

UNRAVELING THE KNOT

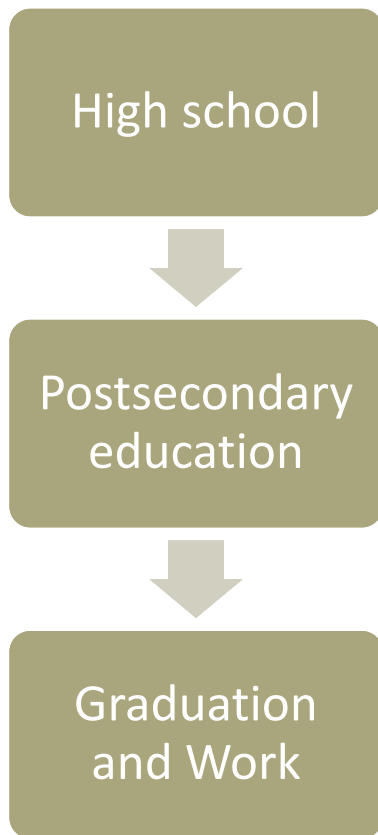
Understanding the Diverse Postsecondary
Pathways of Toronto High School Students



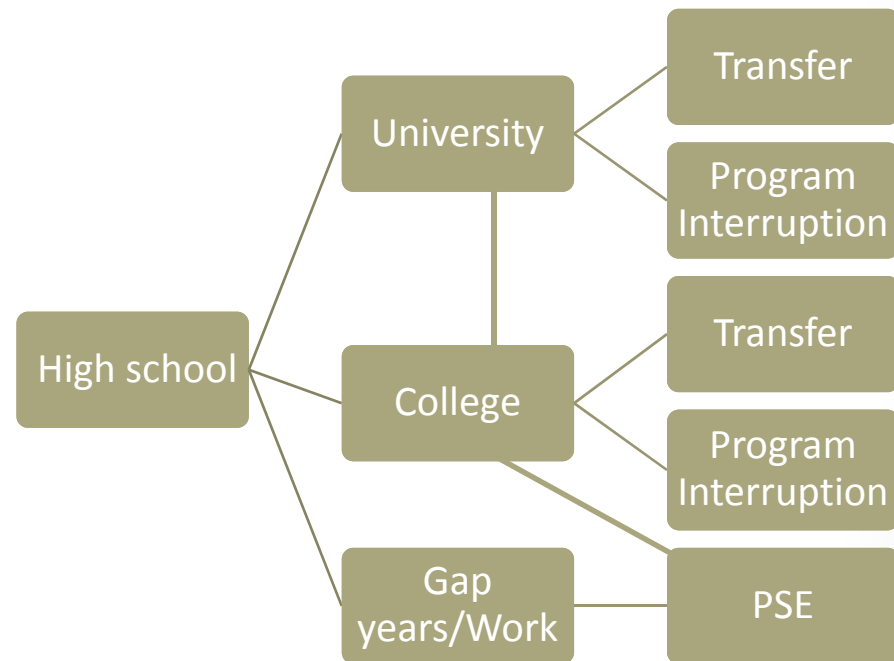
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PSE Pathways: Traditional vs. Non-traditional

Traditional



Non-traditional



Who takes non-traditional PSE Pathways in Canada?

- Students who delay entry to PSE and/or transfer between institutions are more likely than direct entry students to be
 - female
 - Aboriginal
 - older
 - first generation to attend PSE
 - have a disability
 - low income status
 - married and/or have children
 - work full or part-time
- In short, transferring seems to be an option that somewhat mitigates issues of access for under-represented groups in PSE
- However, this is an under-researched area

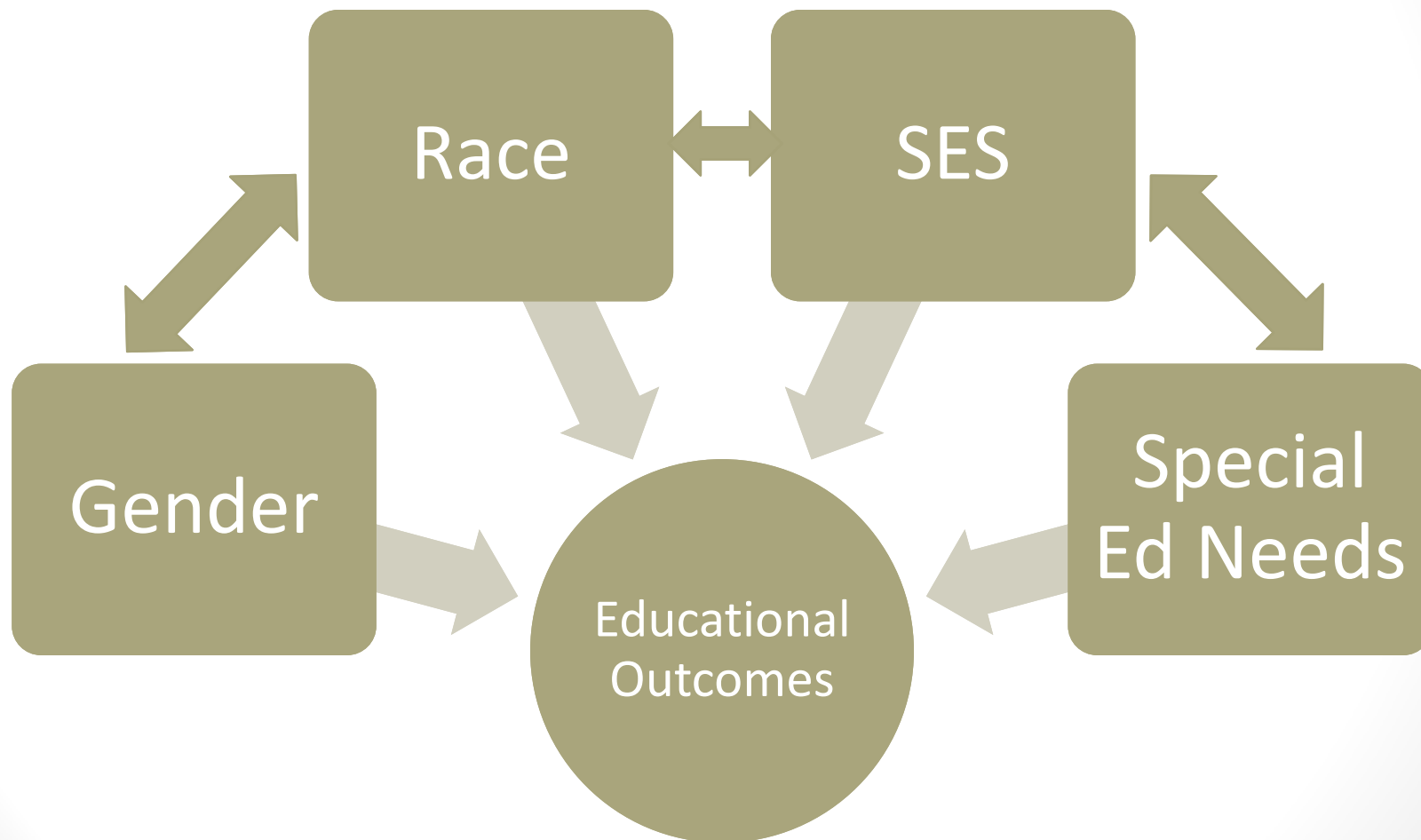
Research Objectives

- To what extent are students graduating high school and directly entering college or university?
- What movement is present between different postsecondary programs and institutions?
 - What are the factors associated with this movement?
- How do pathways vary by individual characteristics?

