

Increasing the Odds for Transfer Student Success with Delineated Engagement Pathways

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PROJECT IMPETUS



In the U.S., transfer student enrollment is declining at a faster rate than for first time in college (FTIC) freshmen. From 2018 to 2020 there was a ...



9.6% decline in FTIC freshmen enrollment in post-secondary institutions.



10.7% decline in transfer student enrollment in post-secondary institutions.

At the same time, transfer students, on average, are dropping out before completing their degree at higher rates than FTIC freshmen.

Sources:

<https://nces.ed.gov/ipeds/TrendGenerator>

<https://www.northcarolina.edu/impact/stats-data-reports/interactive-data-dashboards/>

PROJECT PURPOSE



The purpose of the study is ...

Understand the role of out-of-the-classroom engagements in transfer student success in comparison to first-time freshmen ...

In order to ...

... develop a deeper understanding of the factors that contribute to transfer student retention and success ...

So that ...

libraries and universities can structure support systems and services to help this important population succeed and graduate.

UNC CHARLOTTE



Urban, Research
Institution

Doctoral
University,
Higher Research
Activity

2nd largest
undergraduate
enrollment in
UNC System

30,448 Students
24,116
undergraduates

79% Acceptance
&
84% Persistence
Rates

62% FTIC
freshmen (4,256)
38% Transfers
(2,605)

PROJECT PARTNERS



Co-Curricular Partners

- Library
- Career Center
- UCAE (Tutoring)
- Writing Center
- Speaking Center
- Education Abroad
- Undergraduate Research

Other Departments & Programs

- Undergraduate Learning Communities
- 1st Year Writing Program
- Center for Teaching & Learning
- Registrar
- Niner Central (Student Services Help Desk)
- ITS (Technology) Help Desk

Student Affairs

- Greek Life
- University Recreation Center
- Venture Outdoor Education & Leadership

Institutional Research

- Demographics
- Pre-College
- Success Measures

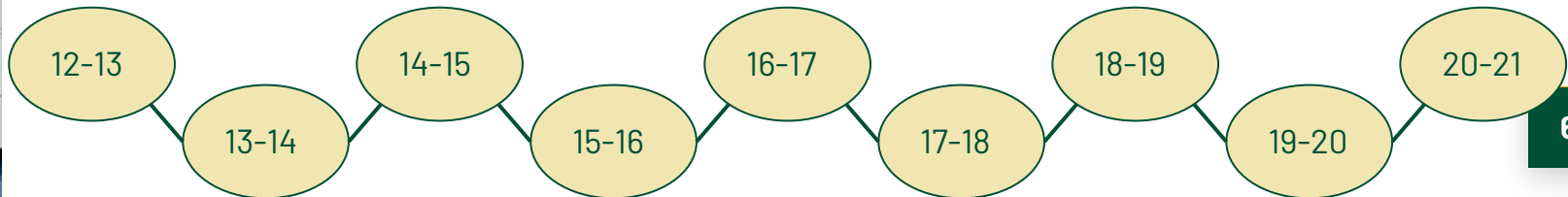
STUDENT ENGAGEMENT DATA SET



Longitudinal dataset at the individual student level of all undergraduate students who matriculated into the university from 2012-2013 to the present.

Data include:

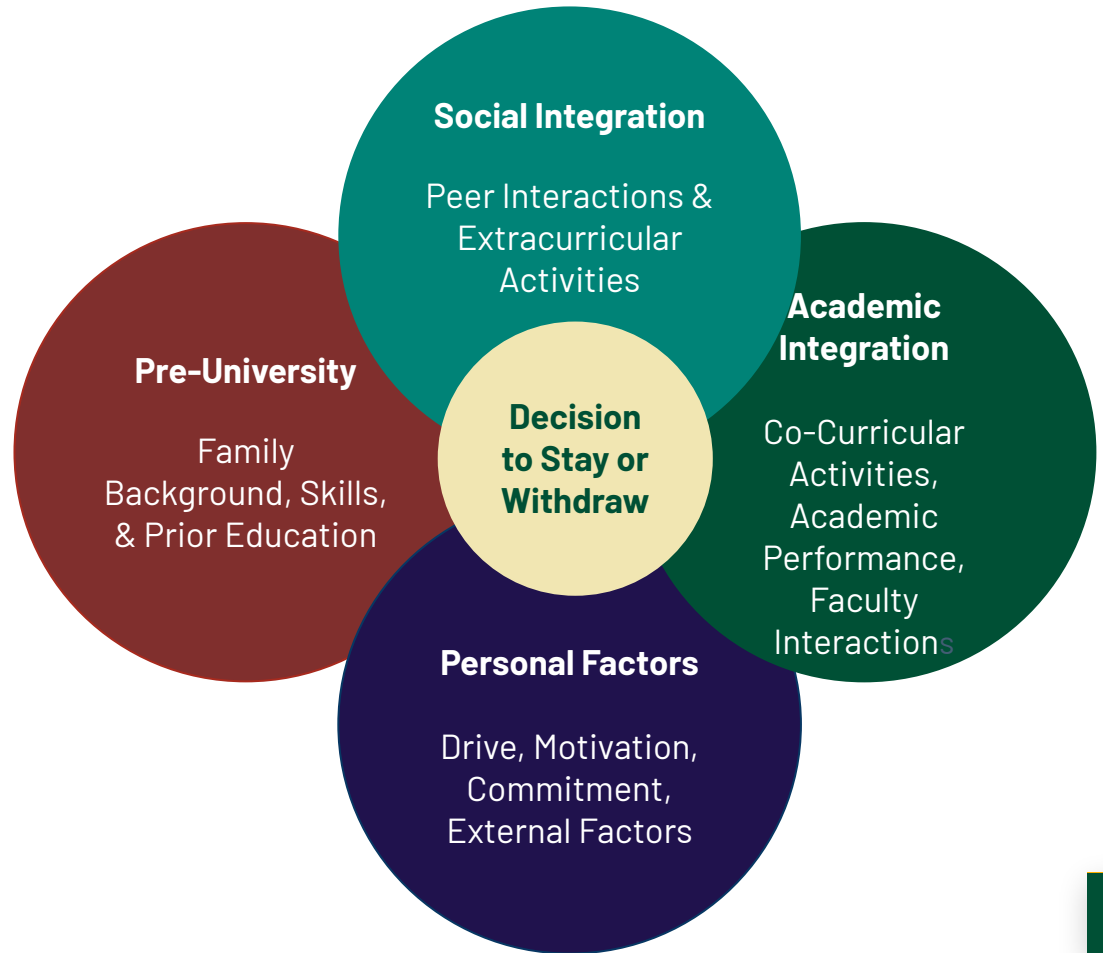
1. Yearly student engagements with each co-curricular and extracurricular partner, at the "type of activity" level of specificity.
2. Pre-College data
3. Demographic data
4. Measures of Success (2nd Year Retention, GPA, and Graduation Rates)



