

# Assessing the Impact of Education Abroad through a National Consortium

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### **CASSIE** The Consortium for the Analysis of Student Success through International Education

National collaborative led by University System of Georgia to:

- Create multi-institutional database on international education (IE) participation and student outcomes that is diverse with respect to geography, institution type, and student backgrounds.
- Ascertain impact of IE overall and on under-represented groups.
- Provide participating campuses with institution-specific outcomes associated with IE compared to benchmark institutions.
- Foster collaboration between campus institutional research and IE.



### **CASSIE** The Consortium for the Analysis of Student Success through International Education

Funded by 3-year Title VI grant from US DOE, Office of International and Foreign Language Education

In partnership with Institute of International Education (IIE)



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### **CASSIE Research Focus:**

- Evaluate the relationship between students' participation in international education such as education abroad, advanced foreign language study, and Title VI programs and their academic outcomes:
  - Likelihood of graduating in 4 or 6 years
  - Time and credit hours to degree
  - GPA
- All students and subgroups by race/ethnicity, financial need, STEM

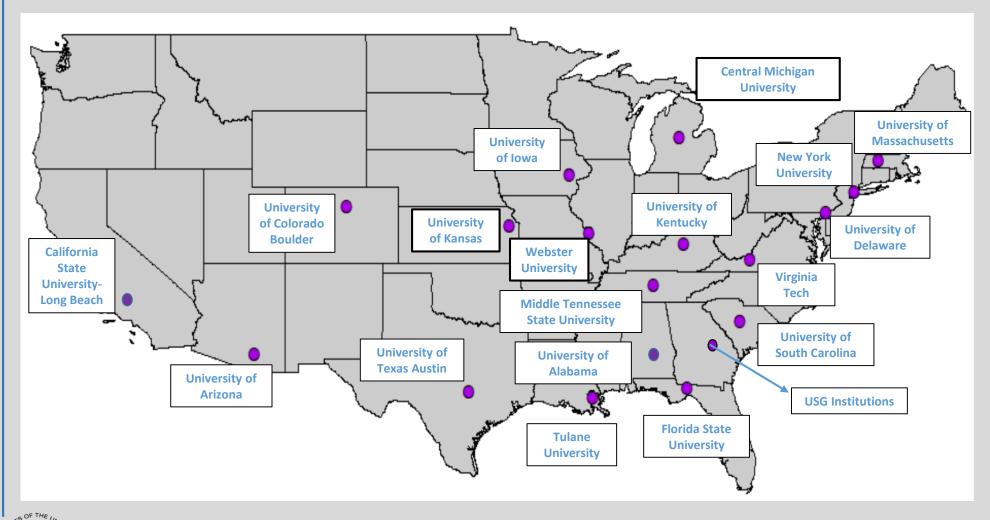


## Prior Research

- Georgia Learning Outcomes of Students Studying Abroad Research Initiative (GLOSSARI)- Rubin, Sutton, O'Rear, et al., 2014
  - Used rudimentary matching and logistic regression on USG population
  - 10% higher odds of graduating in 4 years
  - Larger impact for Black students
- Single institution studies have found similar positive relationships (DeSalvo & Roe, 2017; Schneider & Thornes, 2018; Xu, de Silva, Neufeldt & Dane, 2011).
- CASSIE extends GLOSSARI work by adding non-USG data and more advanced statistical methodology



### CASSIE Institutions





#### **Research Universities**

Augusta University Georgia State University Georgia Tech University of Georgia

**Comprehensive Universities** 

Georgia Southern University Kennesaw State University University of West Georgia Valdosta State University

#### **State Universities**

Albany State University Clayton State University Columbus State University Fort Valley State University <sup>+</sup> Georgia College & State Univ. Georgia Southwestern St. Univ. Middle Georgia State Univ. <sup>+</sup> Savannah State University University of North Georgia

#### **State Colleges**

Abraham Baldwin Agricultural Coll. \* Atlanta Metropolitan State College \* College of Coastal Georgia \* Dalton State College East Georgia State College \* Georgia Gwinnett College Georgia Highlands College \* Gordon State College \* South Georgia State College \*