Data

- Toronto District School Board student census
- Grade 9 cohort from 2006 – 16,364 students
 - followed through to 2014
 - rich demographic information
- Ontario universities and college applications services
 - PSE application and confirmation
 - destination institutions and programs
 - college movement

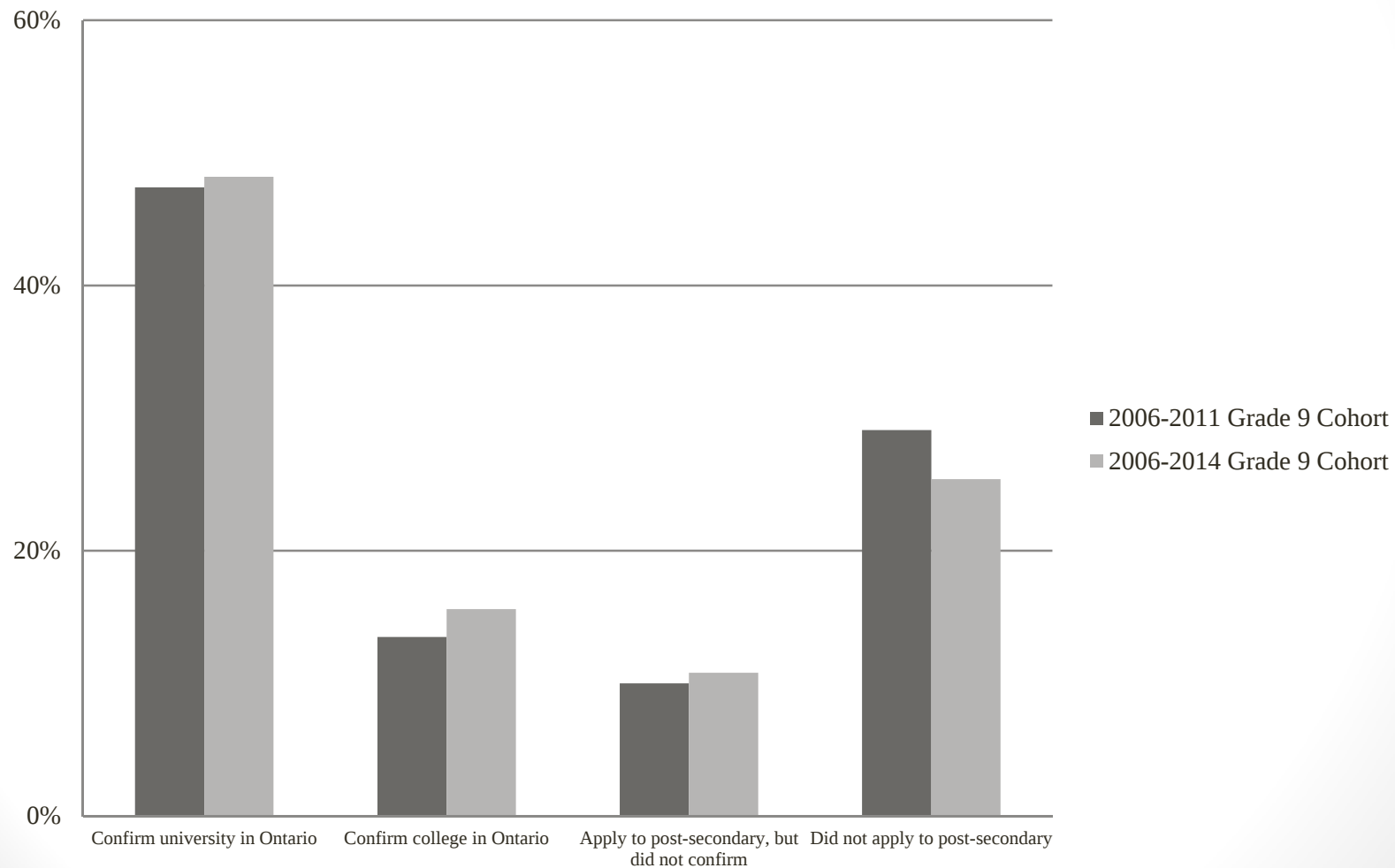
Framework: Intersectionality



Objective 1 Findings

Direct transitions from high school to college/university

PSE Status as of Fall 2011 and Fall 2014, Grade 9 Cohort of Fall 2006



Objective 1 Findings

Grade 9 credit accumulation

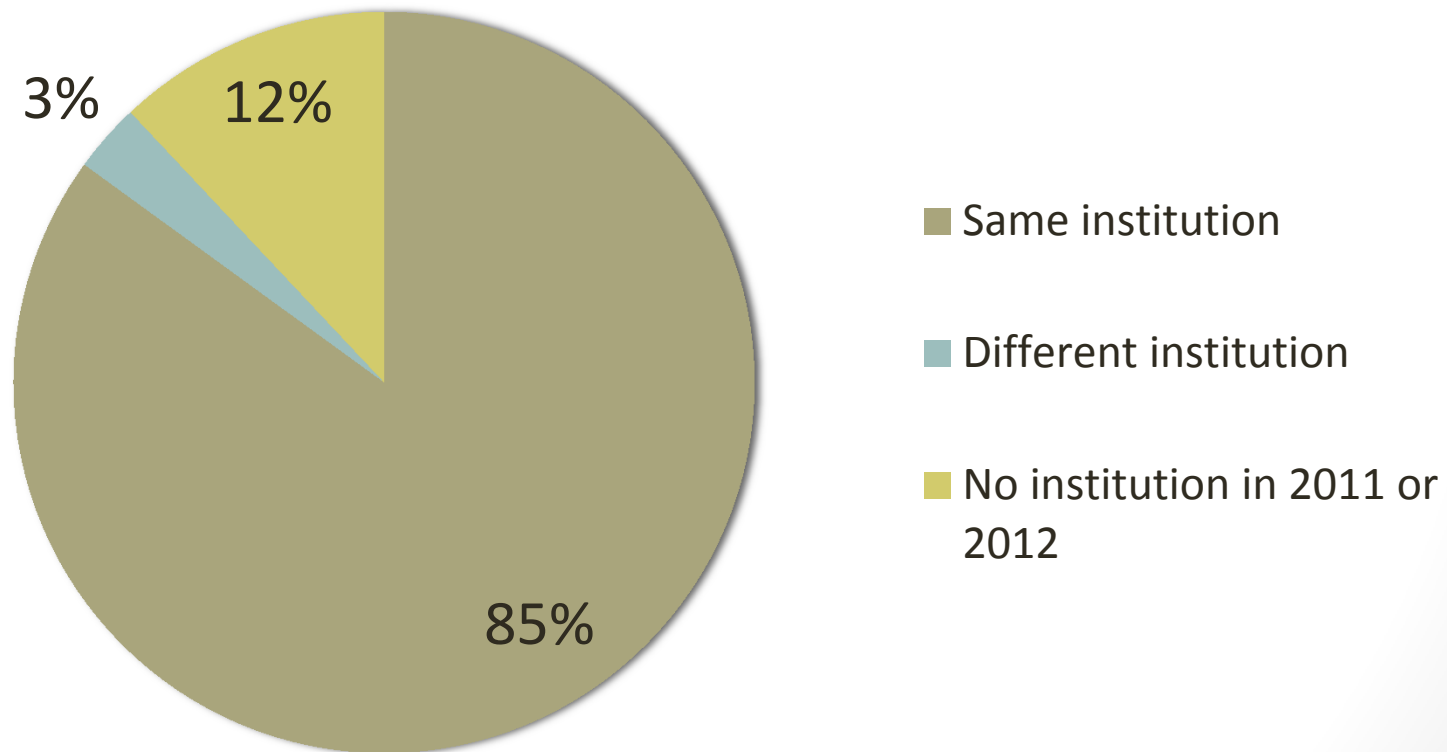
Postsecondary Confirmations by Grade 9 Credit Accumulation,
2006-2014 Grade 9 Cohort

