FIRST-GENERATION UNIVERSITY STUDENTS: MOTIVATION, ACADEMIC SUCCESS, AND SATISFACTION WITH THE UNIVERSITY EXPERIENCE

Patricia R. Forbus  
John J. Newbold  
Sanjay S. Mehta  
Sam Houston State University, Huntsville, TX

ABSTRACT

First-generation college students are becoming the center of an increasing amount of research. The primary purpose of this study was to examine the variation in motivation, academic success, and satisfaction levels between first-generation and continuing-generation students along with the influence of relations established between a four-year university and area community colleges. In addition, the study explored the different backgrounds and characteristics of first-generation and continuing-generation students. The findings of this analysis enhance previous research by demonstrating the benefits of identifying the backgrounds of students entering the university and developing formal associations between the university and those institutions in which the students were previously enrolled.

Keywords: First-generation students, higher education, life roles, support systems, motivation, involvement, identification, academic success

INTRODUCTION

Many university enrollees’ parents do not have college degrees. These entrants are at high risk of leaving the educational institution prior to completing their degree course, suggesting it is critical to develop an understanding and support system for these students (Martinez et al., 2009). This study examined differences in the goal-orientations of first-generation undergraduates as compared to their continuing-generation counterparts and examines the variations in their college success.

The first-generation student was defined as one for whom neither parent had completed a college degree and neither parent had any type of postsecondary education (Choy, 2001) while the continuing-generation students were those with at least one parent who had some type of postsecondary education (Somers, Woodhouse, & Cofer, 2000).

First-generation college students are characterized in the most underprivileged racial, income, and gender groups (Choy, 2001; Horn & Nunez, 2000; & Warburton et al., 2001). First-generation students are faced with all the anxieties and difficulties of any college student, but their experiences often include additional cultural, social, and academic changes (Pascarella, et al., 2003). Being the first-generation of a family to experience the culture of university life and lacking the continuing-generational advantage of college information also make participation particularly difficult for first-generation students (Lohfink & Paulsen, 2005).

It is predicted that the percentage of first-generation students will continue to increase (Giancola, Munz, & Trares, 2008). Consequently, it is important that university administrators understand the various student needs in order to attract, retain, and educate these students.
(Giancola, Munz, & Trares, 2008) including understanding the students’ backgrounds and concerns. The purpose of this study was to determine the differences in academic expectations for first- and continuing-generation undergraduates and the impact of associations between the universities and community colleges and other institutions in which their students were previously enrolled.

LITERATURE REVIEW

First-generation college student research can be targeted at three areas: (a) pre-college characteristics and behaviors; (b) transition to four-year universities; and (c) outcomes such as retention and academic success (Giancola, Munz, & Trares, 2008). In following that outline, first-generation students, compared to their peers, have weaknesses with respect to their basic knowledge about university education from the standpoint of costs and the application process (Warburton et al., 2001). Other disadvantages come from the level of family income and support, degree expectations, and academic preparation (Warburton et al., 2001). First-generation students often do not use their high school years to prepare for college and as a result are many times not prepared academically to pursue a college education (Horn & Bobbitt, 2000). First-generation college students may be less prepared for college due to poor academic training in high school and lower critical thinking skills prior to college (Dennis, Phinney & Chuateco, 2005). Warburton et al., 2001, established that, compared with continuing-generation students, first-generation students were less likely to have taken demanding coursework in high school which is considered to be a decisive key to college entry and academic success. College grades are likely to be strongly influenced by a lack of academic preparation for college (Fischer, 2007).

From a demographic point of view, first-generation students as compared to continuing-generation are more likely to be female, be older, have dependents, come from a lower socioeconomic status (SES), and work more hours (Bui, 2002; McCarron & Inkelas, 2006; Engle & Tinto, 2008). The issue of SES is an important factor concerning the concepts of cultural and social resources for first-generation students (McCarron & Inkelas, 2006). These characteristics are not unlike the non-traditional student in that both are on an average 24 years or older, have families, and are generally employed (Newbold, Mehta, & Forbus, 2010).

In the university-going process, these concepts are considered to include familiarity with the college environment and campus standards, access to advising and financial resources, and familiarity with the normal functioning of a university setting (McConnell, 2000). This knowledge, which is commonly conveyed by parents, may be lacking among first-generation students as their parents did not attend college, and this lack of knowledge may add to a sense of college “culture shock” (McCarron & Inkelas, 2006).

Previous research with undergraduates pointed out that first-generation students have less family support, less overall university familiarity, and more apprehension about financial aid (Bui, 2002; McConnell, 2000). Studies have also shown that first-generation students have little college preparation, lower career ambitions, lack of administrative and peer support, anxiety over the college environment, and poor study skills (Elkins, Braxton, & James, 2000). According to Dennis, Phinney and Chuateco, 2005, these students lack both personal skills and social supports that could be a factor in positive academic success in college. Students whose parents have attained no more than a high school diploma are less likely to seek a bachelor’s degree and less likely to be college qualified (Horn & Bobbitt, 2000). Students often lacked the implied intelligence required for success in college; this includes things such as attending class, being prepared, using course materials, and working in partnership with classmates leading to the idea...
that explicit teaching of the practical skills needed for college is recommended. (Byrd & MacDonald, 2005).