 \* = No Bachelor's or SA population not large enough to include in analysis

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### Data Sample

### • Population:

- 35 institutions, 221,981 students
- First-time freshmen in Fall 2010 & 2011 who sought a Bachelor's degree
- Term-by-term data for six year:
  - Prior academic achievement-SAT/ACT, high school GPA
  - Demographic characteristics-Sex, Race/Ethnicity, Pell receipt
  - IE experiences (education abroad, foreign language study, Title VI)
  - Academic experience-Major, hours earned, degrees awarded, college GPA



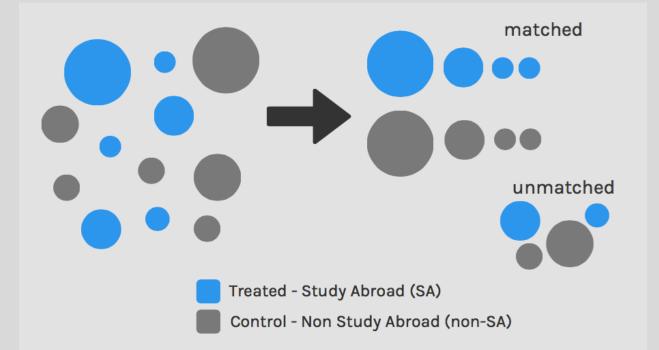
# Methods

- Participation in international education is self-selected:
  - Impact on student outcomes may not be due to the international education experience itself, but other unobserved factors the student possesses
  - Simple comparison of treated and control can result in biased estimates
- Matching:
  - Match students who study abroad with others that have similar background characteristics, but who did not study abroad
  - Compare outcomes across "statistical twins"
  - ATT estimates weighted average of matched groups



### Exact and Nearest Neighbor Matching

- Students are first matched to each other on the control or matching variables.
  - 1. High school GPA
  - 2. SAT/ACT score
  - 3. Pell/need-based aid
  - 4. Race/ethnicity
  - 5. Gender
  - 6. Age at matriculation
  - 7. Major
  - 8. Full-time/part-time status
  - 9. Number of terms enrolled
  - 10. Institution



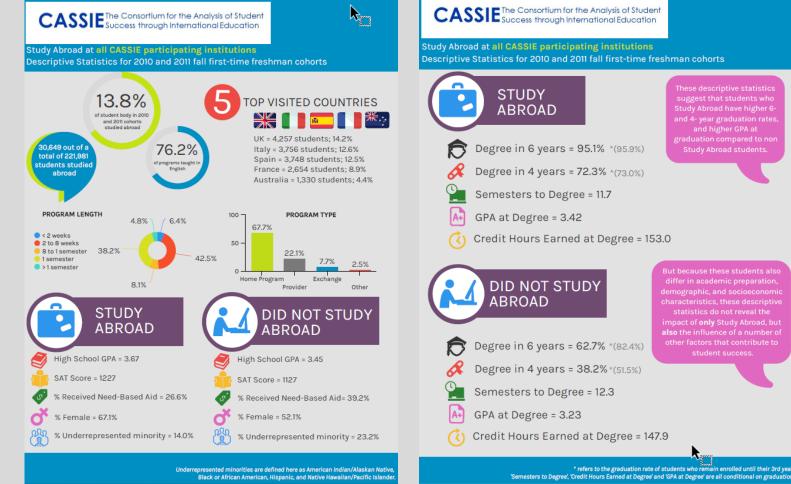


# Limitations

- Effects at participating institutions may differ from all institutions
- Only matching on observed characteristics limits our ability to make confident causal inference
- Binary study abroad variable doesn't capture diversity of experiences and their respective impacts

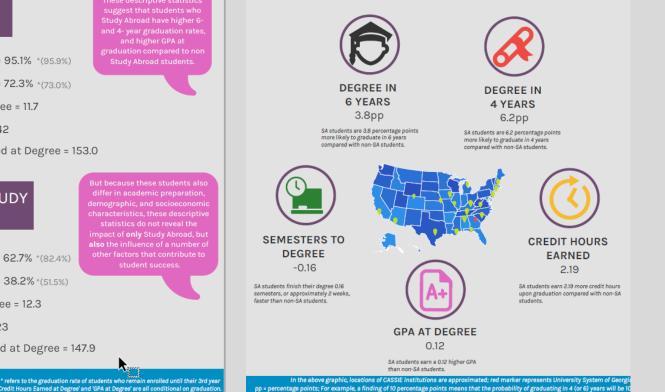


# Findings



#### **CASSIE** The Consortium for the Analysis of Student Success through International Education

Outcomes: What is the effect of Study Abroad for all CASSIE participating institutions?