Grade 9 credit accumulation	Confirm university in Ontario	Confirm college in Ontario	Applied to PSE but did not confirm	Did not apply to PSE
6 or fewer credits (high risk)	3.6%	14.5%	6.9%	75.1%
7 credits (medium risk)	15.2%	28.2%	13.1%	43.5%
8 or more credits (low risk)	59.3%	15.6%	11.2%	25.4%

Objective 2 Findings

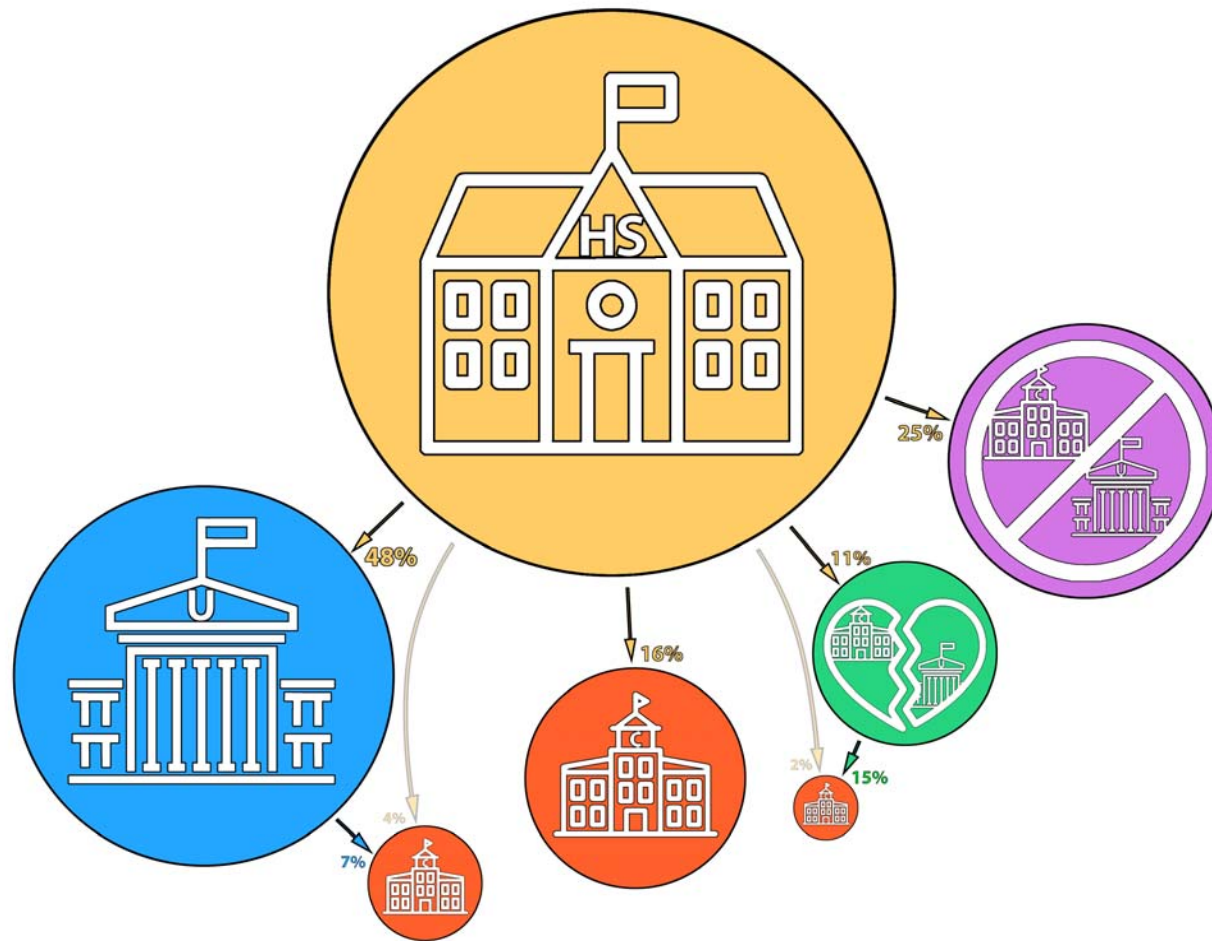
Transitions over two time periods

Transitions between 2011 and 2014



Objective 2 Findings

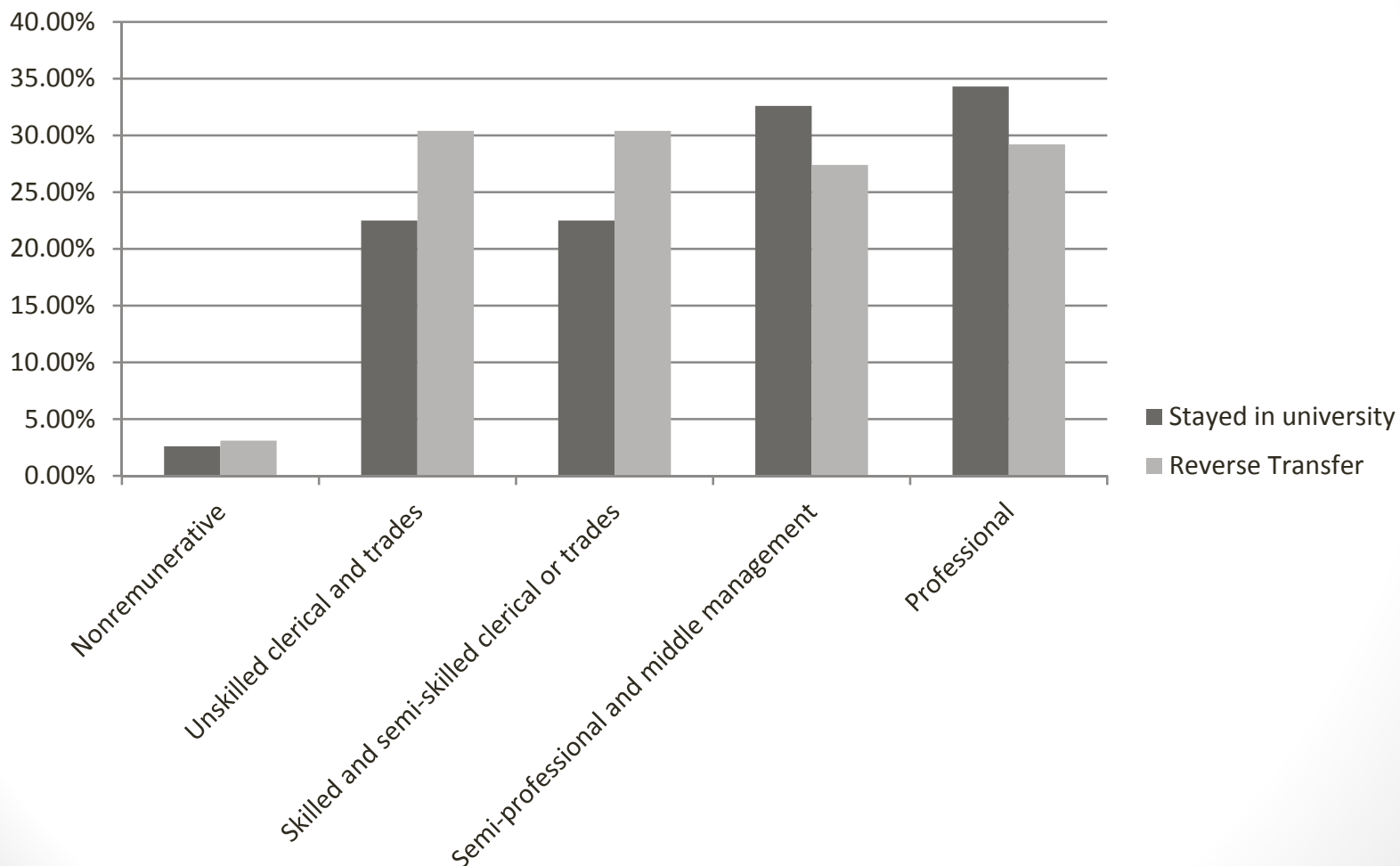
Pathways of College Students



Objective 2 Findings

Pathways of College Students – Reverse Transfer

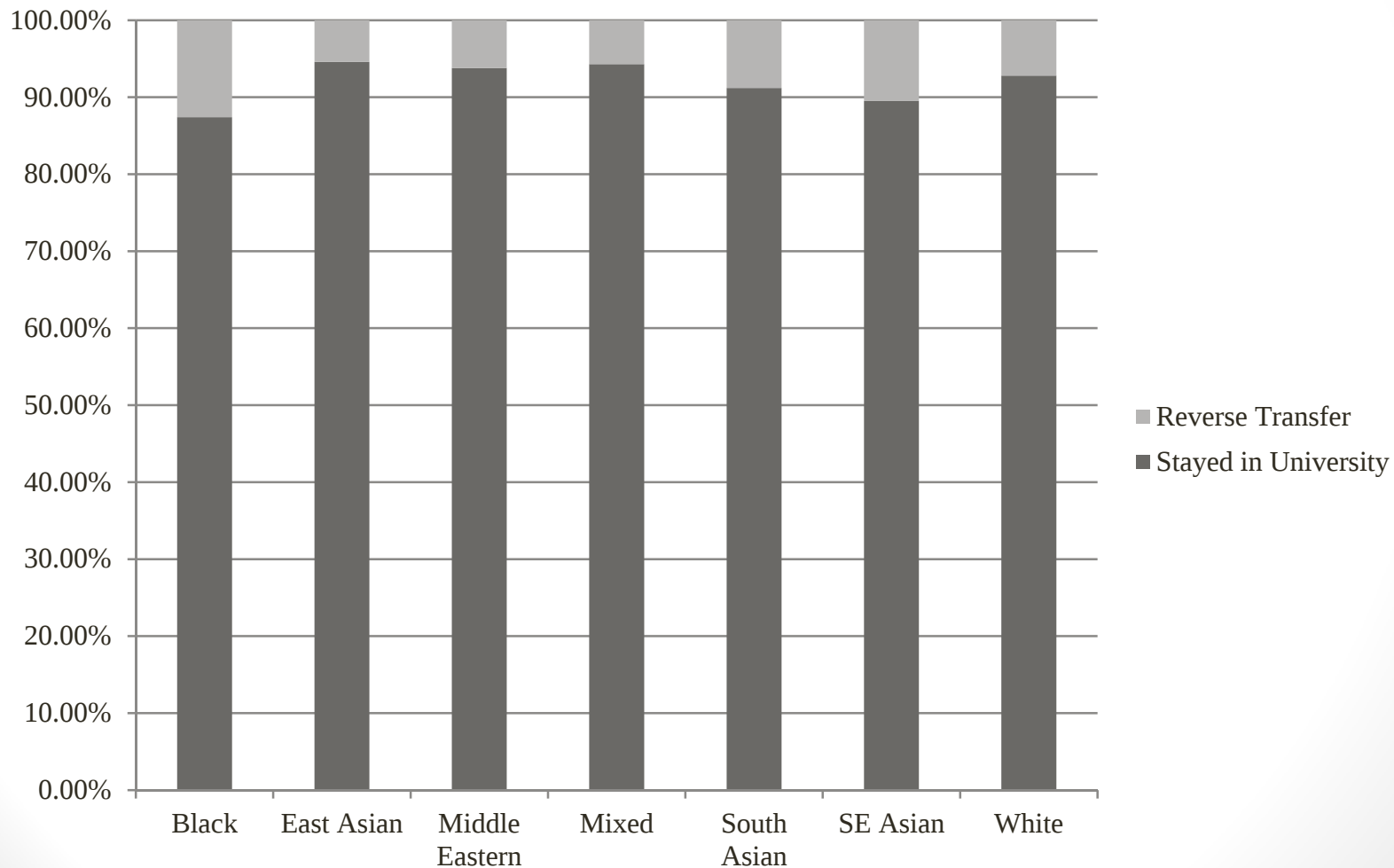
Association between Reverse Transfer and Parental Occupation



