Male-female student retention in HBCUs: A comparative analysis of sample data across five colleges

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ABSTRACT

Several factors contribute to the college retention rates of black students. There could be issues related to the student's own personality attributes, personal and/or family circumstances, financial factors, background events, social factors, as well as a myriad of institutional factors associated with the school system and/or a particular school itself. This paper identifies a set of 14 retention variables and categorizes them into three composite units, which are then used to address the issue of whether the various retention parameters affect black male students differently as much as they affect black female students in regard to their continuity decisions.

Keywords: Retention rates, Retention Variables, Academic Behavior, Black male-female students, Educational Commitment.

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INTRODUCTION

Black student enrollments in higher education across the United States have reached an all-time high over the past decade. But a more important measure of the achievement of blacks in higher education is the proportion of black students that really complete school by earning a college degree. Although the college completion rate has improved nationwide across America by 4 percentage points over the past five years, the graduation rate remains at a relatively low 43 percent, even as the gap between the graduation rates of black and white students continues to widen. Therefore, the question arises as to why do more than half of all black male students often fail to complete college, even at Historically Black Colleges and Universities (HBCUs)? This paper examines various issues in the dismal completion rates of black male students in HBCUs in the United States, and provide a comparative analysis of these issues with those of black female students. The study is motivated by the troubling question of why college completion rates for black students at HBCUs in general, and black males in particular, are so low.

The most recent data (according the *Journal of Blacks in Higher Education*) indicates that the nationwide college graduation rate for black students is about 43 percent, and stands at 20 percentage points below the 63 percent graduation rate reported for white students. The completion rate for black males stands at 36 percent (which is an improvement from the 28 percent that it was a decade ago). Relatively, the black female college graduation rate stands at 47 percent, having increased steadily over the past two decades from 34 percent in 1990 to 47 percent in 2010.

Several factors could contribute to the college retention rates of black students. There could be issues related to the student's own personality attributes, personal and/or family circumstances, financial factors, background events, social factors, as well as a myriad of institutional factors associated with the school system and/or a particular school itself.

Rosenbaum et al. (2009) examined the inner workings of different types of Community Colleges with regard to the level of emphasis their programs place on student enrollments (the "occupational emphasis" versus the "transfer emphasis"). They found some evidence that Community Colleges with heavy "transfer emphasis" tend to thwart or "cool out" student goals by imposing complex procedural requirements that discourage students from seeking degrees at four-year colleges, which could impact their decisions to not continue. Also, they found further evidence that colleges with heavier emphasis on "transfer" are just as likely to "warm up" students and impact their decisions to stay. It is important to understand the roles that institutional factors play in shaping the desire or otherwise of their enrolled students to remain and continue toward completion of their programs. Such institutional factors include the Rosenbaum et al. parameters discussed above, whereby the school's program emphasis or perceived program emphasis does affect the students' perception of the potential fit that school has for them.

Another institutional parameter, for example, is the school's implementation of mandatory remediation programs. Many black male students, for instance, come from under-served communities with poorly performing High Schools and enter the HBCUs academically under-prepared. The Colleges therefore often implement remediation as a mechanism to help such under-prepared students to attain the basic foundation levels

needed to begin postsecondary education. Some studies suggest that remediation is an ineffective determinant of college success because many students are unaware that remedial coursework does not count toward a degree, with costly and therefore negative consequences (Rosenbaum et al, 2009). It will be useful to determine whether or not strict remediation programs negatively impact black male retention rates.

There also is the issue of student information problems and college procedures. The competing demands on time and cultural estrangement that black male students may feel on the college environment may help explain why they may experience greater difficulty integrating and negotiating institutional etiquettes and procedures. Regarding the individual student's expectations from the school, the HBCUs do have strong advisement programs that inform students on their academic progress and potential future career outlets, there is need for counseling on labor market opportunities and career paths. Students may need advisement on how best to convey their value to employers (such as the creation of effective resumes and conducting mock interviews). Yet in many schools, these advisement services may or may not always be mandatory; and, in most cases such services are allocated to be provided by College faculty rather than professional counselors who would be most suited to provide the service. The result is that often there is limited and insufficient time dedicated to any one student, which could result in student frustration. Moreover, given the prevailing relatively harsh labor market conditions that black males face in the U.S., a black male student needs to perceive that his school does have some individualized approach designed to match his skill sets (and potential skill sets) with the specific needs of employers. For, to commit very deeply into the school and its programs, a student must feel a firm confidence in what completion of such programs would hold for him.

