



Students' Perceptions Matter: Early Signs of Undergraduate Student Retention/Attrition

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Presentation Overview

- 🌟 Background and Purpose
- 🌟 Data Sources
- 🌟 Methods
- 🌟 Results
- 🌟 Limitations
- 🌟 Discussion and Conclusions

Introduction: Retention is Important

- 🌟 International: the U.S. is falling behind in % educated (National Science Board, 2008)
- 🌟 National: higher education is important to the economy (Baum & Ma, 2007)
- 🌟 Institutional: great financial cost to *not* retaining students (Crosling, Thomas, and Heagney, 2008)
- 🌟 Individual student: rising tuition = ⬆️ pressure to graduate (Paulsen & St. John, 2002)

Literature

- 🌟 Historically, models have been dichotomous: retained or not (see, for example Tinto, 1993; Bean & Metzner 1987)

Literature continued

- 1 in 5 students who began in a 4 year institution earned their degree via transfer
- 60% percent of students who earned a bachelors degree had attended more than one post-secondary institution
- Concurrent enrollment at dual institutions (or “Double-dipling”) continues to be on the rise (Adelman, 2004)

Theoretical framework:

- New more complex understanding = SWIRL (Borden, 2004; Santos & Wright, 1990; McCormick, 2003)

Literature continued

Three problems:

- Few institutions consider implications of “swirlers”
- What about stop-outs?
- Few models incorporate student perceptions

Purpose

Can freshmen behaviors, attitudes, and expectations tell us about the chances of different enrollment outcomes five semesters later?

Addressing gap in literature:

- Linked to practice, developed by CAWG
- Includes 4 categories of enrollment outcomes
- Uses survey data on perceptions of freshmen

Data Sources

- The 2002 Beginning Student Survey (BSS'02)
- The National Student Clearinghouse (NSC)

Beginning Student Survey

- Locally developed by the Campus Assessment Working Group (CAWG)
See www.irpa.umd.edu/CAWG for more information
- Administered annually to FTFT freshmen 8 weeks into their first semester
- Gathers data on experiences, attitudes, and perceptions

National Student Clearinghouse

- Nation's largest database of enrollment data
- Participating institutions enroll over 92% of all types of U.S. higher education students
- Provides continuing collegiate enrollment and degree information to institutions on their prospective, current, and former students

Four Different Enrollment Categories

Fall 2002 at UM		Fall 2005	N*
Continuously Enrolled		Still here or graduated	1588 (76%)
Stop-outs	Temporarily left UM	Back to / graduated from UM	239 (12%)
Transfer-outs	Left UM	Enrolled in / graduated from another institution	158 (8%)
Drop-outs	Left UM	Not enrolled in or graduated from any NSC institution	99 (5%)
			2,084

* BSS'02 respondents

Methodology

- Multinomial Logistic Regression
Assesses possible associations between student characteristics / Beginning Study Survey responses and subsequent (Fall 2005) enrollment outcomes
- Factor Analysis to group survey items

Multinomial Logistic Regression

Variables included in the MLR:

- Academics factor
- Study Skills factor
- Institutional Connectedness factor
- General attitude toward UM
- College finances
- Future direction
- Working on campus
- Working off campus
- UM was first choice institution
- Race/ethnicity
- Residency
- Interaction between residency and finances

* See handout for specific survey items

Multinomial Logistic Regression

- Men and women have different enrollment patterns
Women are overrepresented in the Stop-out category and underrepresented in the Stayers category ($p < .001$)
- Ran separate MLR analyses for men and women
- Both analyses use continuously enrolled (or “Stayers”) as the reference group
- Exploratory analysis ($p < .10$)

Interpreting the MLR Results

- First test “omnibus” effect of variable
- Then test effect for specific comparison
- Lastly determine the “relative risk”
Likelihood of relevant outcome divided by likelihood of staying continuously enrolled, given certain student characteristics / survey responses

Enrollment Patterns of *Female* Students

Six variables that distinguish stayers from other enrollment patterns:

- General attitude toward UM
- Academics factor
- Residency
- UM was first choice
- Future (career & major) direction
- Race/ethnicity

Enrollment Patterns of *Female* Students

**More likely to
Stop Out if...**
(vs. Stayers)

Didn't know major or career direction
(risk increases by a factor of 2)

UM was NOT 1st choice
(risk increases by a factor of 2)

White as opposed to woman of color
(risk increases by a factor of 4 vs. Black)
(risk increases by a factor of 3 vs. Hispanic)
(risk increases by a factor of 2 vs. Asian)

Higher score for Academics factor
(risk increases by a factor of 1.5)

Enrollment Patterns of *Female* Students

**More likely to
Transfer Out
if...**
(vs. Stayers)

Didn't know major or career direction
(risk increases by a factor of 2)

Lower general attitude about UM
(risk increases by a factor of 2.5)

Out-of-state compared with in-state
(risk increases by a factor of 6)

Higher score for Academics factor
(risk increases by a factor of 1.5)

Enrollment Patterns of *Female* Students

**More likely to
Drop Out if...**
(vs. Stayers)

Knew major or career direction
(risk increases by a factor of 2)

White as opposed to Asian
(risk increases by a factor of 8)

Enrollment Patterns of *Male* Students

Three variables that distinguish stayers from other enrollment patterns:

- General attitude toward UM
- Race/ethnicity
- Study Skills factor

Enrollment Patterns of *Male* Students

**More likely to
Stop Out if...
(vs. Stayers)**

Lower general attitude about MAU
(risk increases by a factor of 2)

Unknown race as compared to White
(risk increases by a factor of 3)

Enrollment Patterns of *Male* Students

**More likely to
Transfer Out
if...
(vs. Stayers)**

No significant effects

Enrollment Patterns of *Male* Students

**More likely to
Drop Out if...
(vs. Stayers)**

Black as opposed to White
(risk increases by a factor of 4)

Lower general attitude about UM
(risk increases by a factor of 1.5)

Lower score on Study Skills factor
(risk increases by a factor of 3)

Limitations

- 🌟 Limited to BSS'02 survey items and FTFT respondents providing UID
- 🌟 Considers only one snap-shot in time (Fall 2005)
- 🌟 Using MLR merely as a tool for identifying risk factors
- 🌟 Overall, most students stay at and graduate from UM

Our Thoughts

- 🍷 For both women and men, perceptions matter!!
- 🍷 A more positive **attitude** toward UM indicated a greater likelihood of continuous enrollment

What was it about UM in just the first 8 weeks that stop-outs, transfer-outs, or drop-outs didn't like?

Did they leave because they didn't like UM?

Our Thoughts

- 🍷 For both women and men, **race/ethnicity** seems to play a role in enrollment patterns

What role does race/ethnicity play in students' enrollment patterns?

Our Thoughts on Female Students

- 🍷 It is surprising that scoring higher on the Academics factor indicates a greater likelihood of stopping-out or transferring-out vs. staying

It may be that lacking future direction helps to explain this phenomenon

- 🍷 More likely to transfer out if living out-of-state

Is out-of-state tuition a concern? Is distance from home a concern? If so, do they transfer to a school that is closer to home?

Our Thoughts on Male Students

- 🍷 More likely to be 'not enrolled' if lower score on their self-assessed study abilities

Does this have to do with confidence or abilities?

- 🍷 What variables are missing for males who transfer?

Implications

- Many of these factors are identifiable 8 weeks into the semester through a few simple questions by an advisor or an RA and looking at institutional records
- Policy and programmatic initiatives may encourage these students to be retained at UM.

Future Research

- What shapes the early less-than-positive general attitude toward UM that influences a student's subsequent enrollment?
- What about double-dippers?
- More on men
- More on transferring to a 2 vs. 4 year institution

Overarching Conclusions

- Students' perceptions do matter with regard to enrollment patterns.
- The scholar-practitioner model is especially poignant in studies of retention because interventions for students who are at risk of leaving must be considered in light of campus resources.

Questions?

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