Along with often being less prepared academically, many first-generation college students have other traits in common, including nonacademic challenges which may consist of lower self-esteem, reduced self-efficacy, less family income, more dependent children, longer expectation to complete a degree program, less encouragement from parents to attend college, and more interest in attending a university geographically closer to their home (Hahs-Vaughn, 2004). Upon university enrollment, first-generation students on the average report feeling less academically prepared for college and actually have lower college entrance exam scores and lower desires for degree attainment in comparison to their continuing-generation peers (Bui, 2002; Horn & Nunez, 2000; Martinez et al., 2009).

Mounting research on college choice suggests that students' decisions about where to attend college are just as important as their decision to attend (Braddock, Lv & Dawkins, 2008). In the college selection process, higher tuitions at private colleges may create a cost problem for first-generation students (Lohfink & Paulsen, 2005). Pascarella et al., 2004, found that first-generation students were less likely to attend selective institutions. These students acknowledged that being able to live at home was a reason for choosing their particular university (Lohfink & Paulsen, 2005). The geographical nearness was one of the most important factors for selection of a higher education institution (Simoes & Soares, 2010). Academic reputation is a factor that was represented in university choice (Council of Ontario Universities, 2003). Results show that roughly one out of three minority students reported that a university’s athletic reputation is an important consideration in determining their college choice (Braddock, Lv & Dawkins, 2008). The reputation of the institution and course content were also given as main reasons for selection of the university (Scott, 2006).

While many variables such as course offerings, facilities, distance, and fees are important, the major force behind selection criteria is word-of-mouth communication (Patton, 2006). Parents of first-generation students are apprehensive about expenses and refrained from encouraging their children to apply to many colleges (Smith, 2001). These parents relied on school personnel to guide their children and, in these families, the children informed and educated the parents, the reverse of what happens in upper income families (Smith, 2001).

Success for college students is often defined in terms of making the shift to the college student role (Clark, 2005). Earlier research findings showed that the transition to college could be very different experiences for first-generation students and continuing-generation students (Clark, 2005). For continuing-generation students, college was an established experience in their families and a predictable stage in their life. These students assumed social integration as the major challenge in their transitions to college (Clark, 2005). For first-generation students, however, enrolling in and attending a university represented a variation from their families’ experiences and expectations. The transition to college was a more complicated mix of academic, social, and cultural challenges (Clark, 2005). Parents who have college degrees may have acquainted their children at young ages with university life and expectations, creating an advantage for their children (Bui, 2002; Chen, 2005; & Warburton et al., 2001). Parents who do not have college degrees might be unfamiliar with (or even disapproving of) college life, creating a disadvantage for their children who want to achieve a college education (Bui, 2002; Chen, 2005; Martinez et al., 2009; & Warburton et al., 2001).

Of the first-generation college students, 52% were enrolled in community colleges and planned to enter four-year institutions as part of the transfer student population (McCarron &
Inkelas, 2006). The term “transfer shock” has been used to explain the lack of success many of these students experience in their initial encounter after transferring to four-year universities (Berger & Malaney, 2001). Compared to their peers, first-generation students completed fewer credit hours, studied fewer hours, and worked more hours per week, were less likely to participate in an honors program, and made smaller first-year gains in reading comprehension (Pascarella et al., 2003).

Research has shown that parental assistance and encouragement is one of the most important indicators of students’ educational desires (Auerbach, 2002). The practical inclusion of parents in the educational process may help to not only boost first-generation students’ hopes but also to reduce the negative effects of university culture shock (McCarron & Inkelas, 2006). The ability of first-generation students’ parents to be involved may be inhibited by variables that accompany “first-gen” status, such as lower SES, fewer resources, and less awareness of the college-going process (Duggan, 2001; Warburton et al., 2001).

Administrators should provide support for first-generation students’ circumstances such as full-time jobs, children, and partners. Advising may need to be characterized by including child care, work placement programs, online courses, advising and student services with evening hours (McCarron & Inkelas, 2006).

Prior research has identified the transition to college as a decisive period that sets the stage for college success or failure (Gall, Evans, & Bellerose, 2000). Summer bridge programs need to be established with introductory workshops and classes, thorough financial and academic advising services, and academic learning communities that encourage development of academic skills (Thayer, 2000). First-generation students need significant backing as they make the transition to college. Strategies that have been of help include bridge and orientation programs and advising, tutoring, and mentoring by faculty and peers (Engle, J. & Tinto, 2008). First-generation students who are best informed and prepared for the transfer to a four-year university are more likely to attain higher grades and to be more satisfied in the university environment (Berger & Malaney, 2001).

Students who become more involved in various aspects of campus life are more likely to perform better academically (Fischer, 2007). Students integrating into the formal aspects of social life do so via involvement in campus organizations which has been shown by other researchers to have several positive benefits to students such as creating feelings of attachment to the campus for students who participate (Fischer, 2007). As a special form of social identification, organizational identification refers to feeling a part of a university and thinking in terms of membership in the university life which is also related to the seeming prestige of the school (Mehta, Newbold, & Forbus, 2010). Student involvement with the university is related to how satisfied they are with their university experience (Berger & Malaney, 2001).