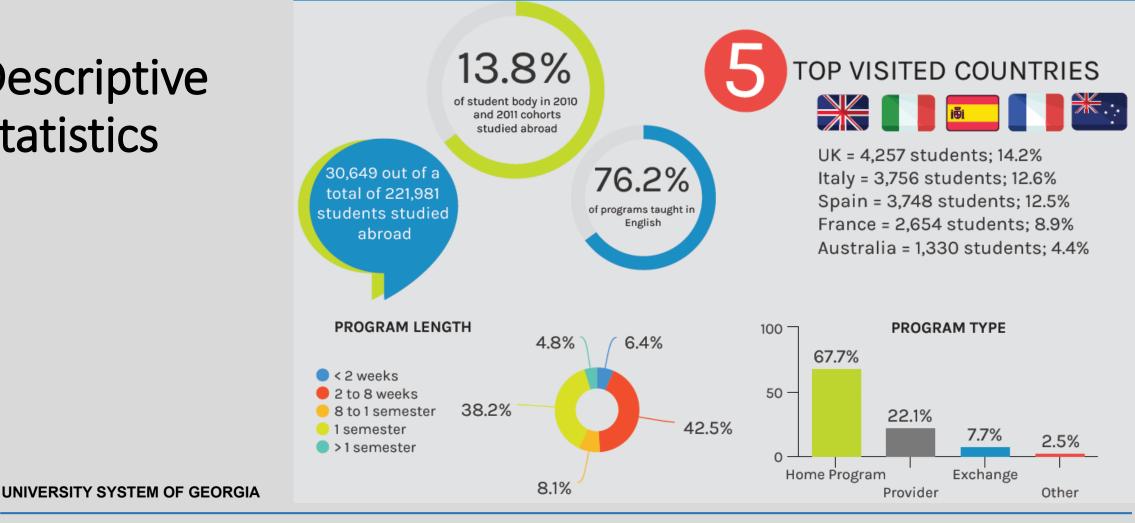




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**CASSIE** The Consortium for the Analysis of Student Success through International Education

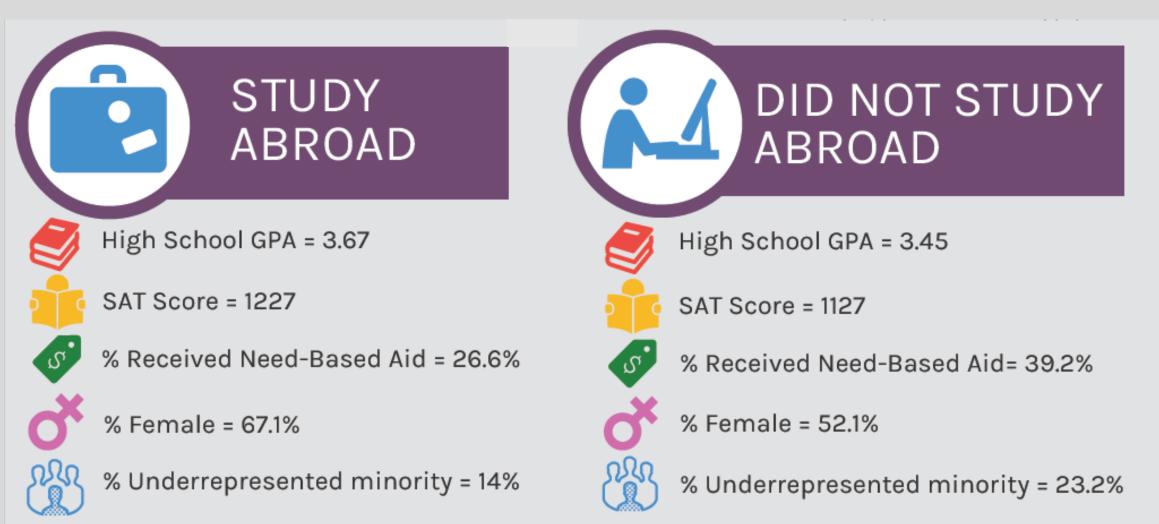
Study Abroad at all CASSIE participating institutions Descriptive Statistics for 2010 and 2011 fall first-time freshman cohorts