Tinto's Model of Student Integration

All of these factors play a role in a student's decision to stay or withdraw.

Spheres of influence at the university are Social Integration & Academic Integration.

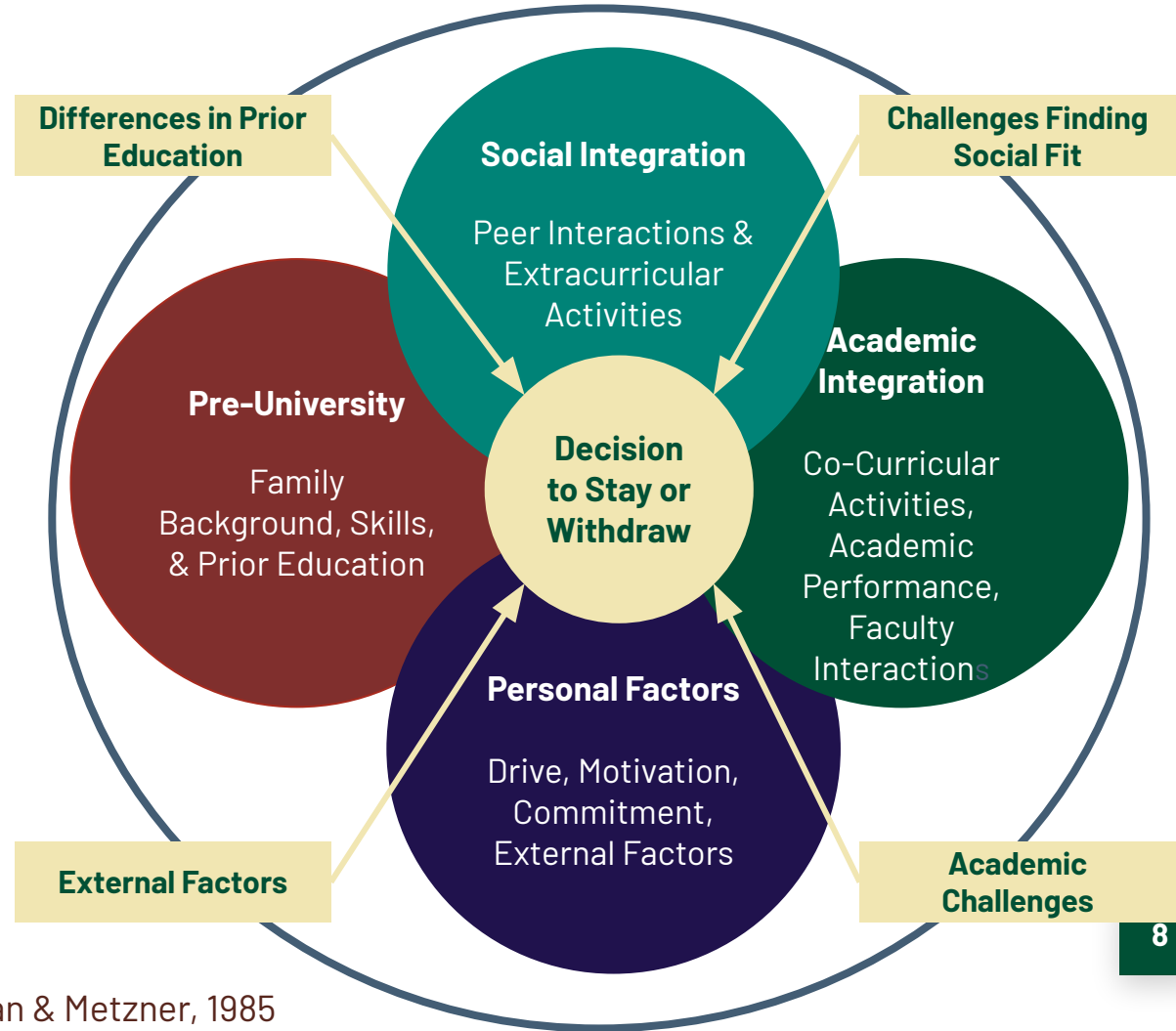


Tinto, 1975, 1993

Student Integration & Transfer Shock

The models of "Transfer Shock" and "Student Attrition" explain decisions to stay or withdraw by affecting any of the four spheres in Tinto's Model.

Engagement with key co-curricular & extra-curricular activities can help minimize transfer shock.



Hills, 1965; Tinto, 1975, 1993; Bean & Metzner, 1985

IN THIS STUDY, WE...



Disaggregated

- Admission Status
- Incoming credits
- 1st Generation Status
- Transfer Institution Type
- In-State or Out-of-State Transfer Institution

Explored Group Differences

- Measures of success (1st year retention, 4 year cumulative GPA, 6 year graduation)
- Engagement with co-curricular and extracurricular partners

Controlled for Confounding Variables

- Pre-entry academic readiness
- Pell Eligibility
- College of Enrollment
- Underrepresented Minority
- Total High Impact Practices

Created Engagement Pathways

Used binary logistic **regression** to calculate the degree to which each type of engagement increased chances for student success for the disaggregated groups



1. Disaggregated Data

IN PRIOR STUDIES, WE LEARNED ...



There are particular co-curricular and extracurricular engagements that help to explain significant and noteworthy percentages of variance in retention, GPA, and graduation rates for undergraduate students, but ...

Findings in our previous studies differed significantly based on ...