Fischer, 2007, found a positive relationship between academic bonds and cumulative grade point averages (GPAs). Better preparation for the university culture can result in better academic success (Giancola, Munz, & Trares, 2008). Universities can support first-generation students as they transition into college to promote this success. Bridge programs have been used with traditional-aged, continuing-generation students as they make the switch from high school to higher education, but such programs are not applicable to the first-generation student (Giancola, Munz, & Trares, 2008). First-generation students experience anxiety as they make the transition to college and are fearful that they do not have the skills, time, and information necessary to succeed (Giancola, Munz, & Trares, 2008). A comprehensive orientation program can be developed that familiarizes first-generation students with the university and its systems
and allows them to interact with peers and faculty. Greater involvement in social activities, such as school clubs and organizations, was positively related to college grades as was having more connections to professors (Fischer, 2007). Seeking out enrichment can have a net positive effect on GPA.

RESEARCH METHODS

Exploratory Research

To facilitate the development of the survey instrument, a focus group was conducted with a convenience sample of university students. The results of the focus group clearly demonstrated that the needs of first-generation students may be significantly different from those of continuing-generation students.

The Survey Instrument

The instrument developed for the study was a self-administered, structured, and undisguised questionnaire. Besides the fact that this type of instrument is the fastest, least expensive, and most popular (Aldrek & Settle, 2004), our primary motivation for selecting this form of instrument was that it was the most appropriate methodology (given our sampling frame, targeted sample size and time frame). A copy of the Survey can be found in Appendix A.

Recognizing the fact that the instrument was meant to measure ideas and concepts that are abstract and non-observable, extra care was taken in designing the questionnaire in terms of proper phrasing of the questions, and a neat layout of the various sections. Face validity was conducted with three researchers in the Marketing Department. A pilot study was conducted with a sample of the population to determine the accuracy of instructions, the best wording of the questions, the appropriateness of scales, etc. Since the topic under investigation was somewhat sensitive, extra care was taken to eliminate any ambiguity in the questionnaire. Seven-point Likert scales were used extensively to assess the following:

1) Student attitudes, opinions, and reasons for being in a university,
2) Their level of involvement and participation in various university activities,
3) Their social life and relationships with various reference group members,
4) Their time management strategies,
5) Their attitude toward stress,
6) Their stress coping strategies,
7) Their attitudes toward their work (if they did not work, they could skip this section, and
8) Their general opinions about attending and selecting their university.

Approximately 3-4 items were developed to represent each construct under investigation. Nominal to ratio scales were used to obtain classification information. The survey took between 10 and 12 minutes to complete. To encourage participation from respondents, all completed responses were eligible to participate in a random drawing.
HYPOTHESES

Motivation

The motives that university students express for enrolling in college are affected by their cultural values (Dennis, Phinney, & Chuateco, 2005). Especially for students from less advantaged backgrounds, it is true that earning a college degree has an encouraging sense of lifelong influence with the vision that achieving a degree will increase the economic and social status of students from underprivileged homes (Horn & Bobbitt, 2000). First-generation students are less positive about their academic accomplishments and display lower levels of academic and social assimilation (Hahs-Vaughn, 2004). Early in their progression to university life, first-generation students postpone concern about extracurricular activities and campus socializing until they develop a structure for their academic lives (Filkins & Doyle, 2002). This results in a negative effect, however, because first-generation students actually profit more from their participation in such activities than their peers (Filkins & Doyle, 2002; Lohfink & Paulsen, 2005; Pascarella et al., 2004). Thus the first two hypotheses.

Hypothesis 1. First-generation students are more likely than continuing-generation students to have a stronger desire to graduate as soon as possible.

Hypothesis 2. First-generation students are less interested than continuing-generation students in having a good time in college.

These hypotheses are operationalized using individual items from the survey.

Academic Success

First-generation students generally perform at lower rates than their continuing-generation student counterparts (Hoffman, 2003). Previous research has found that high expectations early in their university career may indicate an adaptive coping method with the uncertainty of the first-generation students’ beginning years in college (Murphy & Hicks, 2006). It is hypothesized that the higher expectations set by first-generation students lead to increased effort in course performance and academic work. It has been reported that first-generation students take their work seriously, and they are concerned about disappointing their parents (Jehangir, 2009). Students take their cues from their parents about what is reasonable to expect for their educational goals, and they plan their futures accordingly (Fann, Jarkey & McDonough, 2009).

First-generation students had lower high school GPAs and scored lower on standardized tests (McCarron & Inkelas, 2006). They also tend to be less academically and psychologically prepared for college and, in comparison to their peers, first-generation college students tend to have lower college grade-point averages (Giancola, Munz & Trares, 2008 & Martinez et al., 2009). Pascarella et al., 2004, found lower grades were more customary by first-generation university students compared to their continuing-generation peers. This leads to the next four hypotheses.

Hypothesis 3. First-generation students are more likely than continuing-generation students to try to perform well in every course.
Hypothesis 4. First-generation students are more likely than continuing-generation students to place importance on earning the best grades possible.

Hypothesis 5. First-generation students are more likely than continuing-generation students keep up to date on academic work.

Hypothesis 6. First-generation students are more likely than continuing-generation students to report lower GPAs.

Hypotheses 3 – 5 are operationalized utilizing individual items from the survey. Hypothesis 6 is examined by evaluating a chi-square for the grade point distributions.

Satisfaction with the University Experience

Parents’ level of education has been shown to directly influence the university-selection process for first-generation students (Karen, 2002), and these students feel significant concern from their parents when choosing where to study (Demetriou, 2007). While the selection options were limited by financial resources, the university’s reputation and course offerings are the primary reasons for university selection by first-generation students (Scott, 2006). With the importance of the university’s reputation, it can be predicted that first-generation students will feel a greater pride in their attendance.