Objective 2 Findings

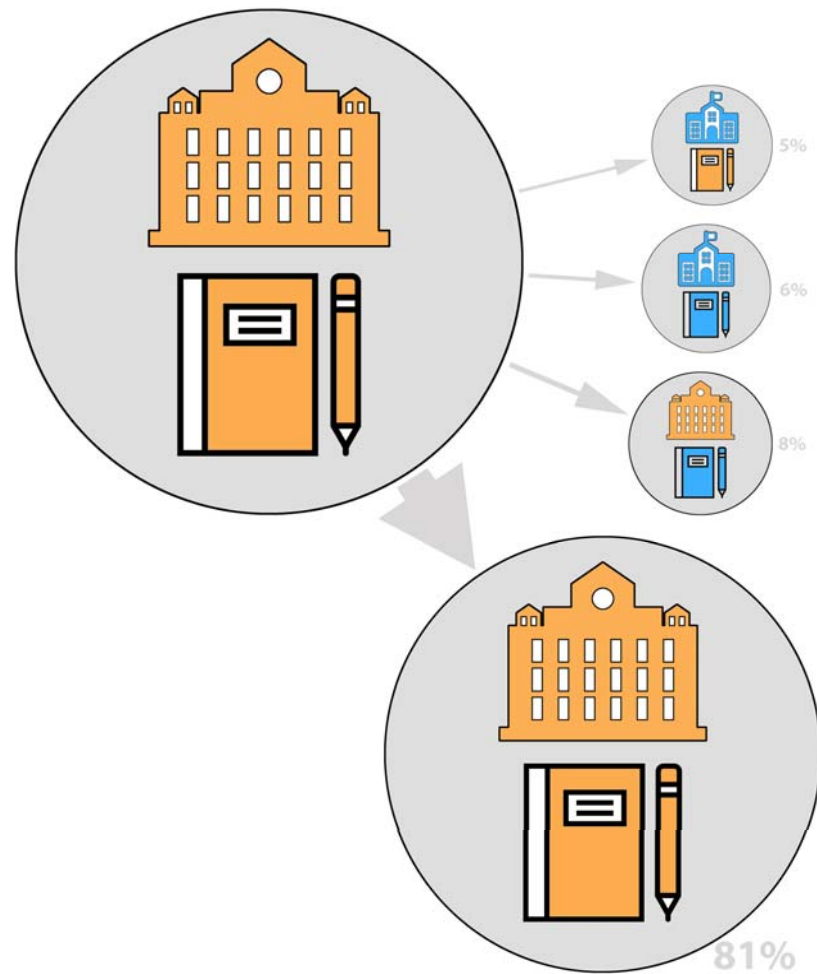
Pathways of College Students – Reverse Transfer