- Measure of success being studied,
- Admission status (FTIC freshman vs Transfer),
- Number of incoming credits, and
- Pre-college and demographic variables.

TO BETTER UNDERSTAND TRANSFER STUDENT ENGAGEMENT & SUCCESS, WE DISAGGREGATED BY ...



Admission Status (FTIC & Transfer), Incoming Credits, & 1st Gen

Transfer credits subdivisions:

- 24-39
- 40-59
- 60+

Transfer Students, Incoming Credits, & Institution Type

Transfer institution type subdivisions:

- Community College
- Bachelor's

Transfer Students, Incoming Credits, & In-State or Out-of-State

Transfer institution state:

- In-state (North Carolina)
- Out-of-state



2. Group Differences

A cluster of seven yellow five-pointed stars of varying sizes is positioned in the upper right quadrant of the slide. The stars are arranged in a loose, upward-pointing arc.

Measures of Success

We learned that our disaggregated groups differed significantly based on measures of success.

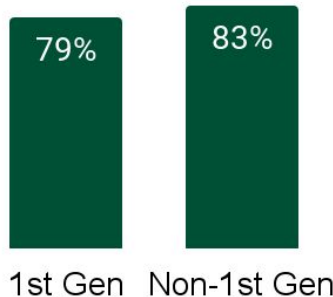
A few examples ...

FIRST GENERATION STUDENTS



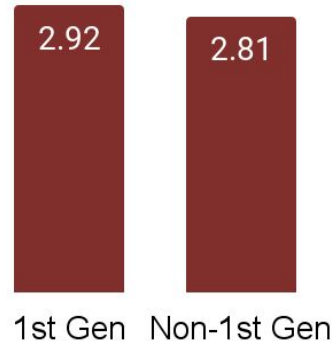
2nd Year Retention

Drop out more often before their 2nd year than other students.



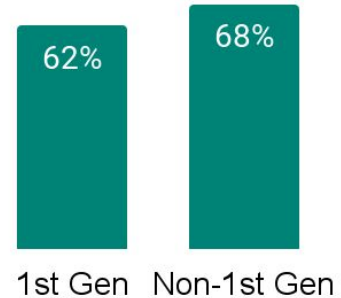
4 Year Cum GPA

Earn higher grades than non-1st Gen students.



6 Year Graduation

Graduate less often in 6 years than other students.

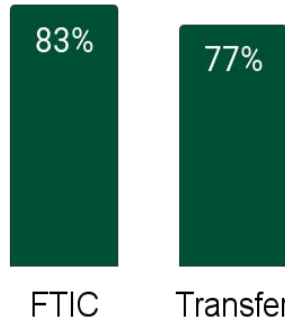


ADMISSION STATUS (FTIC VS. TRANSFER)



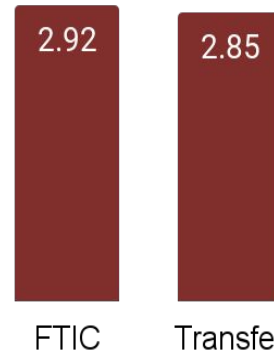
2nd Year Retention

FTIC students are retained better than transfer students.



4 Year Cum GPA

FTIC students have better grades than transfer students.