Satisfaction with university life is an important student corollary frequently used to gauge student adjustment to college (Berger & Malaney, 2001). Fischer, 2007, reported that satisfaction with college was associated with the bonds that students form at the university. Students who view a university to be distinct are more likely to identify with that university and ascribe institute uniqueness which includes things that differentiate the university from others such as distinctive programs, small classes, attractive campus (Mehta, Newbold, & Forbus, 2010). In terms of college experiences, first-generation students experience less integration with university life (Giancola, Munz, & Trares, 2008).

Hypothesis 7. First-generation students are more likely than continuing-generation students to select their university because of reputation.

Hypothesis 8. First-generation students are more likely than continuing-generation students to feel pride in their university.

Hypothesis 9. First-generation students are less likely than continuing-generation students to feel satisfaction with their university experience.

Hypotheses 7 – 9 are evaluated utilizing individual items from the survey.

Sampling and Data Collection

The study was conducted among a projectable sample of the student population at a mid-sized southwestern four-year university. The general demographic of the students attending this university include: 41 % Males, 59% Females; 71 % Whites, 14% African-Americans, 12%
Hispanics, and 3% others; 23% Freshmen, 19% Sophomores, 20% Juniors, 23%, Seniors, and 15% others.

Many first-generation students are operationally “Non-traditional”. Non-traditional status has been described a number of different ways in the preceding research. One commonality of all definitions is the requirement that the student be over the age of 24 (Evelyn, 2002; Giancola, Grawitch, & Borchert, 2009). Some researchers have added other requirements, such as marital status, presence of children or dependents, and work status (Newbold, Mehta, & Forbus, 2010; Leonard, 2002).

In order to generalize the responses and to eliminate any type of bias in the responses, students of an undergraduate marketing research course were trained to obtain 5 completed surveys each. To ensure accuracy of data collection and completion, 5% of each student’s course grade was tied into this process. A stratified sampling plan was deployed, with strata controlling for both year in school (i.e., freshman, sophomore, etc.) and college attending (College of Business Administration, College of Education, etc.). The ending sample was found to represent student population as a whole with a margin of error of ±4.5%. The validity of the sample was examined by a Chi-square goodness-of-fit test where the sample was compared to the population of the institution on key demographic variables. All Chi-squares were determined to be non-significant at the 0.05 level. This is an indicator that the sample is projectable to the population under study.

Data Quality/Data Analysis

The items in the survey were developed based upon the literature review, focus groups, and the special circumstances of the institution where the research was conducted (Churchill & Brown, 2007). For purposes of this investigation, means test for independent groups (first generation vs. continuing generation) provides the basis of most of the findings. Hypothesis 6, which examines the distributions of grade point averages, utilizes the Chi-square test for independent groups.

RESULTS

Tables 1 and 2 summarize the results of the research. The first two hypotheses addressed motivation. H1: First-generation students reported a stronger desire to graduate as soon as possible. The first-generation students represented a mean value of 5.82 on a seven-point scale with continuing-generation students showing a mean of 5.37. H2: First-generation students are less interested in having a good time in college. To examine this, we again used a test of the means. The mean for first-generation students was 4.56 and 5.17 for continuing-generation students indicating that continuing-generation students are more interested in having a good time at college. Both hypotheses were accepted.

The next four hypotheses deal with academic success. H3: First-generation students work harder to perform well in every course. The means were 6.13 for first-generation students and 5.83 for continuing-generation students. H4: First-generation students are more likely work to earn the best grades possible. First-generation students represented a mean value of 5.91 and continuing-generation students rated this option at a mean of 5.67. H5: First-generation students are more apt to keep up to date with academic work. The mean values were 5.70 for first-generation students and 5.45 for continuing-generation students. These three hypotheses were accepted. H6: First-generation students report lower grade point averages (GPAs). For this
Table 1
First-Generation vs. Continuing-Generation Students: Motivations for Attending College and Key Outcome Measures Comparison of Means

<table>
<thead>
<tr>
<th>Related Hypotheses</th>
<th>Item</th>
<th>Mean</th>
<th>p-value</th>
<th>Accept</th>
<th>Reject</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Strong desire to graduate as soon as possible</td>
<td>5.82</td>
<td>5.37</td>
<td>.003</td>
<td>√</td>
</tr>
<tr>
<td>H2</td>
<td>Having a good time in college</td>
<td>4.56</td>
<td>5.17</td>
<td>.000</td>
<td>√</td>
</tr>
<tr>
<td>H3</td>
<td>Perform well in every course</td>
<td>6.13</td>
<td>5.83</td>
<td>.009</td>
<td>√</td>
</tr>
<tr>
<td>H4</td>
<td>Earning the best grades possible</td>
<td>5.91</td>
<td>5.67</td>
<td>.066</td>
<td></td>
</tr>
<tr>
<td>H5</td>
<td>Keeping up academic work</td>
<td>5.70</td>
<td>5.45</td>
<td>.038</td>
<td>√</td>
</tr>
<tr>
<td>H7</td>
<td>University selected by reputation</td>
<td>4.81</td>
<td>4.23</td>
<td>.001</td>
<td>√</td>
</tr>
<tr>
<td>H8</td>
<td>Feel pride in the university</td>
<td>5.36</td>
<td>4.87</td>
<td>.001</td>
<td>√</td>
</tr>
<tr>
<td>H9</td>
<td>Satisfaction with the university experience</td>
<td>6.00</td>
<td>5.62</td>
<td>.003</td>
<td>√</td>
</tr>
</tbody>
</table>