The extent of faculty initiatives into labor market linkages are also crucial for student retention. Although outside of their normal academic duties, faculty input into leveraging career outcomes for students would help establish strong connections that students make with the reality of what their education would provide for them. If the potential for labor market success is closely linked with the acquisition of the knowledge and skill as detailed in the course curriculum and objectives, students would be motivated to greater effort and determination toward degree completion.

The present paper addresses the question of whether the various retention parameters affect black male students differently as much as they affect black female students in regard to their continuity decisions. It provides a comparative analysis of male-female retention rates among black students at five selected HBCUs by carrying out a comprehensive study of the data based on the responses obtained in a survey of selected cohorts of freshmen male and female students. We compare and contrast among and between several retention variables for black females and males to determine the relative importance of each parameter in the decision to continue or not continue in school after their freshman year. The results provide important insights into not only the factors that impact retention, but also for devising ways to address the dismal retention problem of black students in general, and males in particular, across HBCUs.

BLACK STUDENT RETENTION: SOME RECENT LITERATURE

A great deal of work on minority student retention had been compiled in several of the leading studies such as Tinto (1975), Beal and Noel (1980), Swail (1995), and Bean (1986). Most of these works stressed the notion that the issue of minority student retention in higher education is not unconnected with their status of being disadvantaged and underserved, and therefore calls for a deeper study and understanding of the issues of minority retention in higher education. And the issue of minority retention still remains as timely as it has always been, especially given the high rate of attrition among black males in higher education in current times.

Among the many studies, Borego *et al* (2005) had concluded that the most striking result of their study using Virginia Polytechnic University data, was that the graduation rates both within engineering and elsewhere in the university were higher for female students than for males; and that this was true for both the current and previous data sets used. Moreover, analysis of previous cohorts in the current data set indicated that this trend began with the 1992 freshman cohort; and that differences between the two studies indicated that students at a private university, particularly females, were quicker to switch out of engineering majors -- indicating that retention rates in the first few semesters were lower at the private university than in the current study, though both sets converged to similar values by the junior year.

In an earlier study, Swail (1995) presented a conceptual framework for student retention which focused on the issues and barriers facing minority students at HBCUs. The model generated a specific retention strategy based on a framework of five retention components, namely: student services, academic services, curriculum and instruction, financial aid, and recruitment and admission. Galloway and Swail (1999) demonstrated how the above five components of the conceptual framework act as a basic foundation for student retention at a higher institution by offering an interpretation of how students and institutions interact. For example, the model showed the relationship between institutional factors and practices of the college and the academic and social skills students bring with them to school by linking the students' college experience with the various factors that impact that experience -- such as the students' academic preparedness and overall readiness for college, personal maturity, social awareness, ability to get along, and other several such attributes. These represent different aspects of what Burtnett (2003) summarized as the three classifications of retention parameters of the: attitudinal, behavioral, and situational attributes that students bring with them from high school or the work environment, and which shape their ability to ultimately persist and complete college.

Galloway and Swail maintained that institutions are able to build and provide support systems -- such as specialized orientations (classified as Student Services) that help freshman students to get immersed into their new campuses; or tutoring and study assistance sessions (classified as Academic Services) that strengthen the academic development of their students; and all these contribute to provide the complementary institutional support that is crucial to enable students persist in school and successfully complete their degrees.

In an article that advocated for greater faculty involvement on behalf of African American students with regard to their higher retention rates, Kobrak (1992) analyzed the

impact of faculty interaction on black student retention rates, and noted that there is strong need for a healthy relationship between disadvantaged minority students and their faculty members, and that need is essential toward their eventual successful completion of their programs. Similarly, the importance of mentorship in promoting higher retention for minority students was examined by Good, Halpin and Halpin (2000) in an experimental peer mentorship program centered on minorities in an engineering program. The authors examined the interpersonal and academic growth of the peer mentors and highlighted the significant impacts of peer interaction and self esteem on academic achievement. They concluded that mentorship increased the value of education amongst the mentees considering that most mentors would have already attained high levels of confidence and excelled in academics prior to the program. Thomas, Farrow and Martinez (1998) conducted a twelve-year study relating high graduation rates with integral service programs for students offered by the school. The study found that when institutions, such as Rutgers University, instituted a comprehensive support program for students, the school witnessed a dramatic increase in graduation rates. Such schoolsponsored services included financial and social programs that were designed for students to engage and thrive in college, and included faculty support and mentorship also, all of which were found to have had significant impacts on the increased graduation rates; and also that students who benefited from these programs were significantly impacted by the services rendered by the school, demonstrating a strong correlation between institutional support and faculty interaction and a decreased attrition rate.