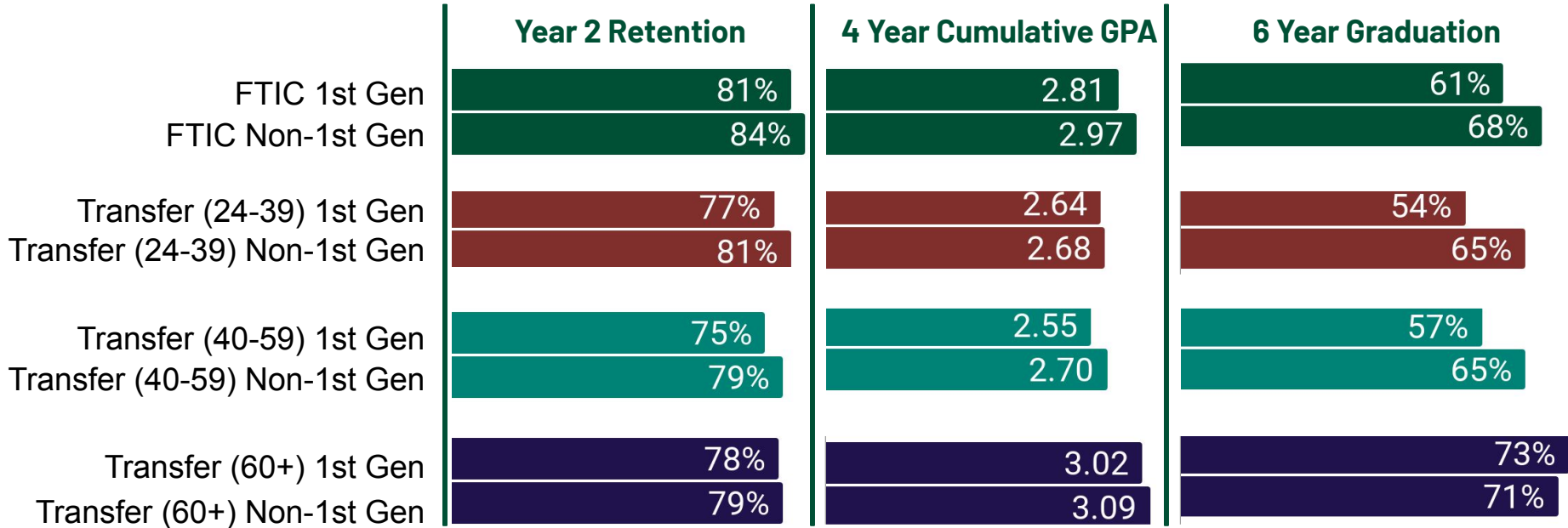


6 Year Graduation

Not significant



ADMISSION STATUS, INCOMING CREDITS, & FIRST GENERATION STATUS



A series of seven yellow stars of varying sizes scattered across the upper right portion of the slide.

Engagement Patterns

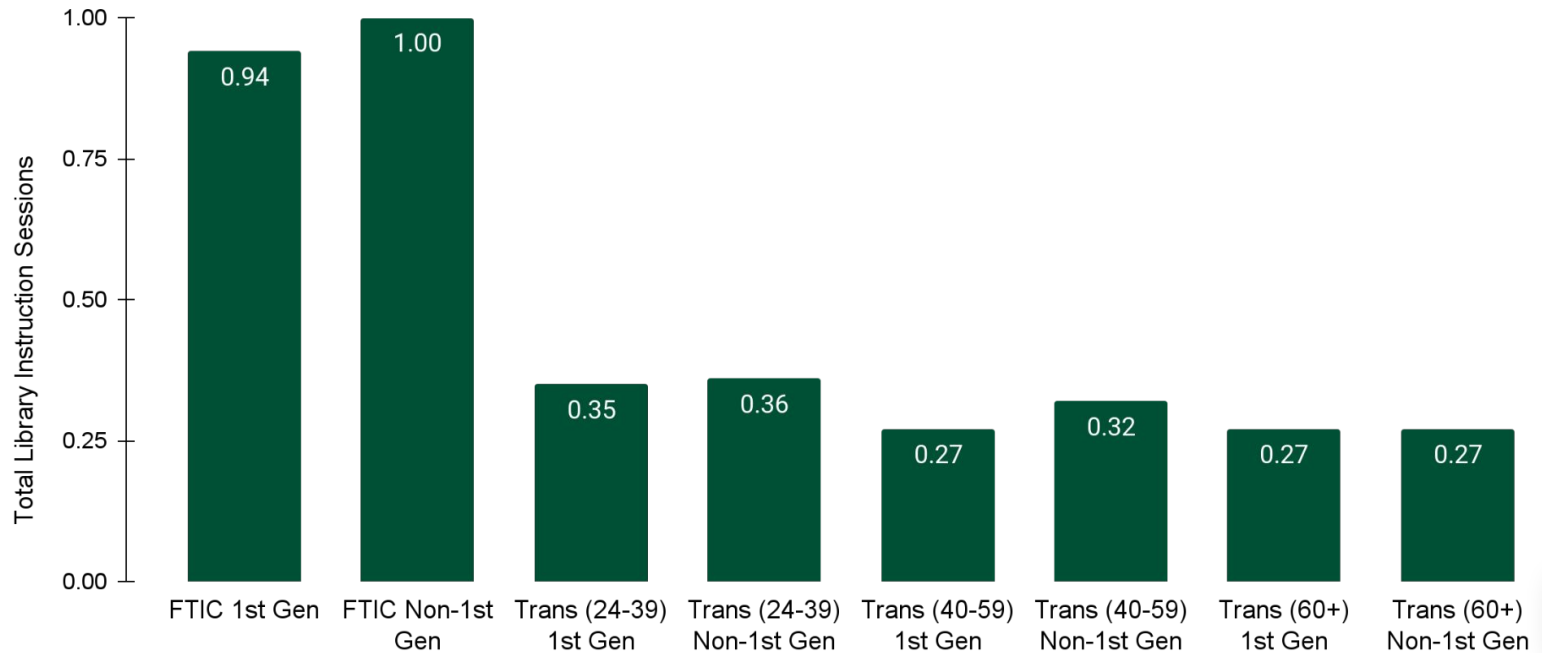
We also learned that co-curricular and extracurricular engagement patterns differed significantly based on disaggregated group membership.