Association between Race and Reverse Transfer



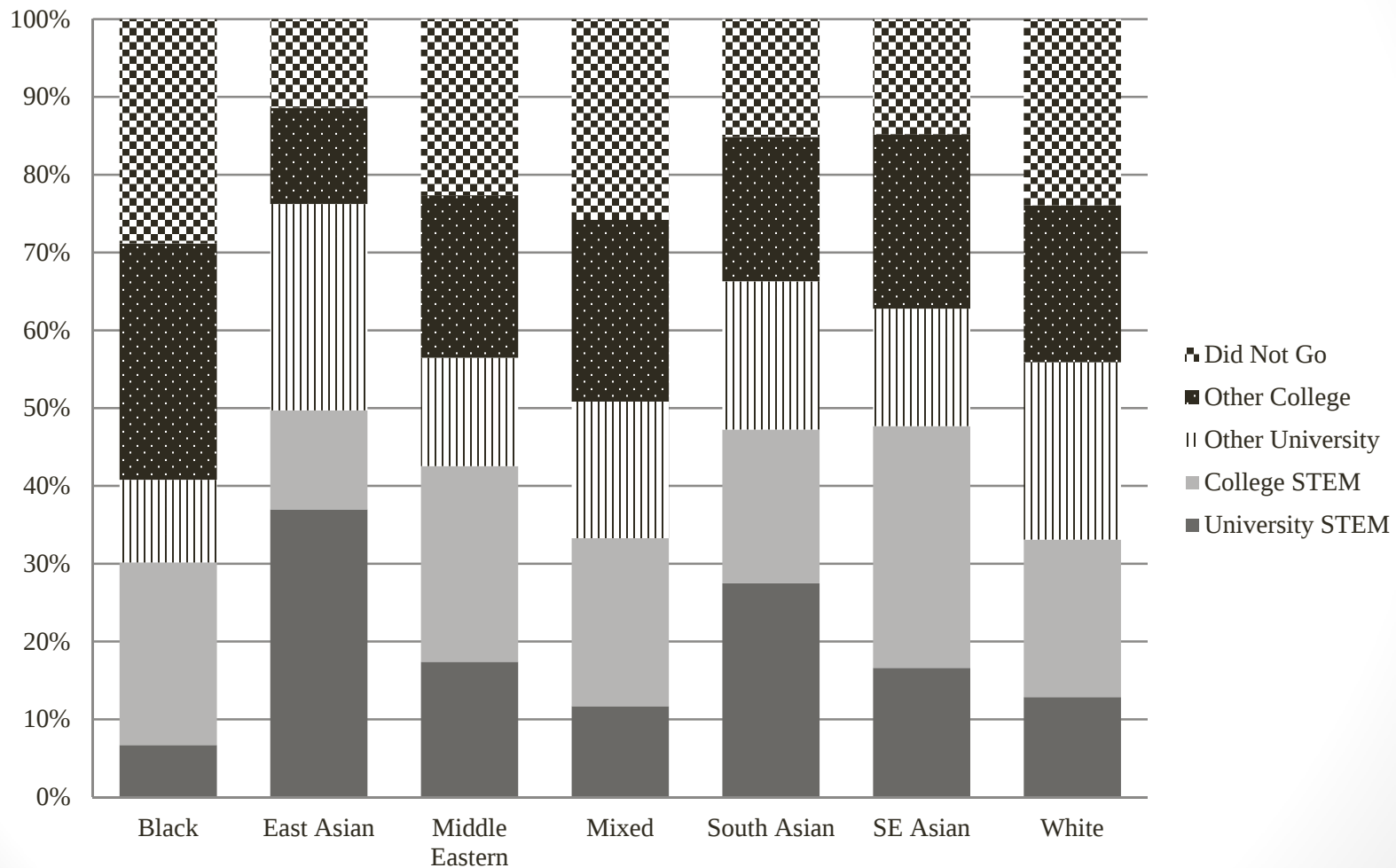
Objective 2 Findings

Movement of College Enrollees



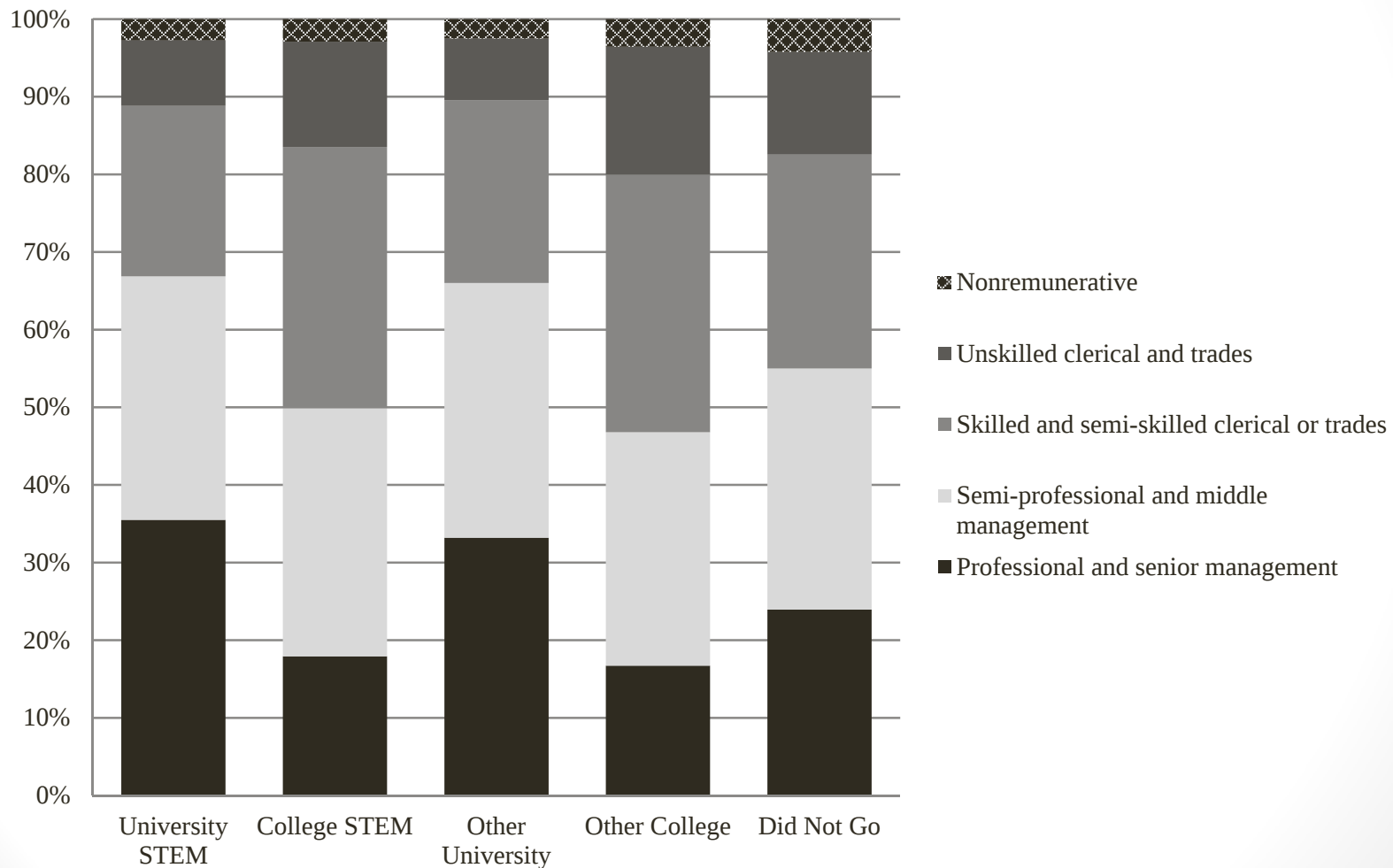
