This study was designed to determine what relationship exists among race, the amount of financial aid awarded, and persistence in college. Thirty black and 30 white students from similar socio-economic backgrounds were matched on sex, aptitude (their SCAT scores), and high school class rank. Persistence was defined as those students who persisted through their freshmen year at college and enrolled for their sophomore year, and those who persisted through at least one semester at the University (the University of Missouri) but then transferred to another institution. The results indicated that there was no difference between the black and white students in terms of persistence. Though there was no significant difference between the amount of financial aid and persistence, all the students who received financial aid and did not persist were black females. (AF)
RELATIONSHIPS EXISTING AMONG RACE, PERSISTENCE AND STUDENT FINANCIAL AIDS

James E. Selby
University of Missouri-Columbia

During the past decade the privilege of an American citizen to obtain an education beyond high school has in fact become a right. The Federal Government, along with state and private foundation cooperation, has supported this right with a vastly increased student financial aid program.

An underlying assumption of this aid is that by eliminating college cost as a requirement for attendance in college every American will finally find higher education within his financial grasp. However, there has been public criticism that these programs are not reaching their intended recipients and that even if a poverty-level student, especially a black student, receives aid, his chances for persistence in college are slim.

A number of authors have investigated the relationship of socio-economic background of students and persistence in college. Astin (1964), in surveying 6600 National Merit Scholars of 1957, found that dropouts came from lower socio-economic backgrounds and applied for fewer scholarships in college. Meth (1966) concluded that there were many programs to encourage black students to attend
college but few programs to help them persist once they were admitted. Plaut (1966) reached similar conclusions, criticalizing higher education frontline offices (i.e., financial aids, admissions, recruitment, counseling) for their lack of coordinating efforts to recruit and hold black students. Henry (1965) found that students' financial resources, as such, were overrated as critical factors in persistence at the University of Missouri-Columbia because financial resources were so interrelated to parents' educational and vocational levels, attitudes, and other variables.

Because of the lack of specific research on the relationship of persistence and student financial aid, this study was designed to determine what relationships exist among race, the amount of financial aid awarded to students, and persistence.

Method

Subjects

The population groups included all single University of Missouri-Columbia black students and white students from United States Office of Education "designated poverty areas" of St. Louis and Kansas City, Missouri, who graduated from high school in June, 1968, and entered the University the following fall.

After students receiving athletic scholarships and grants were eliminated from the populations, black students were matched to white students on the following variables:
A. Sex

B. Aptitude: the Cooperative School and College Ability Test (SCAT) was used, with each black student matched to white students within the standard error of measurement of the SCAT.

C. High School Class Rank: after blacks were matched to whites on sex and aptitude only thirty blacks remained in the study while sixty-four whites remained. Thus, high school class rank percentile was used as the "tiebreaker" to determine the best corresponding white student for each black student.

The final thirty matched pairs, then, included the thirty students from each group who best fit the variables the writer was attempting to control. Each pair was matched within five SCAT raw score points and within fifteen percentile points for high school class rank and came from similar socio-economic backgrounds.

Definition of Terms

Persistence: Students who persisted through their freshman year and enrolled for their sophomore year at the University and those students who persisted through at least one semester at the University but then transferred to another college were classified as persisters. Those who enrolled for Fall, 1968, but dropped from the University before their sophomore year and did not transfer to another college were classified as nonpersisters.
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**Amount of Financial Aid:** Total aid received by each student for his freshman year included the total financial aid package offered to the student by Student Financial Aids. This aid included scholarships, waiver-of-fees, Educational Opportunity Grants, National Defense Student Loans, College Work-Study, and University student labor. None of the sixty subjects had received a guaranteed bank loan.

**Data Analysis**

The two null hypotheses tested were:

- **H₀₁:** If entering freshmen black students and white students from similar urban backgrounds are matched according to certain variables, no significant differences exist between the two groups in persistence into the sophomore year at the University of Missouri-Columbia.

- **H₀₂:** Using these same matched pairs, no significant relationships exist between persistence and the amount of financial aid received by students for their freshman year.

To test **H₀₁** chi-square analysis was used, with the .05 level of confidence required for the rejection of the null.

To test **H₀₂** point biserial correlations measuring the relationship between the amount of financial aid received by students and persistence were computed for five groups of students: black males, black females, white males, white females, and the total group of sixty subjects. A t-test of significance at the .05 level of confidence was then
The results of the analysis of the relationship between race and persistence are presented in Table 1.

As is evident from the table, we fail to reject the null hypothesis that no differences exist between black students and white students in terms of persistence. No significant differences exist between female blacks and female whites, male blacks and male whites, or all blacks and all whites.

The results of the analysis of the relationships of race, amount of financial aid received, and persistence are shown in Table 2.

The second null hypothesis that no significant relationships exist between persistence and the amount of financial aid received can not be rejected at the .05 level of confidence for the total group or any of the subgroups.

Although no significant differences exist in Table 2, it is evident from both the point-biserial correlations and the t-tests that some relationships do exist. Therefore, the
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writer has constructed another table, Table 3, which is a histogram of the data used for this study.

As Table 3 indicates, all of the students who received financial aid and did not persist were black females. All black males, white males, and white females who received aid persisted, regardless of the amount of aid received.

Discussion

The hypothesis that black students do not persist as well as white students receives no support from this study. When the two groups are carefully matched, especially on socio-economic background and scholastic ability, they persist through the freshman year on an almost equal basis. A limitation to this conclusion is that only thirty students from each race were included in the study and persistence was measured for only one school year; this was due to the relatively small number of black students who attend the University. Still, the careful matching procedure described in this study should make the results meaningful.

The other question in this study, whether or not financial aid to students is having an impact on their persisting or not persisting at the University, is less easily answered. As shown in Table 3, 75% of the students who received aid persisted while only 61% of the non-aid group
Selby persisted. However, a chi-square analysis of those proportions yields significance at only the .25 level of confidence.

Since the first part of this study concluded that no differences exist between blacks and whites in terms of persistence, it seems reasonable to suggest a larger study on the relationship of the amount of financial aid received by students and persistence in college, disregarding race as a confounding variable while taking into consideration both socio-economic background and ability in any matching procedures. However, since all students who received aid, yet did not persist, were black females, race may be a factor to consider. At the very least, it indicates that research on the values and attitudes of black women is sorely needed. Could it be that black females are having as much or even more difficulty than black males in determining their identity in higher education? Do black females simply drop out of the higher education system while black males attempt to change the system?

Also, one-half of those students in the study who did not receive aid and did not persist were white females. In spite of all we hear about the "new" American woman with unlimited occupational horizons, this study found that only 58% of the females persisted while 79% of the males persisted. Perhaps future studies concerned with the effectiveness of student financial aid will include large enough
groups to permit more conclusive results. Certainly the
taxpaying public is going to demand from colleges and
universities conclusive evidence that student financial aid
is having an impact on persistence. Controlling for as
many variables as possible may provide such evidence.
References


**TABLE 1**

Chi-square Analysis: Relationship Between Black Students and White Students in Terms of Persistence

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<th>Needed to be Significant at .05</th>
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<td>Black Subjects &amp; White Subjects</td>
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### TABLE 2

Point Biserial Correlation: Amount of Financial Aid and Persistence for Total Group and Four Subgroups

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**TABLE 3**

Data Histogram: Percentage of Students persisting in Each Category

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<th>Black Male</th>
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