Enroll or not to Enroll? What Factors Affect Decisions to Enroll after Admitted to an HBCU

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Introduction

• The university: HBCU with special missions throughout its history and thus has traditionally admitted large percent of under-prepared students. Also a part of the public state university system.

• Accountability and performance measures: same as the rest of the institutions in state university system.
  – Common used measures such as enrollment and degrees awarded, retention rate, graduation rate, and student success
  – Other measures such as percent of under-prepared students in the First Time In College (FTIC) cohort also have been put on the radar screen.
Introduction

• The bar is higher:
  – Starting summer 2011, the state has raised the FTIC standards in terms of both test scores and high school GPA requirements, as well as core high school units requirements. As a result, a higher number of FTICs that come to the university do not meet the admission criteria and become profile admits.
  – At the same time, the state started to ask each university to cut down the number and percentage of profile admits resulting in the university losing one third of incoming FTICs.
Introduction

• Within this context, this study builds on previous empirical studies in the literature to study the factors that influence students’ enrollment decisions after being admitted to this special university, especially whether profile admits and regular admits make decisions differently to inform targeted recruitment efforts.
Literature

College decision-making process is seen as three broad stages through which students go through (Hossler, Braxon, & Coopersmith, 1989).

- Aspiration forming, students forming college aspirations and a mix of factors and processes influence student’s predisposition towards higher education.
- Searching for potential schools, students identify and apply a select number of colleges.
- Making choices in admission, enrollment, and attendance. Each of these stages is influenced by economic, sociological, and psychological factors (Paulsen, 1990).
Literature

Many empirical studies have modeled student behavior in making college choice as a function of
• students' individual characteristics,
• family characteristics and
• institutional characteristics

e.g. Hossler, Braxton, & Coopersmith, 1989; Paulsen, 1990; Welki & Navratil, 1987; Dynarski, 2000; Heller, 1999; Kane, 1994; McPherson & Schapiro, 1991; Parker & Summers, 1993; St. John 1990
Literature

• These studies suggest that individual characteristics such as race, gender, marital status, and students' academic ability and preparation, institutional characteristics such as reputation, selectivity, distance to home, cost of attendance, financial aid, special programs, and curriculum all play important roles in influencing students' application and enrollment decisions.
Literature

• Other factors such as whether the student is from in-state or out-of-state (Curs & Singell, 2002), socio-economic status of the parents, and parents' educational attainment and occupational status (Keane, 2002) also affect sensitivity to college price thus affect enrollment decisions.
Literature

• Controlling for these variables, researchers then can estimate the probability that an individual student, who has applied or been admitted, will enroll at the institution. Thomas, Dawes, and Reznik (2001) and DesJardins (2002) have suggested that these results can be used to benefit more effectively target recruitment efforts.
Research Methodology

• Logistic model is used to control for factors that are to influence college choice.

• Data sources: data collected from our ERP student Information System as well as census data files that each public university submits to the state.

• Three most recent years totaling 13,622 First Time In College students that have applied and admitted to the university are included in this study.
Variables

• Independent variable: whether or not a student decides to enroll at this university conditioned on the student being admitted to the institution

• Dependent variables:
  – gender, race, SAT/ACT scores, high school GPA, time lag between high school graduation and applying to college
  – family income, parents education level, in state or out of state
  – cost of attendance, summer or fall term, distance from home, profile admit or regular admit, and specific academic disciplines they are admitted to.
Dependent Variables

• Categorical variables: gender, race, summer or fall term, profile admit or regular admit, in or out of state, and parents highest education level.

• Ratio variable: test scores, High School GPA, distance from home, time lag between high school graduation and applying to college, family income, and cost of attendance
## Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-.205</td>
<td>***0.000</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>-.437</td>
<td>.153</td>
</tr>
<tr>
<td>White</td>
<td>-.418</td>
<td>*0.013</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-.688</td>
<td>***0.000</td>
</tr>
<tr>
<td>American Indian</td>
<td>.231</td>
<td>.753</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>-.002</td>
<td>***0.000</td>
</tr>
<tr>
<td>High School GPA</td>
<td>-.261</td>
<td>***0.000</td>
</tr>
<tr>
<td>Distance to Home</td>
<td>-.001</td>
<td>***0.000</td>
</tr>
<tr>
<td>In or out of state In State</td>
<td>2.225</td>
<td>***0.000</td>
</tr>
<tr>
<td>Enrollment Term Summer</td>
<td>.413</td>
<td>***0.000</td>
</tr>
<tr>
<td>Admission Type Regular Admit</td>
<td>-.097</td>
<td>*.048</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Income</td>
<td>.000</td>
<td>***0.000</td>
</tr>
<tr>
<td>Time lag between high school graduation and time to apply for the college</td>
<td>.024</td>
<td>**0.004</td>
</tr>
</tbody>
</table>

*p <= .05  ** p<= .01  *** p <= .001
Findings & Conclusions

- Students with higher test scores and better high school grades are less likely to enroll reflecting a less selective status of the university.
- The probabilities of African American students enrolling are substantially higher than most of other races.
- Female students are less likely to enroll than male students.
Findings & Conclusions

• Students with the following characteristics had greater probability to enroll than their counterparts
  – Higher family income
  – In-state
  – Parents with college degrees and above
  – Live closer to the university
  – Admitted in the summer term
  – Not meeting admission standards
Findings & Conclusions

• The probability of students admitted to Pharmacy school and Business school is higher to enroll than other programs.

• Other factors included in the model including time lag between high school graduation and time to apply for the college do not make significant contribution in student choice to enroll.
Findings & Conclusions

• Implications for targeted recruitment efforts
• Redefine or reinstate the mission of the university – further research is needed on what value does the university bring to underprepared students, and at what cost to both the university and students themselves.
Questions/Comments