Davis et al. (2004) explored the importance of belonging and the need for healthy interactions amongst peers during matriculation, in a stark contrast between black and white students enrolled in a predominantly while college. The study examined how African American students fared academically in a predominantly white environment, and built on the concept about the importance of social variables such as unfairness, sabotage, condescension, isolation, connection, confidence, and educational commitment, in the academic achievements of minority young adults. The study was helpful and extremely instrumental, as it used a convenient sample of nursing school students who successfully met graduation requirements and ranged from ages 21-24.

Some more recent studies (such as Grier-Reed et al., 2008) have highlighted several background peculiar obstacles that face minority students, which they bring with them to school, especially those that enroll in HBCUs. Most of the HBCUs see themselves and their mission to be in the service of those students whose backgrounds present difficult challenges to their prospects of succeeding in college. Dumas-Hines (2001), and also Prime (2001) both touched upon the problem of inadequate academic preparation of the populations of students who matriculate into the HBCUs, and particularly to the effect that they fall short of the levels of their peers in other institutions. Often these students are lacking in the level of rigorous high school course work, general high level of education, and basic academic skills (such as study skills, time management, class attendance commitment, or course material management) that are fundamental to college level work. And many do not have the needed strong family and/or community support (Greenwald and Davis, 2000; Stewart et al., 1997); while most have difficulties in making the demanding social adjustments needed for college life and responsibilities. And further to this, a study by Alon and Marta (2005) had critically examined the "Mismatch" hypothesis of retention. The "Mismatch" hypothesis was

proposed by opponents of Affirmative Action, and argues that high attrition and low graduation rates amongst African Americans in HBCUs can be attributed to their attending of "selective institutions" to which they are admitted while intellectually unprepared and academically unqualified. The authors argued in support of a higher graduation rate amongst African Americans enrolled in a selective institution, despite their disadvantages of being underserved. And in rejecting this theory, the authors argued that the theory fails to evaluate each student individually to determine specific advantages and disadvantages that affect academic achievement.

While academic challenges represent a major challenge in retention of minority students in higher education, perhaps one of the most formidable barriers is financial support. Galloway and Swail (1999) noted that many HBCU students rely on the financial aid provided through Pell Grants, personal and family incomes, and savings; and that often these provide only a modest and limited level of the size of financial support needed. Loans and other forms of government aid are often heavily relied on to supplement, which usually result in heavy student indebtedness upon graduation. In many cases, students take account of such potential indebtedness in making retention decisions. Research indicates that even though the society rewards credentialism in many cases (regardless of skill), most minority students worry about job prospects upon college completion, and therefore tend to think twice about the huge potential indebtedness and the future tying down into loan payments in a world of unsure employment status, before deciding to persist in college completion (Galloway and Swail, 1999).

THE DATA SET AND DEFINITION OF VARIABLES

The data set is obtained from a pilot study conducted among a mix of five HBCUs: Jackson State University, Dillard University, Alcorn State University, Tougaloo College, and Miles College. Table 1 (see Appendix) provides the descriptive statistics of the data, comprised of the total data sizes for each college and each of the genders for each college, all drawn from the freshmen level student pools during the 2010-2011 session.

The following retention parameters were applied in the data collection:

- Academic Behavior -- student's attitude to his/her academic responsibilities, such as class attendance, time spent studying, and doing homework.
- Confidence -- how confident the student is that he/she will successfully complete the degree requirements.
- Difficulties with College -- level of difficulty the student encounters with college life.
- Educational Commitment -- how committed he/she is to completing the program.
- Faculty Interaction -- how much does student interact with faculty.
- Financial Concern -- the degree of concern the student has about availability of financial resources to pay for his/her education.
- Institutional Commitment -- how committed he/she believes the school is to providing education.
- Intent to Change -- whether or not student intends to change program, or change school.

