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# **CHOOSING THE UNIVERSITY: THE DIFFERENCE OF FACTORS AFFECTING MATRICULATION BETWEEN FIRST-TIME STUDENTS AND TRANSFER STUDENTS**

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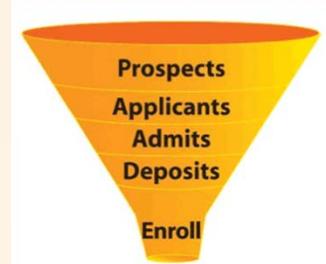
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# Background

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Student enrollments are the lifeblood of institutions.

Recruiters' interest is getting stronger in having an in-depth understanding of why students choose a college.

Enrollment management officers are particularly concerned with the institution-based college choice factors related to the specific characteristics of their student body (Kinzie et al., 2004).

There is a pressing need to understand the distinction between the characteristics of first-time and transfer students and to investigate the relative importance of factors influencing college choice.

# Theoretical Framework

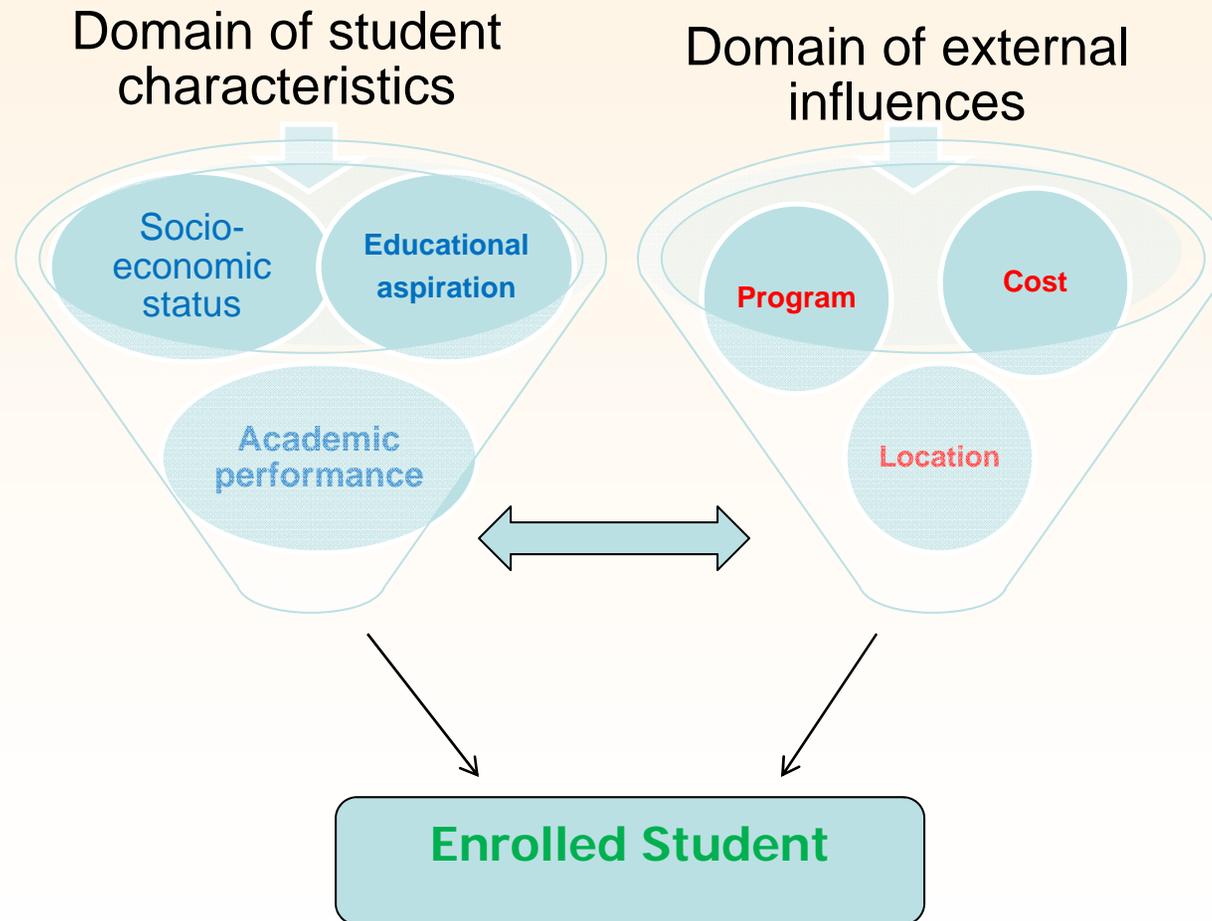
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The characteristic-based college choice model (Chapman, 1981):

1. Domain of student characteristics: socioeconomic status, level of educational aspiration, **student type**, and academic performance
2. Domain of external influences: an individual holding significant influence, fixed college characteristics (**availability of program, college cost, and location**), and college recruiting efforts.