Objective 3 Findings

Program pathways by race



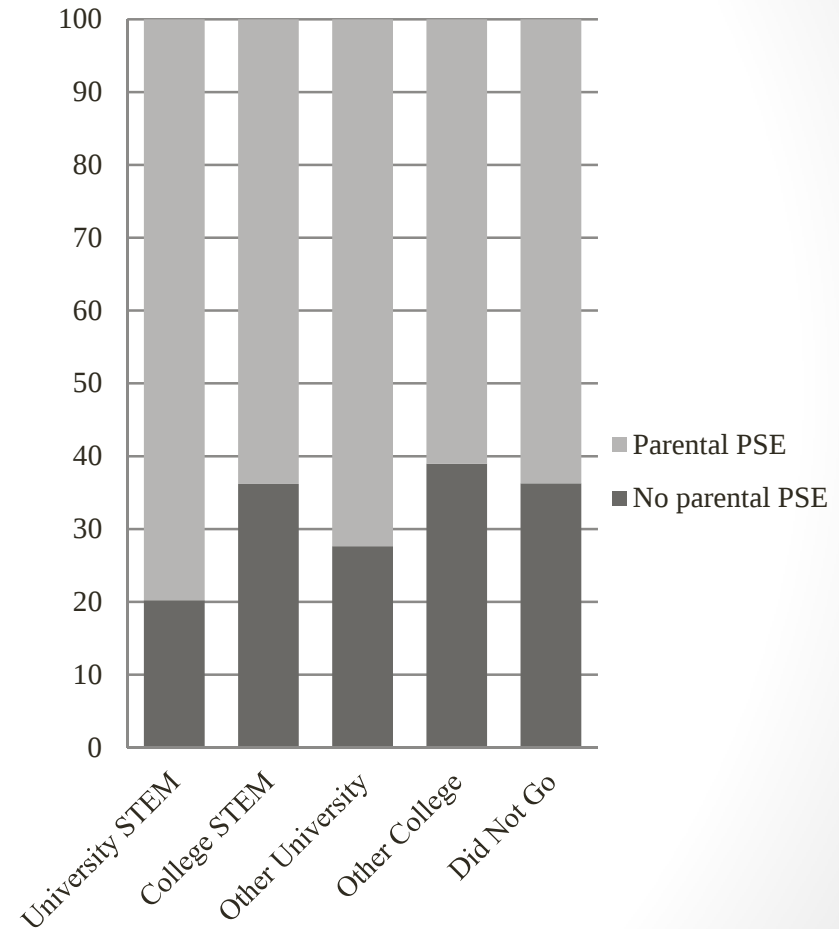
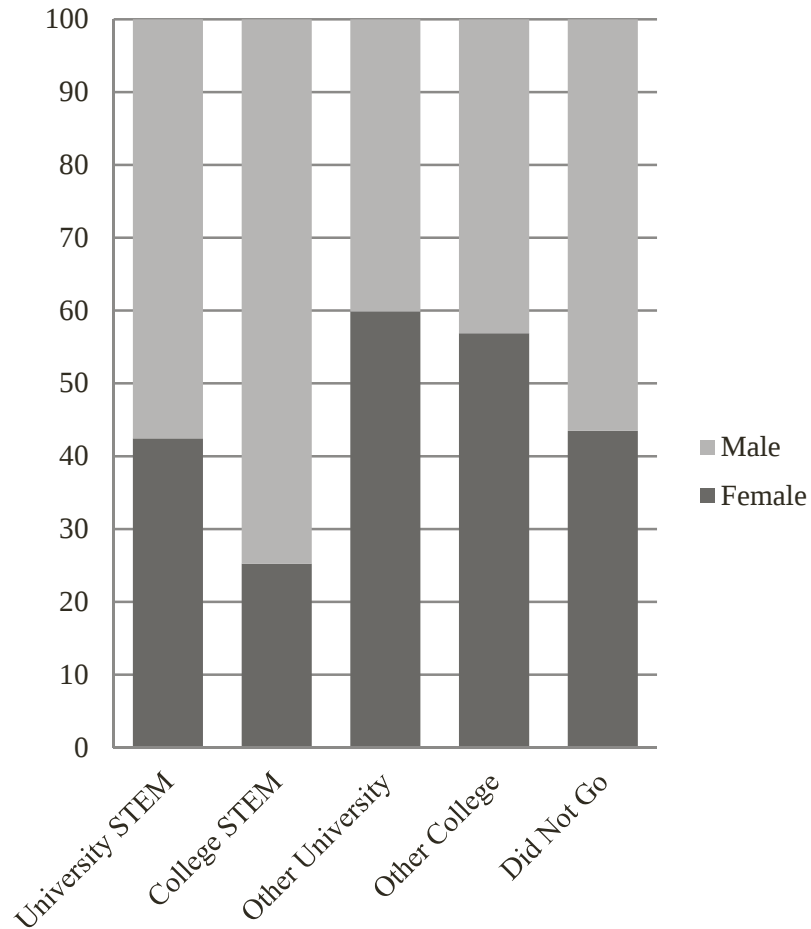
Objective 3 Findings

