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)
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-dipping”) continues to be on the rise (Adelman, 2004).

Theoretical framework:
New more complex understanding = SWIRL (Borden, 2004; Santos & Wright, 1990; McCormick, 2003).

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

<table>
<thead>
<tr>
<th>Fall 2002 at UM</th>
<th>Fall 2005</th>
<th>N*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Enrolled</td>
<td>Still here or graduated</td>
<td>1588 (76%)</td>
</tr>
<tr>
<td>Stop-outs</td>
<td>Temporarily left UM</td>
<td>Back to / graduated from UM</td>
</tr>
<tr>
<td>Transfer-outs</td>
<td>Left UM</td>
<td>Enrolled in / graduated from another institution</td>
</tr>
<tr>
<td>Drop-outs</td>
<td>Left UM</td>
<td>Not enrolled in or graduated from any NSC institution</td>
</tr>
</tbody>
</table>

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

* BSS'02 respondents 2,084
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

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

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)

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

<table>
<thead>
<tr>
<th>More likely to Stop Out if... (vs. Stayers)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Didn’t know major or career direction</td>
<td>(risk increases by a factor of 2)</td>
</tr>
<tr>
<td>UM was NOT 1st choice</td>
<td>(risk increases by a factor of 2)</td>
</tr>
<tr>
<td>White as opposed to woman of color</td>
<td>(risk increases by a factor of 4 vs. Black)</td>
</tr>
<tr>
<td></td>
<td>(risk increases by a factor of 3 vs. Hispanic)</td>
</tr>
<tr>
<td></td>
<td>(risk increases by a factor of 2 vs. Asian)</td>
</tr>
<tr>
<td>Higher score for Academics factor</td>
<td>(risk increases by a factor of 1.5)</td>
</tr>
</tbody>
</table>

### Enrollment Patterns of *Female* Students

<table>
<thead>
<tr>
<th>More likely to Transfer Out if... (vs. Stayers)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Didn’t know major or career direction</td>
<td>(risk increases by a factor of 2)</td>
</tr>
<tr>
<td>Lower general attitude about UM</td>
<td>(risk increases by a factor of 2.5)</td>
</tr>
<tr>
<td>Out-of-state compared with in-state</td>
<td>(risk increases by a factor of 6)</td>
</tr>
<tr>
<td>Higher score for Academics factor</td>
<td>(risk increases by a factor of 1.5)</td>
</tr>
</tbody>
</table>

### Enrollment Patterns of *Female* Students

<table>
<thead>
<tr>
<th>More likely to Drop Out if... (vs. Stayers)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Knew major or career direction</td>
<td>(risk increases by a factor of 2)</td>
</tr>
<tr>
<td>White as opposed to Asian</td>
<td>(risk increases by a factor of 8)</td>
</tr>
</tbody>
</table>

### 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)

**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 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?

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?
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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