A few examples ...

Library Instruction Participation in Year 1



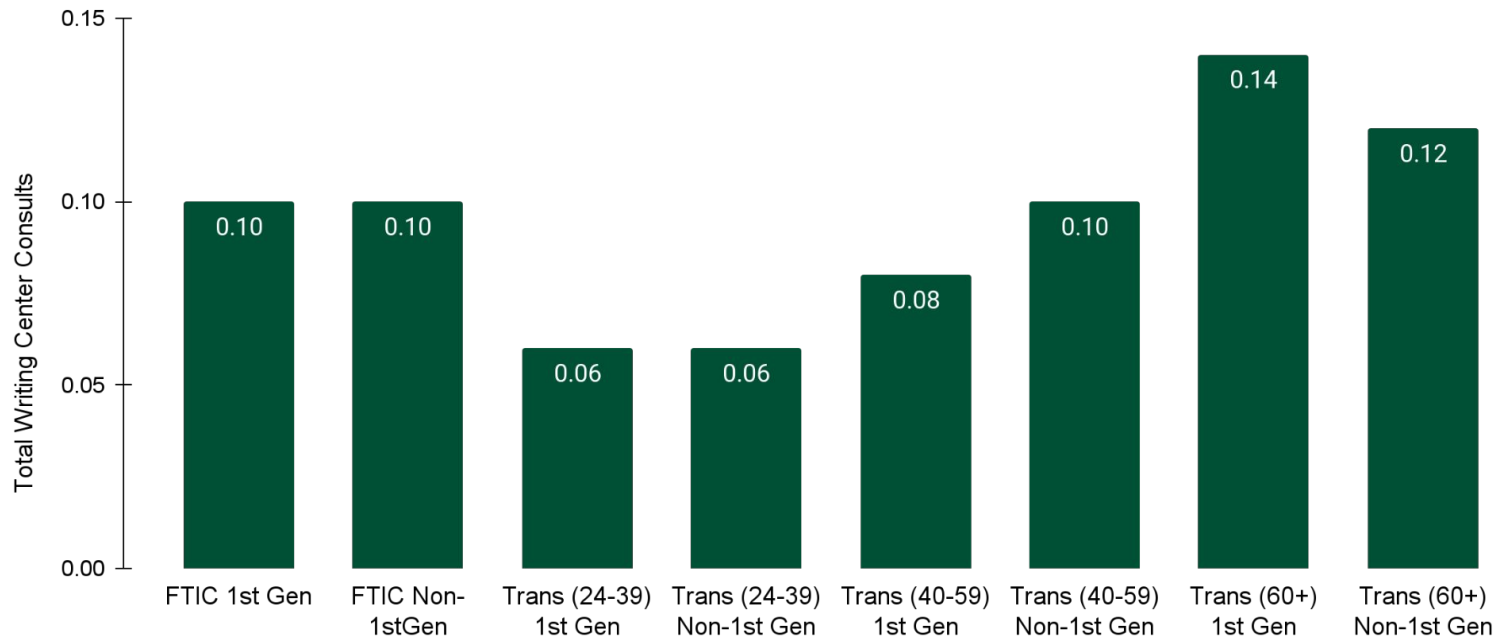
Admission Status, Incoming Transfer Credits, & 1st Generation Status