# The Model of College Choice



# Previous Research: Major Factors Influencing College Choice

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Academic program offering, parents' advice, institution location, institution reputation, institution size, financial aid, and cost of attendance.

Each of these factors contributes differently to the overall college choice process (Cibik, 1982; Litten & Brodigan, 1982; Paulsen, 1990).

# Research on College Choice for Transfer Students

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- Academic program: the most important factor influencing transfer behaviors of community college students (Anderson & Scholl, 1976; Lang, 2009; Monroe & Richtig, 2002).
- Affordability, high academic reputation, maturity, mobility, and competitiveness of admission requirements may influence an individual's college choice (Anderson & Scholl 1976; Cowin, 2004).
- Realigning their goals, effects from attendance at the initial institution, academic performance, and academic climate (Twede, 1990).

# Research on the Differences of College Choice between Female and Male Students

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Females are more aware of the constraints that the setting and close persons put on them, and their emotions are more important to them in the decision process. Conversely, men assign more importance to the analysis of the information required to carry out the decision and to the definition of the goals or purposes of the decision (Lizárraga, Baquedano, & Cardelle-Elawar, 2007).

Females are more interested in subjects related to the humanities and social sciences while males show a higher level of interest in engineering, physical and health sciences. Female students also tend to choose less selective colleges (Kerr & Colangelo, 1988; York, 2008).

College enrollment decisions are affected by the expected return on the college education. College ranking/prestige has a positive effect on male college-going decisions, but has no effect on female decisions (Averett & Burton, 1996, Jacob, 2002).

# Hypotheses

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Different types (first time and transfer) of students make their decision to attend a particular institution on the basis of one or more of the factors that relate to their characteristics and needs.

The relative importance of these college choice factors determined by students' characteristics and needs may also be influenced by student type and gender.

# Context of the Institution

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- A moderately selective four-year public institution with a total enrollment of approximately 6,000 undergraduate and graduate students.
- Programs in the arts and sciences, business, education, and library and information management.
- The majority of undergraduates: full-time, on-campus, traditional-aged, and in-state students.
- Located in a city with a population of nearly 30,000, which is the county seat, and the largest city in a seven-county rural area.

# Survey Participants

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- Of the 2,272 new students solicited for participation, 1,632 returned useable surveys, representing 71.8% of the entire new student population.
- 1,189 (72.8%) new freshmen and 443 (27.2%) transfer students; Female (59.3%), White (83.2%) and in-state residents (84.5%).
- First-time students: immediate high school graduates(68.6%); New transfers: from in-state community college(65.3%).

# Instrument and Data Collection

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- SWARM survey: “To what extent did each of the following factors influence your decision to attend the institution?”
- The survey items were initially developed by a group of university and admission professionals composed of professors, experienced admissions administrators, and student representatives.
- Based on the reviews, revisions, comments and suggestions, a 13-item SWARM survey was finalized.
- Students were asked to complete the survey at the time of new student matriculation.

# Index Validity and Reliability Analysis

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- Exploratory factor analysis in reducing the number of measured items: The survey item, athletic participation, as an influencing factor of institutional choice was eliminated.
- Exploratory factor analysis in detecting the underlying constructs of the influencing factors (accounted for a total of 61.7% variance). The four constructs were labeled as:
  - Academic quality
  - Significant persons' advice
  - Attendance cost
  - Institution location
- Reliability analyses: The Cronbach's alpha measures ranged from .60 to .73, confirming that the scales had moderate or high internal validity.

# The Four Constructs of the Index

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## *Academic quality - 0.73*

- Academic programs/majors offered
- Campus atmosphere
- Size
- Institution reputation

## *Attendance cost - 0.68*

- Cost of tuition and housing
- Financial aid package offered
- Scholarship offer

## *Significant persons' advice - 0.71*

- Advice of parents or relatives
- Advice of high school counselors/teachers or college professors
- Advice of alumni

## *Institution location - 0.60*

- Location of the institution
- Friends attending

# Variables and Analysis

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- The independent variables: gender and student type (first-time versus transfer students).
- The dependent variable: 1) academic quality; 2) significant persons' advice; 3) attendance cost; and 4) institution location.
- A 2 X 2 multivariate analysis of variance (MANOVA) was performed on the multi-dimensional four-construct influencing factors
- These analyses attempted to examine whether gender and student type (freshmen and transfer students) made any differences in the perceived importance of the influencing factors of institutional choice.