Table 2
First-Generation vs. Continuing-Generation Students Pearson Chi-Square* Analysis

<table>
<thead>
<tr>
<th>Related Hypotheses</th>
<th>Item</th>
<th>First-Generation Students</th>
<th>Continuing-Generation Students</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6</td>
<td>GPA 1.60 – 2.50</td>
<td>15.7%</td>
<td>18.8%</td>
<td>Reject</td>
</tr>
<tr>
<td></td>
<td>GPA 2.51 – 3.00</td>
<td>32.4%</td>
<td>36.8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPA 3.01 – 3.50</td>
<td>31.4%</td>
<td>30.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPA 3.51 – 4.00</td>
<td>20.5%</td>
<td>14.2%</td>
<td></td>
</tr>
</tbody>
</table>

*p-value .281 shows low statistical significance.

hypothesis the findings were not significant with a p-value of .281; however, it was surprising to see that the first-generation students reported having higher percentages of those GPAs above 3.01 and lower percentages of the GPAs below 3.0 compared to the continuing-generation students. For this reason H6 was not accepted.

The last three hypotheses focus on overall satisfaction with the university experience. H7: First-generation students more often use reputation as a criterion in the university selection process. In testing the means, first-generation students had a mean of 4.81 and continuing-
generation students had 4.23. H8: First-generation students feel more pride in their university. First-generation students reported a mean of 5.36 with continuing-generation students reporting 4.87. H9: First-generation students are more satisfied with their university experience. The mean for first-generation students was 6.00 and 5.62 for continuing-generation students indicating that first-generation students are more satisfied with their time at college. All three hypotheses were accepted.

CONCLUSION

Much of the results of this investigation corroborate the findings of previous research. First generation students are found to take a more pragmatic, serious approach to their college education relative to their continuing-generation counterparts. In a related fashion, first-generation students are more likely to identify with and take pride in the institution they attend.

Perhaps the most surprising results were associated with H6: First-generation students are more likely than continuing-generation students to report lower GPAs. It was initially expected, based on the literature review, that first-generation students would report lower academic success than continuing-generation students. This variance can be explained by understanding that the mid-sized, tier two, regional university where this research was conducted has studied background information for their students to determine their college experience level prior to enrolling. This has resulted in the establishment of over 40 articulation agreements with community colleges around the state making this university a leader in such agreements.

These special alliances help promote a smooth transition into the university culture. Cooperative Advising is one of the benefits of the articulation agreements. Cooperative Advising is a program allowing professional counselors at partner colleges to have direct access to transcripts of college transfer students via the web for use in the advising process. Reverse Transfer allows students to transfer course work from the university to participating colleges to complete some degree requirements for the associate degree. It is specifically designed to allow students to receive the advantages in carrying out completion of the associate degree when they leave college prior to degree completion. Thus the university courses count towards both degree programs, in essence, another form of dual credit.

Students have several benefits which enable them to begin their transition to the university while still attending the community college. With a reduced application fee, students can be jointly enrolled at their community college and the university. Academic advisors from both institutions are available for student counseling. These community college students receive a university ID card which provides them with library and computer facility privileges and free admission to university sporting events. This allows them to begin to intermingle with university students and begin forming bonds that will support them when they transfer to the university. There are transfer scholarships available at the university which help overcome some of the financial concerns faced by first-generation students.

Time Compressed Degree Plans provide a student the means to complete the high school diploma, associate, and baccalaureate degrees in six years. Time compressed degree plans typically result in more than 30% savings for the total cost of education and allow the student to enter the work for force two or more years early. The concept of “Joint Admission” provides students with a mechanism to maximize utilization of facilities and programs offered jointly by the community college and the university. This includes the ability to attend both schools simultaneously or alternate between institutions.
This research demonstrates a university confirming the fact that college administration needs to be prepared to understand the backgrounds and learning needs of first-generation students. The findings of this research suggest that university relations may have an especially important impact on the college experiences of first-generation students. It is important for university administration and faculty to supply this group of students with interventions to effectively meet their needs (Ishitani, 2003). Administrators must study the particular needs and desires of first-generation students who transfer from community colleges so that the transition to the four-year university environment is successful (Berger & Malaney, 2001).

Student affairs administrators should use these findings regarding first-generation students to dismiss some of the mistaken beliefs about university life and to support them in successfully integrating into the university environment. Early identification of first-generation students should assist university professionals with understanding the needs of these students and provide them with special attention. The conclusions of this research could be used to develop orientation programs that include faculty and peer mentoring/advising plans and can address students’ expectations. These programs could challenge students to cultivate attitudes conducive to earning good grades, persisting, and ultimately graduating (Murphy & Hicks, 2006).

Finally, the relative high levels of identification and satisfaction rates with the institution have positive implications for the development and alumni operations of an institution of higher education. First generation students may prove to play a special role in being advocates for their alma maters for purposes of public relations and advertising.

**RECOMMENDATIONS FOR FUTURE STUDY**

According to Fischer, 2007, the enrollment of minority students in institutions of higher education has increased over the past 30 years, in both numbers and as a proportion of the student body. Racial and ethnic status relate directly to the study of first-generation college student integration into the college environment. Certain groups of students, such as minority students (Rendon, Jalomo, & Nora, 2000) and/or first-generation college students (Ishitani, 2003) are more likely to leave college than are others. Racial and ethnic status students face a complexity of the issues involved in the college transition (Choy, 2001 & Ishitani, 2003). An area of study that would expand the scope of this research would be an exploration of the racial and ethnic differences in adjusting to university life and the consequences that different adjustment strategies have on academic success. A recommendation for future study would include the racial and ethnic background information concerning first- and continuing-generation students. This would help further define services and support needed for university students.