Writing Center Consultations in Year 1



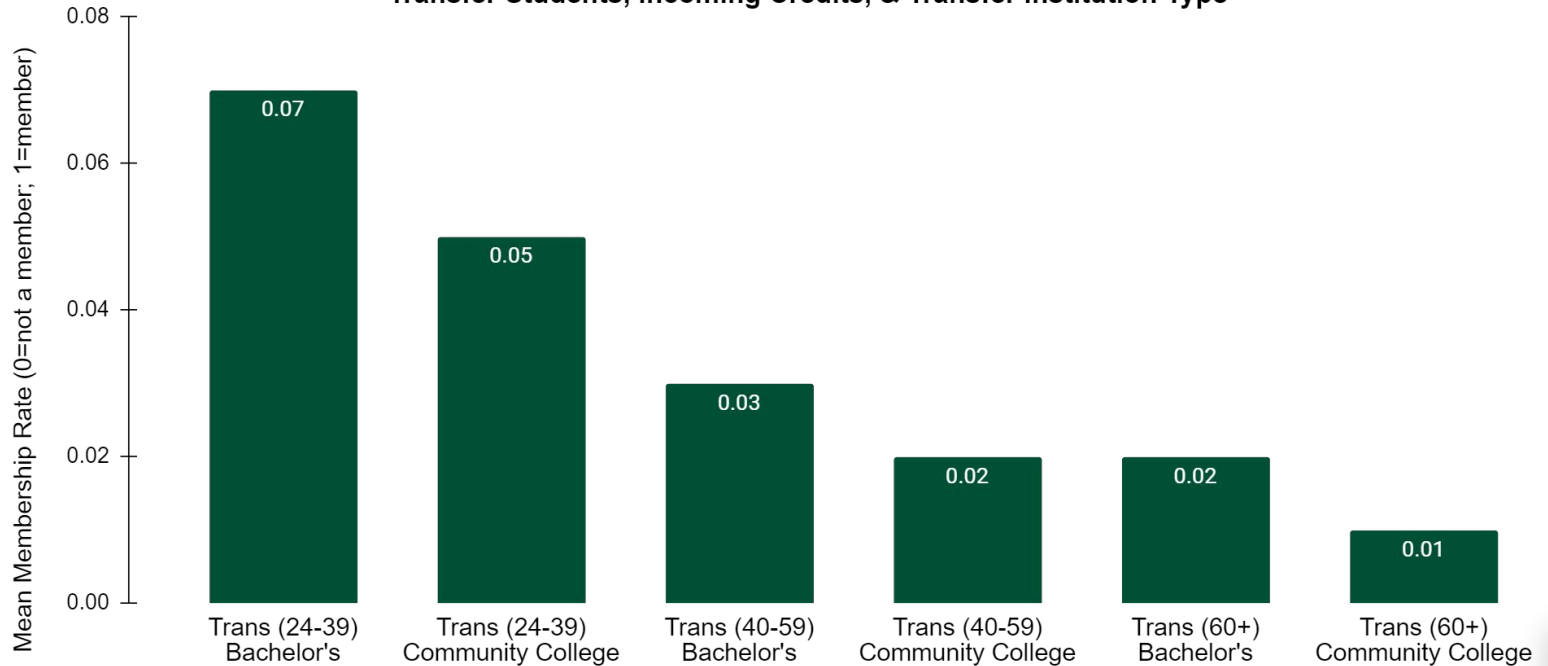
Admission Status, Incoming Transfer Credits, & 1st Generation Status



Greek Life Membership in Year 1



Transfer Students, Incoming Credits, & Transfer Institution Type



A decorative graphic consisting of five yellow stars of varying sizes scattered across the upper right portion of the slide.

What can we conclude so far?

Disaggregated groups differ significantly both with respect to achievement of the student success measures ...

and ...

their engagement patterns with co-curricular and extracurricular activities and services.



3. Confounding Variables

PROPENSITY SCORE MATCHING



**Pre-Entry
Academic
Readiness**
(ACT/SAT)

**Socioeconomic
Status**
(Pell Grant
Status)

College
(ART/ARCH,
BUSN, CCI,
EDUC, ENGR,
CLAS, CHHS,
UCOL)

**Under-
represented
Minority Status**
(URM - not white,
not Asian)

**High Impact
Practices**
(Experiential Educ.,
Education Abroad,
Learning
Community,
Undergrad
Research, Freshman
Writing Course)



4. Engagement Pathways

ENGAGEMENT DATA CONSIDERED FOR PATHWAYS



 Library	 Career Center	 University Center for Academic Excellence	 Writing Resources Center	 Student Affairs Extracurricular Memberships
<ul style="list-style-type: none"> ● Instruction ● Laptop & Desktop Usage ● Authentications ● Book Checkouts ● Study Room Reservations 	<ul style="list-style-type: none"> ● Advising ● Career Fairs ● Classroom Presentations ● Workshops 	<ul style="list-style-type: none"> ● Supplemental Instruction ● Consultations ● Tutoring ● Workshops 	<ul style="list-style-type: none"> ● Consultations ● Classroom Presentations 	<ul style="list-style-type: none"> ● Greek Life ● Sports Clubs ● Intramural Teams



