

**STUDENT FINANCIAL AID AND ITS
EFFECTS ON PERSISTENCE**

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STUDENT FINANCIAL AID AND ITS
EFFECTS ON PERSISTENCE

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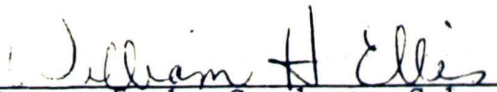
by
Floyd Thomas Bradley
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To the Graduate and Research Council:

I am submitting herewith a Research Paper written by Floyd Thomas Bradley entitled "Student Financial Aid and Its Effects on Persistence." I have examined the final copy of this paper for form and content, and I recommend that it be accepted in partial fulfillment of the requirements for the degree Master of Science, with a major in Psychology.


Major Professor

Accepted for the Graduate and
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Dean of the Graduate School

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CHAPTER 1

Review of the Literature

Student financial aid increasingly has become a major source of support for students in financing higher education. The Higher Education Act of 1965 set the stage for an increasing number of students to obtain access to a college education and attend the institution of their choice. The primary purpose of this act was to make a college education available to those individuals whose families could not afford to finance their education (Jensen, 1983).

President Carter's budget request for 1979 outlined two steps designed to help college students meet the rising cost of tuition payment.

1. The maximum federal scholarship, called the Pell Grant, would be raised from \$1,600 to \$1,800, and the assets that parents could hold and still have their children eligible for the grants would be increased from \$17,000 to \$25,000. This step was designed to aid poor families.

2. A contingency fund of \$100 million was set aside to pay for an initiative that would help middle-class parents, with a high income, to finance their children's higher education (New York Times, January 24, 1978, p. 23).

After fifteen years of consistent growth in financial aid programs, the Reagan administration has made several attempts to cut back funding in the area of student financial aid

programs. Federal student aid programs have undergone three major reductions in appropriations since the Reagan administration took office in January, 1981. These cuts have included:

1. rescissions from the Fiscal Year 1981 budget;
2. reductions in program ceilings imposed by the Omnibus Budget Reconciliation Act; and

3. further reductions below the Reconciliation levels in the Fiscal Year 1982 appropriations bill (Martin, 1984).

Also, the executive branch considered reducing funding by one half of campus-based aid (Supplemental Educational Opportunity Grant or SEOG, National Direct Student Loan or NDSL, and College Work-Study Program or CWSP) from \$1.1 billion at present to \$500 million for the 1983-84 year. To make the situation worse, a proposal also had been made by the Administration to eliminate graduate and professional students from participation in the Guaranteed Student Loan Program. If these proposals had been made law, they could have had damaging effects on graduate and undergraduate enrollments for institutions of higher education which depend heavily upon federal student aid (Herndon, 1982).

The two primary purposes of financial assistance, according to Astin (1975), are to provide greater access to higher education and to assure that students (especially those students from low income backgrounds) complete their studies (Butler, 1983). The assumption underlying this policy is that student aid will overcome the economic obstacles to college attendance which are related to lower socioeconomic

origins. It is anticipated that if academic ability and motivation are present, the student will not be blocked from college attendance because of financial constraints (Jensen, 1983).

As access and choice have been enhanced, there has been increasing interest with regard to the effect financial aid has on student persistence (Fife, 1975). That is, once students have entered their institution of choice, the receipt of aid may free them from financial constraints related to socio-economic background and contribute to the completion of a college education. Dr. Lee Noel noted in a 1979 address to the National Association of Student Employment Administrator's conference, "We learned how to admit students in the 60's, and we now must learn how to recruit students. Once recruited, we must then ensure that they persist until graduation" (McKenzie, 1981).

Now more than ever before, aid administrators are concerned about the cutback in financial aid programs by the federal government. Federal financial aid programs took three major cuts during the first two years of the Reagan Administration. Financial aid funds were cut 17 percent between the 1981-82 and 1982-83 academic years (Hook, 1982). Social security educational benefits have been phased out, and the Middle Income Student Assistant Act of 1978 has been replaced effectively with other legislation (Sanders, 1982).

In 1983, the Administration was successful in revising legislation to make the receipt of aid contingent upon a

student's having been registered for the selective service. Several appeals and proposals were unsuccessful, therefore, the revisions now stand as law. Currently, the Reagan Administration is expected to recommend a number of proposals and legislative changes that would reduce total student aid funds by as much as \$440 million in 1986 and \$1,661 billion in 1988. Under these proposals, \$161 million would be saved in the Department of Education's student aid programs by imposing a \$30,000 adjusted gross income ceiling on student eligibility. The effects of this change would implement a more restrictive definition on determining independent student status and establishing a \$4,000 maximum federal student aid cap per student. An additional \$145 million would be saved in the Guaranteed Student Loan (GSL) program in fiscal year 1986 by making administrative changes and imposing a maximum income cap on borrowers. Another \$75 million would be saved in fiscal year 1986 by phasing out or terminating the health professions' education programs (Martin, 1984).