In addition, it would be useful to replicate this type of study in a control/test type of design, where similar schools – some of which have special programs for first-generation assimilation, and some which do not – are compared for effectiveness of learning and attitudes about the institutions.
REFERENCES


Auerbach, S. (2002). Why do they give the good classes to some and not to others? Latino parent narratives of struggle in a college access program. Teachers College Record, 104: 1369-1392.


Bui, K.V.T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experience. College Student Journal, 36(1), 3-11


About the Authors:

**Patricia Forbus** earned her MBA from the University of Arkansas in 1997 and completed her MEd. at Sam Houston State University in 2009. She is retired from AT&T/Lucent/SBC and has worked as a Business Development Volunteer for the Peace Corps in the Ukraine and Honduras.

**Dr. John J. Newbold** earned his Ph.D. at St. Louis University in 1993. Currently, he is Associate Professor of Marketing at Sam Houston State University. Previously he has held market research positions at Anheuser-Busch Companies and Compaq Computer. He is interested in research related to better tailoring courses and programs to first generation and non-traditional students.

**Dr. Sanjay S. Mehta** earned his Ph.D. at the University of North Texas in 1999. Currently, he is Professor of Marketing at Sam Houston State University. Dr. Mehta has worked extensively with small businesses in developing their marketing plans. He is interested in research on better pedagogical approaches to teaching marketing strategy.
APPENDIX A
SURVEY INSTRUMENT

Sections A-D are intended to help determine why you are in college and what you do while in college. Please use 1 (strongly disagree) thru 7 (strongly agree) to answer the following questions.

1=Strongly Disagree, 4=Neutral (neither disagree or agree), 7=Strongly Agree; NA=Not Applicable

<table>
<thead>
<tr>
<th>A</th>
<th>MOTIVATION FOR GOING TO COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am going to college to <em>earn a good living</em> after I graduate.</td>
</tr>
<tr>
<td>2</td>
<td>I am in college to <em>enjoy college life and have a good time</em>.</td>
</tr>
<tr>
<td>3</td>
<td>I am going to college to prepare for a <em>specific career</em>.</td>
</tr>
<tr>
<td>4</td>
<td>I am going to college to <em>prepare for life</em>.</td>
</tr>
<tr>
<td>5</td>
<td>I am trying to graduate from college as <em>soon as possible</em> so I can start a career.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>GENERAL OPINIONS ABOUT SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I try to <em>perform well</em> in every course I take.</td>
</tr>
<tr>
<td>2</td>
<td>Getting the best grades possible in school is important to me.</td>
</tr>
<tr>
<td>3</td>
<td>I usually keep <em>up to date</em> on my academic work.</td>
</tr>
<tr>
<td>4</td>
<td>I find college (i.e., exams, assignments, homework) to be difficult.</td>
</tr>
<tr>
<td>5</td>
<td>I am NOT trying to get all “A’s”. Rather, I am basically trying to pass my courses and graduate.</td>
</tr>
<tr>
<td>6</td>
<td>Overall, I am satisfied with the level at which I am performing academically (i.e., satisfied with my current GPA).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C</th>
<th>INVOLVEMENT AND PARTICIPATION IN VARIOUS ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am involved with my <em>religious organization(s)</em> (e.g., Church, temple, mosque, synagogue).</td>
</tr>
<tr>
<td>2</td>
<td>I am involved with my <em>sorority/fraternity</em>.</td>
</tr>
<tr>
<td>3</td>
<td>I am involved with one or more <em>professional organization(s)</em> related to my field of study.</td>
</tr>
<tr>
<td>4</td>
<td>I participate regularly (every semester) in <em>programmed physical activities</em> on campus (e.g., intramurals).</td>
</tr>
<tr>
<td>5</td>
<td>I participate regularly (about 2-4 times a week) in <em>unprogrammed physical activities</em> on campus (e.g., working out, jogging).</td>
</tr>
<tr>
<td>6</td>
<td>I participate regularly (about 2-4 times a week) in <em>off-campus social activities</em> (e.g., going to clubs &amp; bars, going to the movies).</td>
</tr>
<tr>
<td>7</td>
<td>I regularly (more than half) attend <em>athletic events</em> (e.g., football, basketball, baseball, soccer).</td>
</tr>
<tr>
<td>8</td>
<td>I regularly attend other <em>sponsored events</em> (e.g., Christmas tree lighting, parades, job fairs, guest speakers).</td>
</tr>
<tr>
<td>9</td>
<td>Overall, I am quite active and involved in various on-campus and off-campus activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>GENERAL SOCIAL LIFE AND RELATIONSHIP RELATED ISSUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I fit in well and feel a <em>part of the college environment</em>.</td>
</tr>
<tr>
<td>2</td>
<td>I <em>do not</em> have much of a social life at college</td>
</tr>
<tr>
<td>3</td>
<td>I get along with my peer(s) and cohorts at college.</td>
</tr>
<tr>
<td>4</td>
<td>Overall, I am <em>quite satisfied</em> with my social life at college.</td>
</tr>
</tbody>
</table>
Sections E-H are intended to help determine your time management skills, your level of stress, and how you handle stress. Please use 1 (strongly disagree) thru 7 (strongly agree) to answer the following questions.