- Occupational Uncertainty -- how certain the students is about what he/she will do with the degree after graduation; that is, how far the degree will prepare him/her for a successful career path.
- Peer Interaction -- how much and how well the student interacts with peers.
- Perception of Program -- whether or not the academic program content is perceived as interesting and relevant to future success.
- Personal Problems -- how much student's personal/family problems weigh on his/her education.
- Prefer a Job -- whether or not he/she prefers holding a job rather than being in school.
- University Orientation -- whether the student would prefer to attend another institution.
- Value of Education -- the value in education in terms of the extent to which it enables college graduates to obtain good jobs.

Each variable applies several factor proxies for measurement, and based on their respective compositions, mean values are computed to determine the response level for each variable. For example, under the "Confidence" variable, six factor proxies were polled to each student. The responses, ranging from 1 (for "Not Important at All") to 5 (for "Very Important"), are used to determine the appropriate calculated mean values for each respondent. The mean value represents the variable's composite index, namely, the various factors that together constitute the indicator of what the variable measures. The mean value is the response level assigned to that variable for each respondent in each of the gender groups. For purposes of this analysis, a mean value of 4 and above is considered to be a "positive" response (indicating that the respondent's response is that the variable is "very important"); and a mean value of between 4 and 2.5 is considered to be a "moderately important"); and a mean value of lower than 2.5 is considered to be a "negative" response (indicating that the respondent's answer is that the variable is "unimportant").

COMPARATIVE ANALYSIS

The comparative analysis of the responses between female and male students across the selected institutional pool will provide some important insights into the various factors that condition the retention disposition of students in HBCUs. The study examines the differences in the responses given to the various variables between and among the female and male students.

Classification of Retention Variables

The variables applied in this study are organized into three classes by adapting the Burtnett (2003) retention factor classifications. The variables are classified under the composites of Attitudinal Variables (A-Variables), the Behavioral Variables (B-Variables), and the Situational Variables (S-Variables) -- encompassing all the retention variables that are used in this study. And the purpose of the classification is two fold: to collect highly correlated variables together and thus simplify the comparative analysis,

and to highlight the practical aspects of each variable in driving the retention decisions of students.

The attitudinal variables are those that shape the student's attitude and determine his/her overall perception of higher education. These variables tend to be at work even long before the student enrolls in college. They hold strong sway in shaping his/her attitude toward deciding whether or not to persist in school after enrollment. The behavioral variables are those that drive the student's personal behavior. Again, they tend to be impacted by views and perceptions formed prior to enrollment, but they drive the student's actions and therefore make him/her reach the decisions of staying or dropping from higher education. The two classes of variables, attitudinal and behavioral, relate to the personal attributes of the student, and may be impacted by such factors as the student's culture, family background, parents' level of education, race, or gender. The situational variables are the variables that are exogenous to the student -- they are factors outside of the student's control, but they bear significant effects on the student's decision as to persisting or dropping from school.

Based on the above classifications, the following allocations are made to the variables used in this study; and the composite data classifications are presented in Table 2. It is important to note that there are grey areas in these classifications, as some of the variables could possibly be classified under any two or more of the categories (especially between the attitudinal and behavioral categories); but this needs not distort the observations that are made or the conclusions that are drawn from them:

The Attitudinal Variables (A-Variables)

- Confidence
- Educational Commitment
- Financial Concern
- Intent to Change
- Perception of Program
- Prefer a Job

The Behavioral Variables (B-Variables)

- Academic Behavior
- Difficulties with College
- Faculty Interaction
- Peer Interaction
- University Orientation

The Situational Variables (S-Variables)

- Institutional Commitment
- Occupational Uncertainty
- Personal Problems
- Value of Education

THE ANALYTICAL RESULTS

Table 2 presents the overall consummated mean responses by composite classifications of the retention variables for females and males. Each entry is found as the average of the mean responses between the five chosen representative HBCUs; for example, the 98% reading for females in the Confidence Variable is found by adding together each of the Confidence responses among the five colleges, and then dividing by 5.

