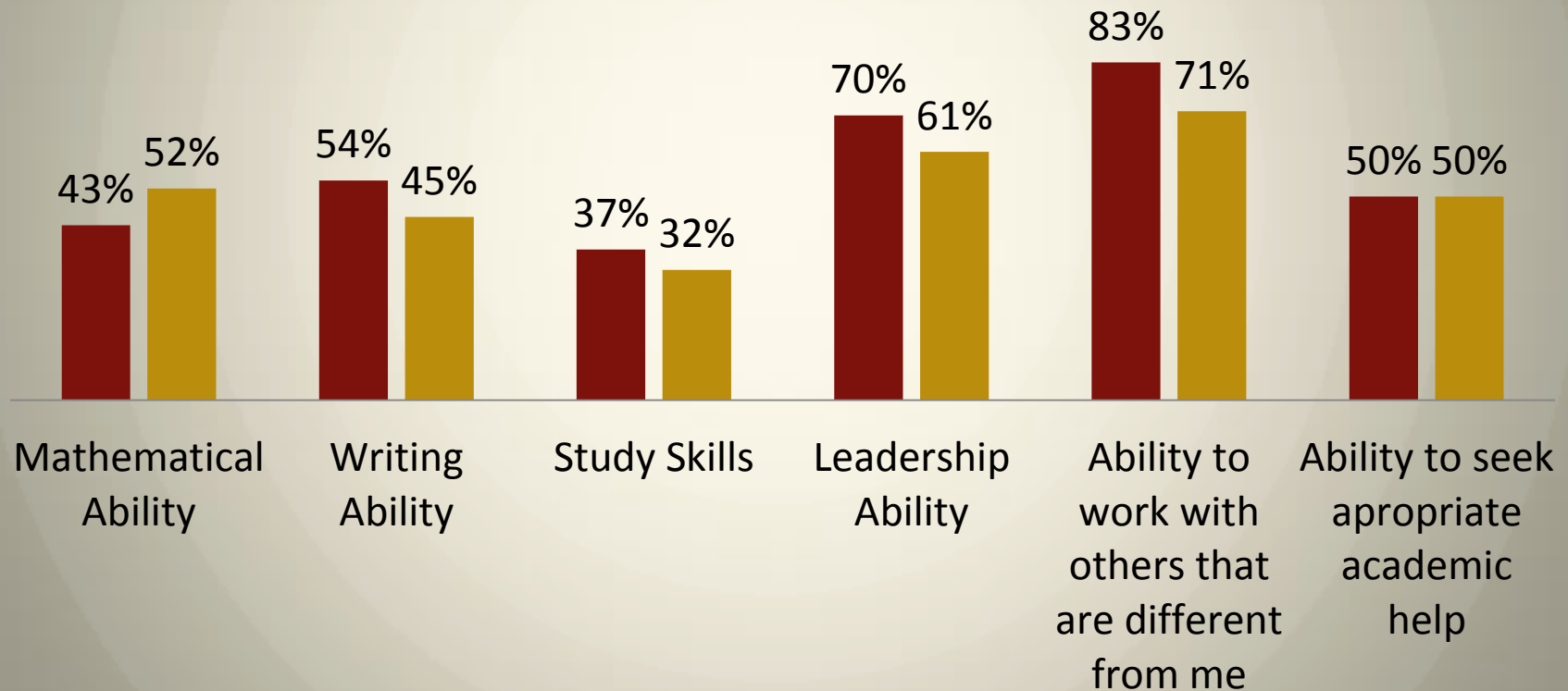
New Student Orientation Evaluation

Sense of Belonging (α=.93)						
Item	Orientation Type	N	Mean	Standard Deviation	Effect Size (r)	Sig (2-tailed)
1. I feel a sense of belonging to IUPUI	2- Day	946	**5.95**	1.13	.12	.000
	1-Day	1044	**5.66**	1.22		
2. I feel that I am a member of the IUPUI community	2- Day	943	**5.80**	1.18	.13	.000
	1-Day	1042	**5.47**	1.26		
3. I feel that I fit right in on campus.	2- Day	941	**5.86**	1.21	.12	.000
	1-Day	1036	**5.57**	1.25		
4. I feel connected with other IUPUI students	2- Day	939	**5.58**	1.33	.16	.000
	1-Day	1035	**5.14**	1.32		
5. I see myself as part of the IUPUI community	2- Day	934	**5.92**	1.19	.13	.000
	1-Day	1023	**5.56**	1.59		

Uses of ESS So Far

- Increase campus understanding of incoming student cohorts (shared widely and presented during intact group meetings)

- Program evaluation of pilot 2-day New Student Orientation program

- Used to understand differences between new first-time beginners and new external transfers

The future

Promoting Student Success: A Vision

Academic Hope Score

Sense of Belonging Score

Confidence Levels

External Time Commitments (work-off campus , commuting, care for dependents)

Academic Preparation (AP credit, HS GPAs, SAT Scores, Academic Honors Diploma)

FLAGS Early Warning Indicators

Recommended Interventions

Questions!