Program pathways by social class



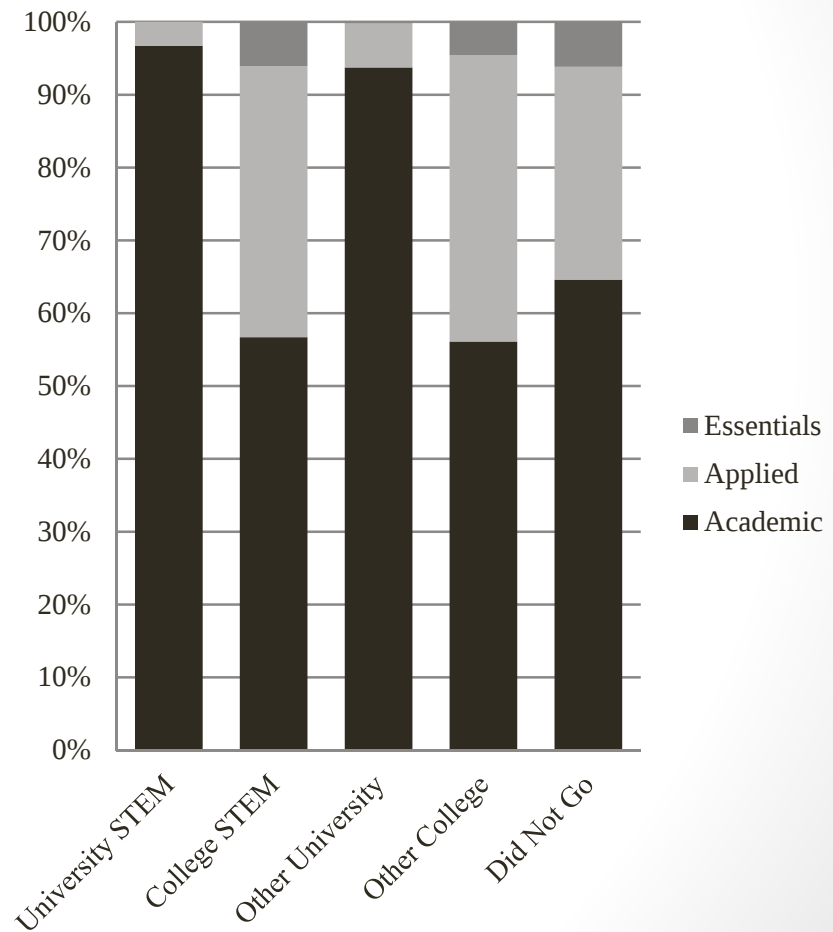
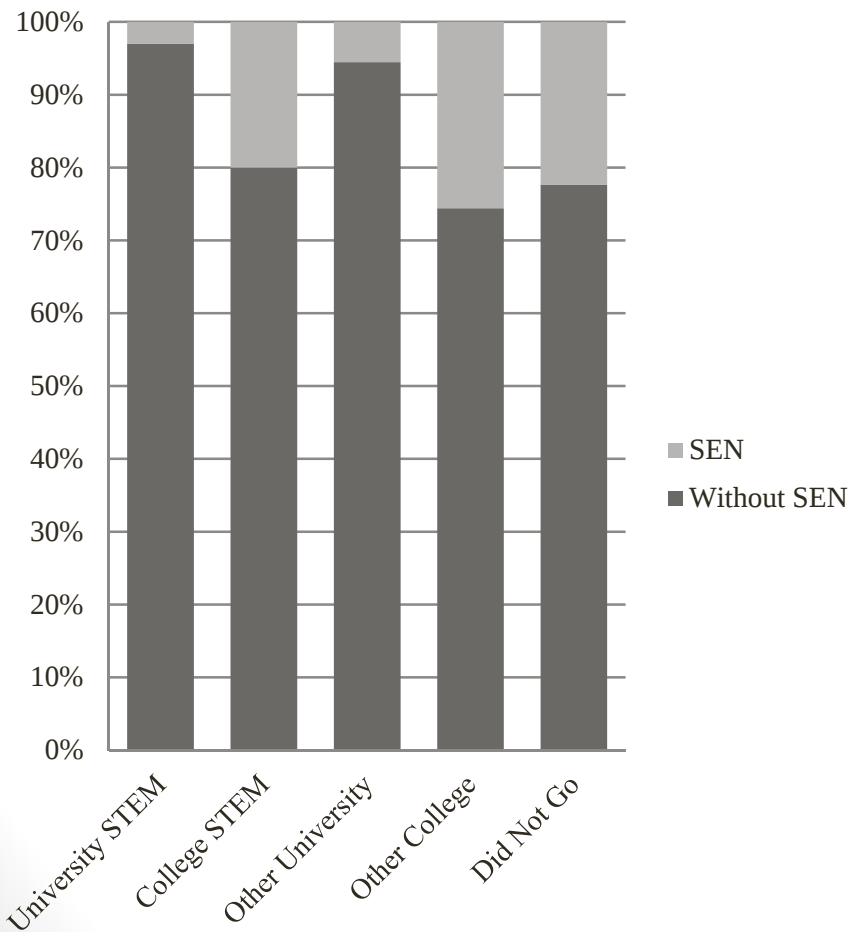
Objective 3 Findings

Program pathways by sex and parental PSE



Objective 3 Findings

Program pathways by SEN and Grade 9/10 academic program



Objective 3 Findings

Interactions between race, sex, and parental occupation

Summary of Statistically Significant Effects for *Race*, *Race x Sex*, and *Race x Parental Occupation* in Predicting Postsecondary Pathways_±

Determinant*	Uni - STEM	Coll - STEM	Uni - Other	Coll - Other
Black <i>X Sex</i> <i>X Parental Occupation</i>	+	+		
East Asian <i>X Parental Occupation</i>	+	+	+	+
South Asian <i>X Parental Occupation</i>	+		+	+
Southeast Asian <i>X Sex</i>				+