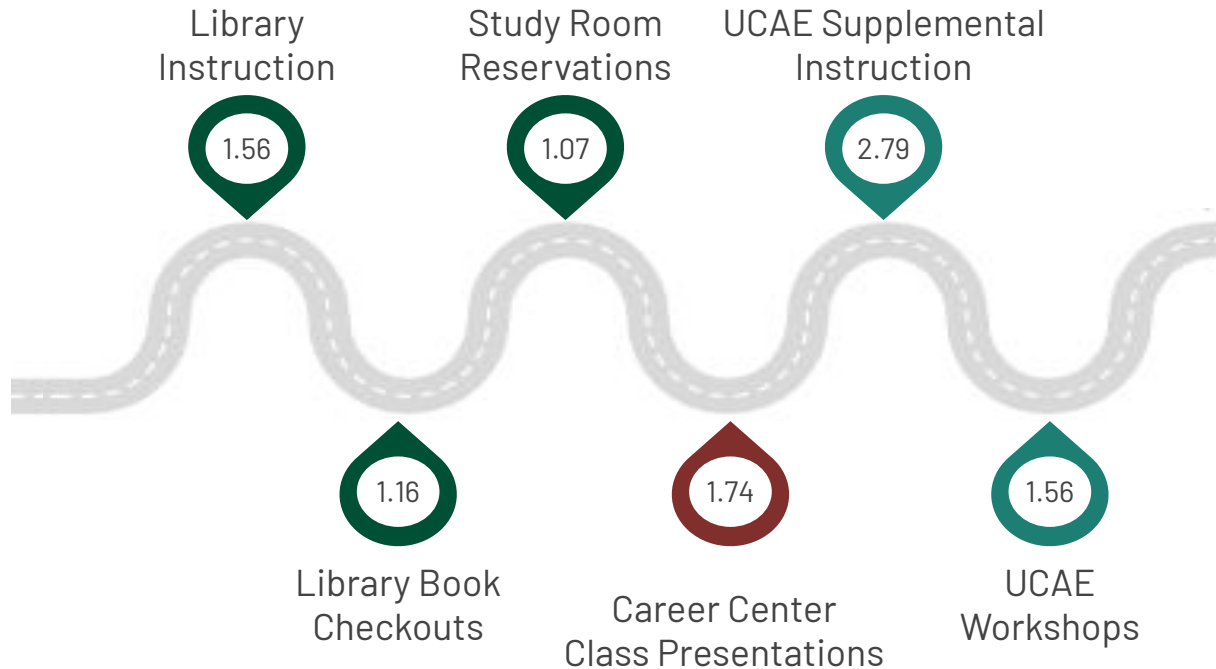
DELINEATED ENGAGEMENT PATHWAYS FOR SUCCESS



A few examples ...