1=Strongly Disagree, 4=Neutral (neither disagree or agree), 7=Strongly Agree;  NA=Not Applicable

<table>
<thead>
<tr>
<th>E</th>
<th>INFORMATION ABOUT HOW YOU MANAGE YOUR TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I often find I have NOT budgeted enough time to complete school assignments or prepare for a test.</td>
</tr>
<tr>
<td>2</td>
<td>I feel I have enough free time to just relax.</td>
</tr>
<tr>
<td>3</td>
<td>My involvement in activities not related to school takes the majority of my time.</td>
</tr>
<tr>
<td>4</td>
<td>I feel I have enough time in a day to complete all the necessary tasks.</td>
</tr>
<tr>
<td>5</td>
<td>I can probably improve in the way I manage my time.</td>
</tr>
<tr>
<td>6</td>
<td>Overall, I feel I manage my time very well.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F</th>
<th>INFORMATION ABOUT YOUR STRESS LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>For the most part, I DO NOT feel stressed on a day-to-day basis.</td>
</tr>
<tr>
<td>2</td>
<td>I am always thinking about the things I have to do.</td>
</tr>
<tr>
<td>3</td>
<td>I frequently find that I am overwhelmed by the demands of school and the other activities I am engaged in.</td>
</tr>
<tr>
<td>4</td>
<td>Overall, I would consider myself to be &quot;stressed out&quot;.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G</th>
<th>ISSUES THAT CONTRIBUTE TO YOUR FEELINGS OF STRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Money related issues (e.g., rent, tuition, vehicle payments).</td>
</tr>
<tr>
<td>2</td>
<td>Schoolwork related issues (e.g., homework, group meetings).</td>
</tr>
<tr>
<td>3</td>
<td>Work related issues (e.g., co-workers, boss, schedule).</td>
</tr>
<tr>
<td>4</td>
<td>Driving and commuting to-and-from work, school, home, etc.</td>
</tr>
<tr>
<td>5</td>
<td>Issues related to relationships (e.g., friends, family, roommates).</td>
</tr>
<tr>
<td>6</td>
<td>Issues related to a general lack of time to get everything done.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H</th>
<th>INFORMATION ABOUT HOW YOU HANDLE STRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I engage in mental activities (e.g., reading, meditation, video games) to relieve stress.</td>
</tr>
<tr>
<td>2</td>
<td>I engage in physical activities (e.g., working out, playing sports) to relieve stress.</td>
</tr>
<tr>
<td>3</td>
<td>I engage in spiritual activities (e.g., go to church, read the holy book) to relieve stress.</td>
</tr>
<tr>
<td>4</td>
<td>I engage in leisure activities (e.g., socialize with friends, go shopping, see a movie, listen to music) to relieve stress.</td>
</tr>
<tr>
<td>5</td>
<td>I talk to someone I trust (e.g., mother, friend) to relieve stress.</td>
</tr>
<tr>
<td>6</td>
<td>I talk to someone professional on campus (i.e., counselor, professor) to relieve stress.</td>
</tr>
<tr>
<td>7</td>
<td>When I get overly stressed, I sometimes skip a class or two.</td>
</tr>
<tr>
<td>8</td>
<td>When I get overly stressed, I sometimes skip meetings (group meetings, meetings at work, meetings with friends).</td>
</tr>
<tr>
<td>9</td>
<td>When things aren’t going so well, I put things in a broader perspective, organize, and prioritize.</td>
</tr>
<tr>
<td>10</td>
<td>I ask for time off from work when the demands of school and work are too much.</td>
</tr>
</tbody>
</table>
Section I deals with work. *If you do not work for pay, please skip section I and go to section J.* Section J will assist us in determining your general opinion of SHSU. Once again, please use 1 (strongly disagree) thru 7 (strongly agree) to answer the following questions.

1=Strongly Disagree, 4=Neutral (neither disagree or agree), 7=Strongly Agree; NA=Not Applicable

<table>
<thead>
<tr>
<th></th>
<th>GENERAL QUESTIONS ABOUT MY WORK (If you do NOT WORK, please SKIP this section)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am working at my current job because I need the money and will likely quit once I graduate. 1...2...3...4...5...6...7...NA</td>
</tr>
<tr>
<td>2</td>
<td>I am very committed to my current job. 1...2...3...4...5...6...7...NA</td>
</tr>
<tr>
<td>3</td>
<td>I see my present job as a potential career path in the future. 1...2...3...4...5...6...7...NA</td>
</tr>
<tr>
<td>4</td>
<td>My job takes away from other aspects of my life (i.e., school, social, relationships) 1...2...3...4...5...6...7...NA</td>
</tr>
<tr>
<td>5</td>
<td>I try to plan my work schedule around my class schedule. 1...2...3...4...5...6...7...NA</td>
</tr>
<tr>
<td>6</td>
<td>Overall, my work/job frequently contributes to my overall stress. 1...2...3...4...5...6...7...NA</td>
</tr>
</tbody>
</table>

Section J: Consider the following areas (or departments) of operations at ____. For each area, please WRITE A NUMBER (using the scale below) between 1 and 5 that indicates what you EXPECTED from _____ (prior to coming) and how _____ has actually PERFORMED in those areas.  