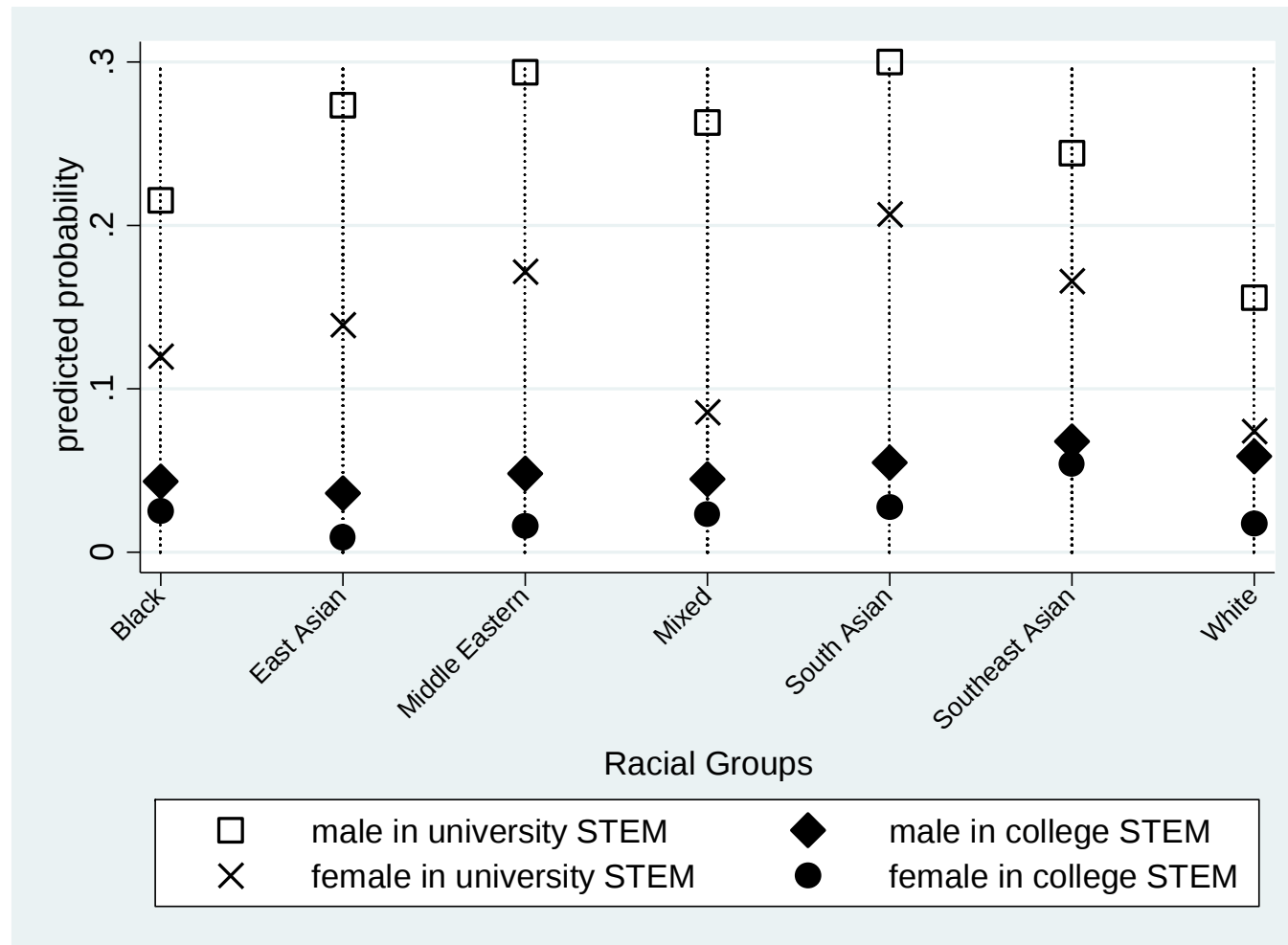
_± Reference category of dependent variable: Did not attend PSE

*Reference is white male

Objective 3 Findings

Probabilities of STEM pathways

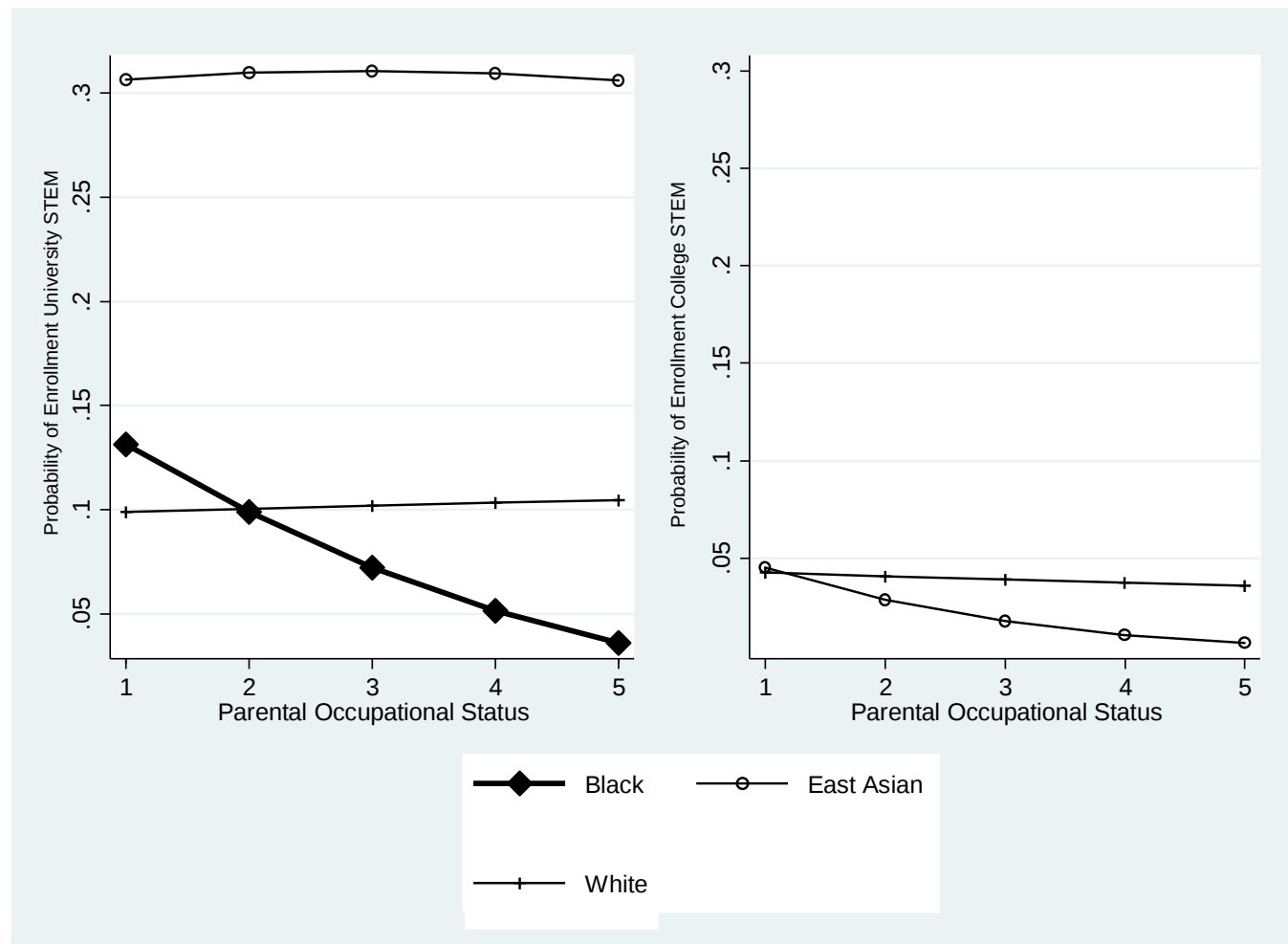
Predictive Margins of Interactions of Race and Sex on STEM Enrolment



Objective 3 Findings

Probabilities of STEM pathways

Predictive Margins of Interactions of Race and Class on University STEM and College Ennrolment



Conclusions

- PSE pathways are varied and complex
- Influenced by individual characteristics – race, gender, SES
 - reverse transfer, college mobility, program choice
- Policy directions
 - Credit accumulation at the high school level
 - Programs targeted at specific subpopulations
- Further investigation
 - University pathways
 - College to university transfer
 - Association between parental occupation and university STEM, particularly among Blacks

Thank you

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