The A-Variables

On the Confidence variable, 98 percent of the females and 99 percent of the males had a mean response of 4 or above on the 5-point scale, indicating strong confidence that they would complete their academic programs; while 92 percent of females and 87 percent of males responded that Educational Commitment is either moderately important or highly important to them in deciding to continue with schooling. For the Financial Concern variable, 96 percent of the females, and 93 percent of males students responded that financial concern is either moderately important or very important in their decision the return to school (but as much as 6 percent of the male students are impacted by financial concerns while only half as much is the case for females; suggesting that male students tend to be more independent with lesser support from elsewhere relative to female students).

The Perception of Program variable: 98 percent of female and 97 percent of male students indicate that perception of program in either moderately important or highly important for them. Thus overall, all students irrespective of gender, believe in the importance of their programs, and that it would enable them to achieve their life career and/or professional goals. The Intent to Change variable: 98 percent of females, and 94 percent of the males, indicated that the intention to change program or school is either moderately important or very important in their consideration to remain or not remain in school. But nearly 5 percent of the males, and under 2 percent of the females, responded that the intent to change is not an important factor for them. This seems to suggest that the females are more apt to quit one school and/or program in order to switch to another school/program. Thus the males appear to be relatively less prone to switching from one school/program to another -- the Intent to Change variable is less of a retention factor for the males than it is for the females.

The Prefer a Job variable: 3 percent of the females, and 7 percent of the males responded in the high mean range scores -- the desire to hold down a job is a "very important" factor in their decision to remain in school. It is interesting to see that the males' score is higher (more than double the females') in this regard -- probably underlying the fact that the males tend to be a lot more independent during their time of attending college. And this fact is a key factor that underlie any differences that may be observed between the two sexes. The medium range mean score for the females is 33 percent (that job preference is a moderately important factor in their retention), while the low mean range score is 63 percent (not at all important). This is an important result. That the females are relatively less concerned with holding down a job while in school suggests that the females tend to have more avenues for financial support while in school.

Overall, it is observed that there is a general similarity of responses to the A-Variables, although the female responses are slightly higher than the male responses to each of the individual composite variables. Generally, the results indicate that there is a slight difference between the male and female students in relation to their respective attitudes to college education -- the female students maintained consistently higher percentages in the A-Variables, which represent a measure of attitude to retention in higher education. This could then be interpreted as an indication that the females exhibit more flexible attitudes to higher education than the males, in relation to retention. But there is an important similarity: both male and female students believe in the importance of their programs to the effect that it would enable them to achieve their life career and/or professional goals.

The B-Variables

The B-Variables represent the composite measure of the student's behavioral attributes -- another aspect of his/her personality characteristics that feature in retention dispositions. We observe that 87 percent of females, and 81 percent of males, reported that Academic Behavior is either very important or moderately important to them (but 14 percent of the female students reported that academic behavior is not important to them; and this is a significant number considering that black female students are generally known to be relatively more astute in academic behavior and performance than the males). The difference is that the female percentage that indicated that academic behavior is important to them is higher than the males by nearly 6 percentage points; moreover, a sizable number of the males (albeit small in absolute terms, 18 percent -- compared to 14 percent for the females) indicated that this variable is not important to them. This suggests that perhaps the female students display relatively more positive disposition toward such academic attributes as study habits, class attendance, homework performance, and commitment to school work and school initiatives.

Faculty Interaction variable: 83 percent of female students indicate that faculty interaction is either moderately or highly important), while 15 percent of the females report that faculty interaction is not important to them -- an indication of some degree of academic independence among the females. The males however show a bit of difference. Higher percentages of the males, 90 percent, indicated that faculty interaction is either moderately of highly important to them, with yet a lower percentage (9 percent compared to 15 percent for the females) indicating that faculty interaction is not important. The males therefore show much less need to interact with faculty (an indication of greater academic independence), suggesting that the males are less likely to discontinue college because of a lack of, or a lesser, faculty interaction. However, a wider implication of this is that because the female students are more likely to interact more smoothly with faculty relative to the male students, the females tend to be the ones that benefit far more in terms of academic help, advise, and general counseling that are available from faculty, and therefore tend to perform much better academically. That the males show less need to interact with faculty (an indication of greater academic independence) suggests that the males are less likely to discontinue college because of a lack of faculty interaction.