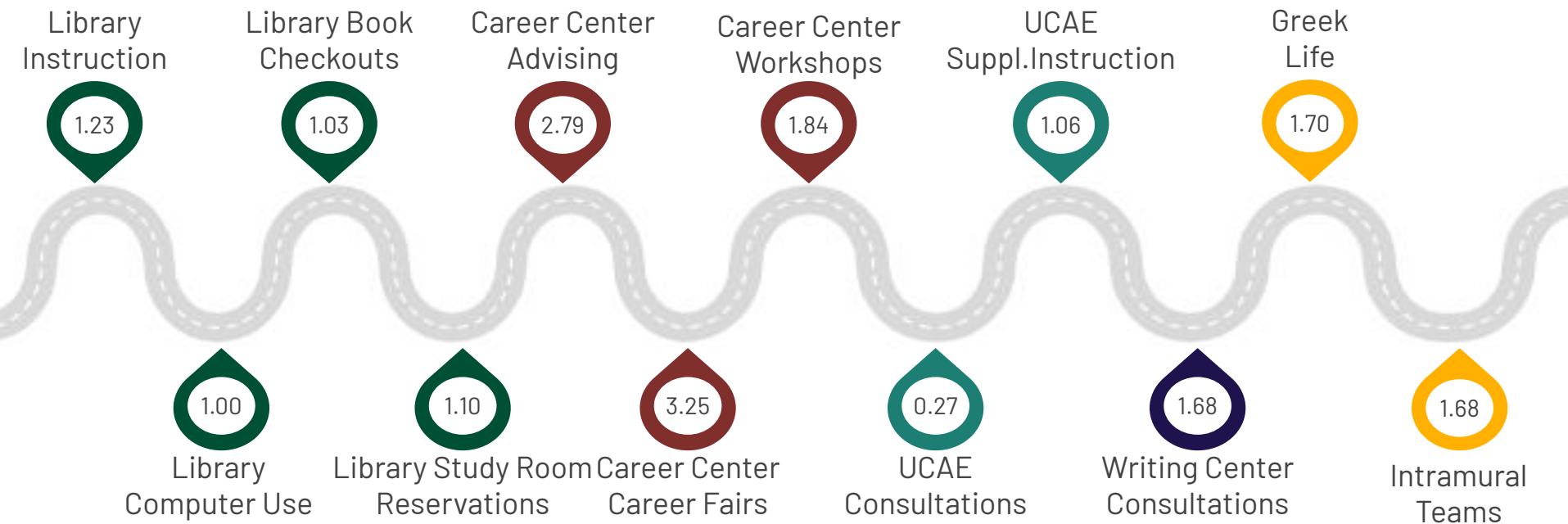
YEAR 1 TO YEAR 2 RETENTION PATHWAY

1st GENERATION TRANSFER STUDENTS WITH 60 OR MORE INCOMING CREDITS



4 YEAR CUMULATIVE GPA

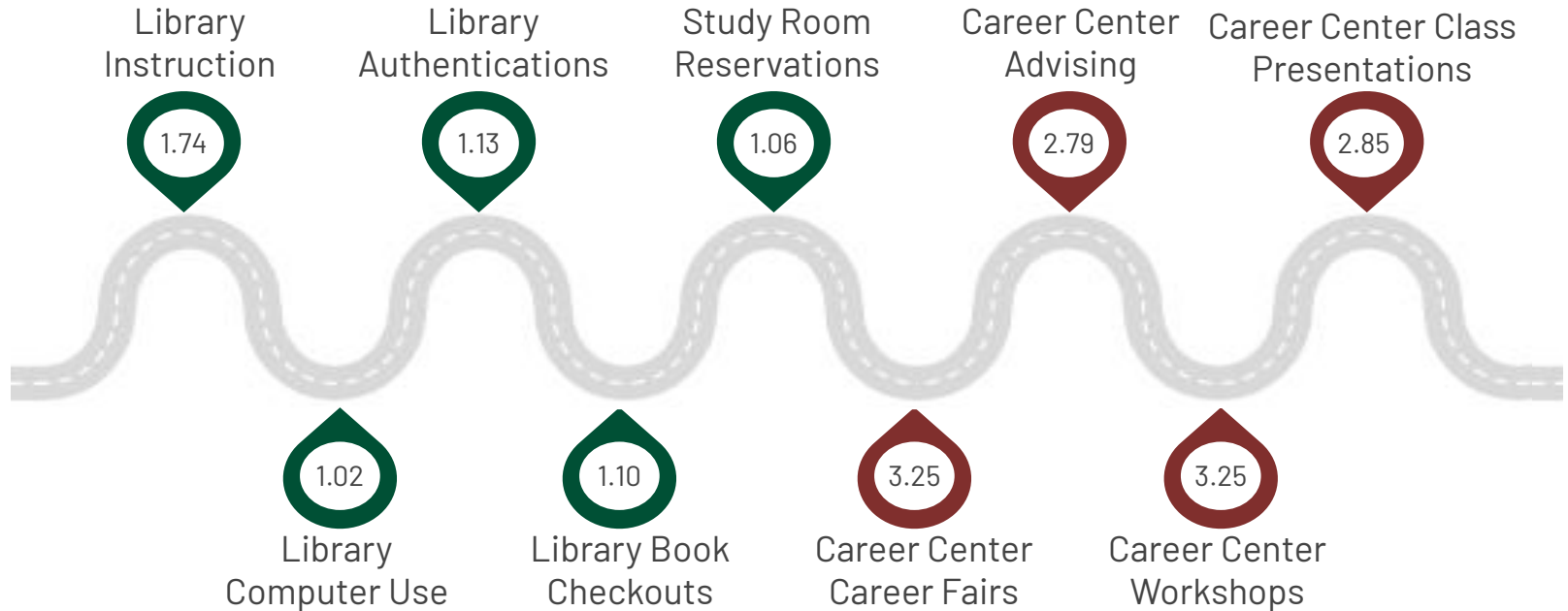
1st GENERATION TRANSFER STUDENTS TRANSFERRING FROM A COMMUNITY COLLEGE



Figures represent odds ratios (e^B)

6 YEAR GRADUATION PATHWAY

1st GENERATION TRANSFER STUDENTS WITH 24-39
MORE INCOMING CREDITS





5. Key Takeaways

KEY TAKEAWAYS IN CONTEXT OF THEORY



Tinto's Social Integration Theory suggests ...

... a student's pre-university background, external factors, social integration, and academic integration all play a role in a student's decision to stay or withdraw (Tinto, 1975 1993).

Findings from the study support Tinto's theory that ...

... engagement in specific co-curricular and extracurricular activities significantly increases the odds for success.

In this study, we further learned that ...

... the engagement pathways for success differ significantly depending on admission status, 1st generation status, number of incoming credits, and type of transfer institution.

... Controlling for pre-college, demographic, and other variables helped pinpoint which key engagement activities increase the odds for success.

KEY TAKEAWAYS IN CONTEXT OF THEORY



Hills' Transfer Shock and Bean & Metzner's Student Attrition theories suggest...

..... several factors may impede a transfer student's ability to academically and socially integrate, thereby adversely affecting their chances for success. (Hill, 1965; Bean & Metzner, 1985)

Our findings support Hill's *and* Bean & Metzner's theories and indicate that ...

... on average, transfer students coming in with less than junior status (< 60 credits) ...
... are less likely to persist than FTIC freshmen, *and*
... have lower GPAs and 6-year graduation rates than FTIC freshmen and transfer students with 60+ incoming credits.

Universities can help transfer students overcome their "first year" shock and succeed by structuring support systems and services to help them engage academically.

IMPACT



First study of its kind to create delineated out-of-classroom engagement pathways for transfer student success. In accomplishing this work, we created a replicable model that:

Disaggregates data into meaningful subgroups based on research and campus concerns.

Identifies significant group differences among subgroups for 3 measures of success.

Creates delineated engagement pathways for student success based on:

Identifies significant group differences in student engagement in out-of-classroom services and activities.

Controls for confounding variables in order to focus in on if/how particular types of engagement play a role in student success.

- admission status,
- 1st generation status,
- number of incoming credits, and
- type of transfer institution.



WHAT'S NEXT



We will continue investigating the precursor characteristics and co-curricular and extracurricular activities that relate to transfer student success hopefully uncovering further pathways libraries and universities can emphasize to help transfers succeed.



THANKS!

Any questions?

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CREDITS



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