1=Extremely Poor/bad, 2=Poor/bad, 3=Average, 4=Good, 5=Extremely Good/Excellent 

If something DOES NOT apply to you, please use 0=Not Applicable

<table>
<thead>
<tr>
<th></th>
<th>SHSU EXPECTATIONS AND PERFORMANCE</th>
<th>My Expectations</th>
<th>How SHSU Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Overall quality of the teaching and instructions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Overall quality of computer services (helpdesk, website)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Overall quality of the athletic/sport teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Overall campus facilities (grounds, classrooms, buildings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Overall campus police (assistance, security)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Parking facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Services offered by the department of financial aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Features of the OneCard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Assistance provided by the student advisement center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Assistance provided by the admissions department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Assistance provided by the residence life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Assistance provided by the career services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Assistance provided by the alumni association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Overall school spirit and traditions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section L: How You Spend Your Time.

1. During the time school is in session, about how many HOURS PER WEEK do you usually SPEND OUTSIDE OF CLASS on activities related to your academic program (e.g., studying, writing, reading, lab work, rehearsing, etc)? Check one box.
   1. None
   2. 1-10 hours
   3. 11-20 hours
   4. 21-30 hours
   5. 31-40 hours
   6. Over 40 hours

2. During the time school is in session, about how many HOURS PER WEEK do you generally spend WORKING at a job for pay? Check one box.
   1. None (“I don’t work”)
   2. 1-10 hours
   3. 11-20 hours
   4. 21-30 hours
   5. 31-40 hours
   6. Over 40 hours

Section M: Classification Questions. Please check the box(s) that applies to you.

1. Approximately how many miles (one way) do you commute to ____? Check one box.
   1. None (live on campus)
   2. Less than 5 miles
   3. 5-15 miles
   4. 16-25 miles
   5. 26-35 miles
   6. More than 35 miles

2. With respect to your RELATIONSHIP status (not living status), are you currently: Check one box.
   1. Married
   2. In a relationship with a significant other
   3. Neither (currently not in a relationship)

3. What is your GENDER? Check one box.
   1. Male
   2. Female

4. What is your age? ___________ in YEARS.

5. Which of the following best describes your ETHNIC ORIGIN? Check one box.
   1. Caucasian (White)
   2. Hispanic (Non-White)
   3. African-American
   4. Asian-American
   5. Other

6. Are you currently responsible for caring for any children? Check one box.
   1. Yes
   2. No
7. What is your current ACADEMIC CLASSIFICATION in college? Check one box.
   1. Freshman
   2. Sophomore
   3. Junior
   4. Senior
   5. Graduate
   6. Other

8. Did you begin your college here at ____ or did you transfer here from another institution? Check one box.
   1. Started here
   2. Transferred from another institution (Name of institution ______________________)

9. How many YEARS have you been attending an institution of higher education (community college, university, technical college)? Check one box.
   1. Less than 1 year
   2. 1-2 years
   3. 3-4 years
   4. 5-6 years
   5. 7 or more years

10. How many college credit hours are you CURRENTLY registered/enrolled for (i.e., Spring 2006)?
    _______ Semester HOURS.

11. How are you FINANCING YOUR COLLEGE EDUCATION? What PERCENTAGE of your college expenses are paid for by each of the following (please make sure the total adds to 100)?
    1. Self/Own Funds ….. ______%  
    2. Parents ….. ______%  
    3. Spouse or significant other ….. ______%  
    4. Employer support ….. ______%  
    5. Scholarship and grants ….. ______%  
    6. Student grants/loans ….. ______%  
    7. Other (please specify) ….. ______%  
    TOTAL 100 %

12. What is your current OVERALL GPA? __________

13. WITH WHOM do you LIVE DURING THE SCHOOL YEAR? Check one box.
    1. No one, I live alone
    2. One or more other students
    3. My spouse or significant other
    4. My child or children
    5. My parent or parents
    6. Friends who are not students at ____
    7. Other (please specify) _____________________

14. WHERE do you live DURING THE SCHOOL YEAR? Check one box.
    1. Dormitory or other campus housing
    2. Fraternity or Sorority house
    3. Residence within _____ County
    4. Residence outside _____ County

15. On average, approximately how many HOURS of SLEEP do you get per night? Please specify both
    1. WEEKDAYS ____________ Hours
    2. WEEKEND ____________ Hours
16. Did either of your PARENTS GRADUATE from college? **Check one box.**
   1. Both parents  
   2. Father only  
   3. Mother only  
   4. Neither  

17. Which of the following college does your MAJOR fall in? **Check one box.**
   1. College of Arts and Sciences  
   2. College of Business Administration  
   3. College of Criminal Justice  
   4. College of Education  
   5. College of Humanities and Social Sciences  
   6. None of the above

   Please write your specific major in this space ____________________________

18. Where are you taking your classes this semester? **Check All Boxes That Apply.**
   1. On the main campus at __________
   2. At the University Center
   3. Correspondence courses
   4. Via the Internet

19. Which of the following best describes your family’s annual household income? **Check one box.**
   1. Less than $30,000  
   2. $30,001 - $45,000  
   3. $45,001 - $60,000  
   4. $60,001 - $75,000  
   5. $75,001 - $90,000  
   6. More than $90,000  
   7. Don’t Know

20. Which of the following best describes your own personal income? **Check one box.**
   1. Less than $10,000  
   2. $10,001 - $15,000  
   3. $15,001 - $30,000  
   4. $30,001 - $45,000  
   5. More than $45,000