### Descriptive **Statistics**

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## **Descriptive Statistics**





## **Descriptive Statistics**



Degree in 6 years = 95.1%

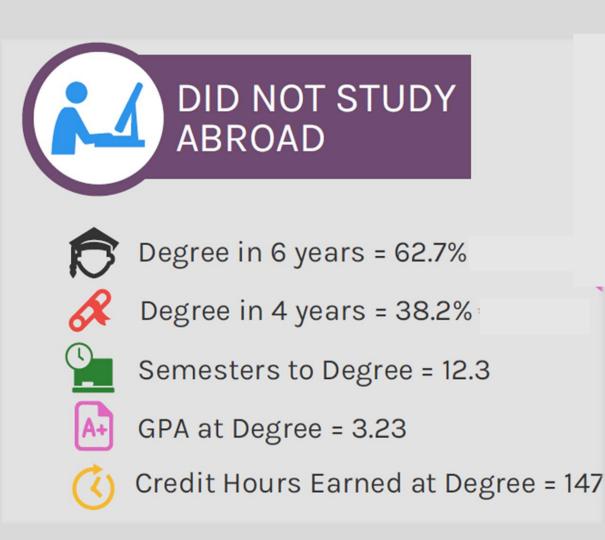
Degree in 4 years = 72.3%

Semesters to Degree = 11.7

GPA at Degree = 3.42



Credit Hours Earned at Degree = 153





### **Matching Estimates**



### DEGREE IN 6 YEARS 3.8pp

SA students are 3.8 percentage points more likely to graduate in 6 years compared with non-SA students.



### DEGREE IN 4 YEARS 6.2pp

SA students are 6.2 percentage points more likely to graduate in 4 years compared with non-SA students.



### **Matching Estimates**





SA students finish their degree 0.16 semesters, or approximately 2 weeks, faster than non-SA students.



CREDIT HOURS EARNED 2.19

SA students earn 2.19 more credit hours upon graduation compared with non-SA students.

### GPA AT DEGREE 0.12

SA students earn a 0.12 higher GPA than non-SA students.



# Matching Estimates for Race/Ethnicity Groups

Matching Estimates Measuring Contribution of Study Abroad to Student Success (ATT)

#### All Students and Race/Ethnicity Sub-Groups

	All					<u>Two or</u>
	<u>Students</u>	<u>Asian</u>	<u>Black</u>	<u>Hispanic</u>	<u>White</u>	<u>More</u>
Percent Bachelor's degree in 6 years	3.8	3.2	9.6	7.4	3.7	8.8
Percent Bachelor's degree in 4 years	6.2	6	9.2	13.4	8.6	4.1 (NSS)
Conditional on Graduating in Six Years						
Semesters to Degree	-0.16	-0.22	-0.16	-0.34	-0.22	-0.23
Credit Hours Earned at Degree	2.19	3.65	3.16	9.29	1.43	1.32 (NSS)
Cumulative GPA at Degree	0.12	0.11	0.13	0.13	0.09	0.16
All results are statistically significant at the 5% level unless noted as NSS.						



# Discussion

- Findings suggest study abroad improves likelihood of completion
  - Consistent with other studies on study abroad
  - Commensurate with improvements for other interventions such as intensive coaching and advising for students at risk
- Findings contrary to notion that SA contributes to excess time or substantial credits to degree
- Findings for minoritized racial/ethnic groups suggest similar positive outcomes as the full population
  - Larger effects for Hispanic and Black students argue for removing barriers to participation for these students



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