Peer Interaction variable: 94 percent of both males and females responded that peer interaction is either moderately important or very important in their decision to

persist in school.

The University Orientation variable: 46 percent of females stated that they would prefer to attend another institution; but 50 percent of all the females responded that the preference to attend another institution is not an important consideration for them. The males' responses are a bit different, with 57 percent of the males stating that the preference to attend another school is not an important consideration in their decision to discontinue or not discontinue with college education; and 42 percent reporting that university orientation is either moderately important or highly important in their retention decision.

Overall, the B-Variables appear to have a mixed impact on retention decisions. The female students appear to be more responsive to the Academic Behavior and Faculty Interaction variables in their retention decisions, while the males are less responsive to them. But the males are more responsive to the Peer Interaction variable than the females; while University Orientation is not an important factor in the retention decisions of students irrespective of gender.

The S-Variables

The S-Variables represent the composite measure of the exogenous variables that impact retention decisions of students -- institutional variables that generally lie beyond the student's control, but contribute to the student's decision to persist or not persist in college. The Institutional Commitment variable: 97 percent of females and 90 percent of the males responded that institutional commitment is important to them; suggesting that the female students take the school's commitment much more seriously than the males -- a major difference that presents an important retention issue for female students -- they are more likely to base their schooling decisions on perceived level of their school's commitment (in providing and supporting their education in terms of, say, availability of supportive educational facilities, seriously engaged and well qualified faculty, meaningful curricula, and the like); the male students seem to be more forgiving in their perception of the institution's commitment.

The Occupational Uncertainty variable is a measure of how certain students are about how far the college degree would prepare them for successful careers. It is seen that 96 percent of the females and 95 percent of males responded either strongly or moderately strongly, to the effect that they were certain that their degrees would enable them to achieve good careers -- a strong retention attribute among students of both sexes. The Value of Education variable: does not present any significant variability between male and female students in terms of their retention decisions. Among the females, 86 percent responded in the high mean score range, i.e. that the Value of Education is a very important consideration toward their disposition to stay or not stay to completion. The corresponding male response is 82 percent.

The Personal Problems variable is a measure of how much the student's personal and/or family problems do bring to bear on his/her education. We see that 59 percent of the female students indicated that personal problems is either important or very important in their college retention, but as much as 40 percent of the females responded that this variable is not important in their retention dispositions. The corresponding males' response is 62 percent; and a significant percentage of the males, 37.5 percent, reported

that personal problem is not an important consideration for them (and compares well with the 40 percent for the females). This indicates that male students are relatively not very much swayed by personal problems in their college retention. These indicate that contrary to widely-held expectations, a sizeable percentage of the students, both females and males, are not constrained by personal problems (such as child care, relationships instability or marriage instability, single parenthood, or broken family) in pursuing college education. Thus, we can infer that among the many factors that could contribute to high attrition rates in college retention of both black (female and male) students, "personal problems" does not seem to be a prominent one.

CONCLUSION

This study has provided an in-depth inter-gender comparative analysis of retention variables between some selected HBCUs using female and male freshmen data from a pilot study. The work provides a great deal of useful results. The retention variables were classified under various composites on the basis of their respective roles in students' retention decisions; and within each composite, the variables were analyzed individually and the data carefully and meticulously studied.

The analysis reveals important differences (and similarities) in the retention dispositions of female and males students within the various HBCUs, and these issues present very important ideas and major considerations for applications in retention policy decision making.

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APPENDIX

Table 1

Descriptive Statistics: Total and Gender Survey Data Sizes

Gender	Jackson State	Dillard	Alcorn	Tougaloo	Miles
Females	110	56	62	48	8
Males	88	30	14	40	19
N	198	86	76	88	27

Table 2<u>Summary of Calculated Mean Responses (%) by Composite Classifications</u>

Composite Variables	Females	Males
A-Variables		
* Confidence	98	99
* Educational Commitment	92	87
* Financial Concern	96	93
* Intent to Change	98	94
* Perception of Program	98	97
* Prefer a Job	36	55
B-Variables		
* Academic Behavior	87	81
* Faculty Interaction	83	90
* Peer Interaction	94	94
* University Orientation	46	42

S-Variables

* Institutional Commitment	97	90
* Occupational Uncertainty	96	95
* Personal Problems	59	62
* Value of Education	86	82