# Results (Descriptive Statistics)

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- To what extent did each of the following factors influence your decision to attend the institution?
- Likert scale: 5 = very strong influence, 4 = strong influence, 3 = moderate influence, 2 = weak influence, 1 = little/no influence

|                                      | <i>Mean</i> | <i>SD</i> |
|--------------------------------------|-------------|-----------|
| • <i>Academic quality</i>            | 3.87        | 0.78      |
| • <i>Attendance cost</i>             | 3.48        | 0.95      |
| • <i>Significant persons' advice</i> | 3.13        | 1.00      |
| • <i>Institution location</i>        | 3.47        | 1.08      |

## Results (2 x 2 MANOVA)

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The overall main effect of student type ( $Wilks' \Lambda = .970$ ,  $F(4, 1625) = 12.449$ ,  $\eta^2 = .030$ ,  $p < .001$ ) and gender ( $Wilks' \Lambda = .978$ ,  $F(4, 1625) = 8.975$ ,  $\eta^2 = .020$ ,  $p < .001$ ) was significant.

The overall interaction effects for student type and gender were non-significant,  $Wilks' \Lambda = .999$ ,  $F(4, 1625) = 0.320$ ,  $\eta^2 = .001$ ,  $p = .864$  (see Table 3).

This indicates that the difference between the subjects' means as a function of student type did not depend on their gender.

# Results (Subsequent Univariate ANOVA by Student Type)

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- Tests of between-subjects effects indicated that there were statistically significant student type main effects for all the four subscales:
  - 1) academic quality,  $p < .001$ ,  $d = .31$ ;
  - 2) significant persons' advice,  $p = .001$ ,  $d = .22$ ;
  - 3) attendance cost,  $p < .001$ ,  $d = .38$ ; and
  - 4) institution location,  $p = .007$ ,  $d = .20$ .

**First-time students were more significantly influenced than transfer students by these dimensions of factors in their decision to attend the institution.**

These differences represent medium effect sizes.

# Results (Subsequent Univariate ANOVA by Gender)

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- Tests of between-subjects effects indicated that there were statistically significant gender main effects for the following two subscales: 1) academic quality,  $p < .001$  and 2) institution location,  $p = .029$ .
- Female students tended to be more influenced by the factors of academic quality while male students considered more on the dimension of institution location.
- These differences represent medium effect sizes of .28 and .21.
- No significant differences between female and male students were found on the subscales of significant persons' advice,  $p = .466$  and attendance cost,  $p = .981$ .

# Summary of Findings of Influencing Factors

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- The individual influencing factors interrelate to each other to form underlying dimensions of academic quality, significant persons' advice, attendance cost and institution location that integrate together, but differ in importance to influence the new students in matriculation.
- Major/program offerings, perceived academic quality, cost of attendance, and institution location remain to be important factors in choosing colleges (Chapman & Jackson, 1987, Kinzie et al., 2004).
- Parents ( $M=3.39$ ) continue to play an influential role in their students' college decisions.
- Scholarship offer and financial aid seem to have moderate influence on students' choice of the institution.

# Discussion (Student Type)

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- Compared to new transfer students, freshmen attach significantly more importance on all the four dimensions of influencing factors
- The weighting of these factors varies for different types of students (Carden, 1978; Hossler, Braxton, & Coopersmith, 1989).
- Transfer students appear to be more independent on college choice and less influenced by external environment characteristics depending on their college academic experiences, older ages, more matured personality and more sources for attendance cost.
- This finding is consistent with the naturalistic theory that underlines the role of experience and personal competence in the decision process (Orasanu & Connolly, 1993).
- The findings possibly reflect that transfer students received less attention from the institution in recruitment efforts.

# Discussion (Gender)

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- Female students tend to be more influenced by academic factors while male students placed more emphasis on institution location.
- Female students appear to place more value the academic program quality and the consequences of their decision-making are concerns.
- Male students seem to be more objective and realistic in their decision making (Wood, 1990), attaching more importance on the institution location that relates to attendance convenience, cost saving, and proximity to family and friends.

# Implications

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- It is essential for administrators, recruiters and strategic planners to be aware that the importance of the influencing factors in college choice is different for students with different characteristics.
- Students attach enormous importance on academic quality, which seems to be the most persuasive dimension for college choice.
- Institutions could consider directed marketing that could articulate the finding of this study specific to the different perspective of the students' characteristics.
- Enrollment communication efforts should reflect the uniqueness of transfer students, considering their characteristics such as having college academic experiences, older ages, more matured personality and more professional-oriented.
- Transfer students should receive more recruitment attention and resources such as web-based information, campus visit, admissions /recruiting activities, scholarship and financial opportunities.

# Limitations

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- Lack of data capacity to include other factors such as students' social economic status, academic performance, and college efforts to communicate with students, that were included in the conceptual framework (Chapman, 1981);
- The MANOVA analyses not controlling for variation by students' characteristics in social economic status, academic performance and majors/programs;
- Not having the data to investigate whether or not some fluid influencing factors such as financial aid, scholarships, and actual communication efforts were offered differently to freshmen and transfer students.
- Generalization limited by the context of the rural-based institution.

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