The impending cuts in, and massive revamping of, federal student aid programs and wide public interest in tax credits as a "substitute program" for federal aid are clear indicators of the new public conservatism. This forces attention on the future of the stated objectives of financial aid, not only in terms of providing access and choice, but also in terms of retention (Saarniit, 1985).

The goal of "retention" is primarily concerned with the rate at which enrolled students complete a predetermined

period of study. It is typically computed on the basis of academic years of persistence toward the completion of degree requirements. Aid recipients should be expected to persist for a reasonable length of time beyond initial entry into college so that they are able to:

1. take advantage of what institutions of higher learning have to offer,
2. determine whether or not these services will be of benefit to them, and
3. complete degree objectives.

It is important to remember that access to higher education and the ability to attend the institution of choice was initially the purpose of federal student aid. However, with student aid decreasing, institutions must take on the responsibility of providing students with "how-to" skills in both acquiring and successfully managing additional resources to supplement or replace financial aid (Saarniit, 1985).

With this unprecedented reduction in federal student assistance the need for evaluation of the effects of student financial aid is urgent. Jensen (1983) suggested that research is needed to determine if financial aid is achieving its goal of equalizing opportunities for higher education; what types of aid are most effective for achieving equalization of opportunities; and if financial aid should continue to be an integral part of the financing of higher education.

A substantial body of research exists in the area, however, due to conflicting results, there is still need for research

to determine the efficacy of financial aid. A study by Astin (1975) examined the effects of financial aid on expected rates of persistence using the self reports of a large representative national sample. While the effects of the type of aid were found to vary by the proportion of support they comprised and by the sex, socioeconomic background, and ethnic origin of the recipients, several general conclusions were drawn from this research. Work-study was found to have the most consistent and pronounced positive impact on persistence in college. Gift aid had small positive effects on persistence, and loan support was usually related to decreased persistence. This research, however, examined the impact of financial assistance on persistence in the first year of college only, whereas, Jensen (1981) examined the influence of the receipt of student financial assistance and the amount of assistance received on persistence in college over a four year period. The results indicated that with other relevant variables controlled, the receipt of student financial aid had small positive effects on persistence. The denial of student aid in the freshman year to a group of applicants who were not eligible resulted in small negative effects on persistence.

McCreight and LeMay (1982) found that larger proportions of the non-recipient groups dropped out in each of the first three years of their study. They defined persistence as those students who had earned degrees in the six-year study period or who were enrolled in degree programs during the

sixth year of the study. The authors found that 51 percent of the recipients had either attained degrees or were persisting toward degrees in the sixth year compared to 42 percent of the comparison group. Also, Riccobono and Dunteman (1979), using the National Longitudinal Study data, found a small positive relationship between the recipient of student aid and persistence into the second year of college when compared to the persistence of those not applying for aid. The positive effect of financial aid on persistence was found at all types of colleges and universities and on students from lower and middle socioeconomic backgrounds at all ability levels, however, Fields and LeMay (1973) found no differences between recipients, non-recipients, and non-applicants in rates of voluntary withdrawal from the university or in the proportion of the groups which returned to the university for a second year. In addition, neither amount nor type of aid awarded was related to persistence among recipients.

Numerous studies have investigated the process of undergraduate persistence in recent years (Bean, 1979, 1983; Rootman, 1972; Spady, 1970; Tinto, 1975). While these works have advanced the use of theoretical orientations to the study of student persistence, they do not consider the impact of student financial aid programs as key variables that might explain persistence behavior (Voorhees, 1985). The conclusions of many of these studies often contradict one another and thus, taken in total, fail to provide concrete direction to the financial aid administrator.

At a time when two of every three students who enter the nation's public colleges and universities require some form of financial assistance (Stamper, 1983) and with the impending cuts proposed by the Reagan administration, failure to direct attention to student finances as a possible determinant of persistence is a significant shortcoming (Tinto, 1982).

CHAPTER 2

A Chronological Perspective--Background

From 1643, when Lady Anne Mowlson made a gift of 100 English pounds to Harvard University, until 1944, virtually all financial assistance available to students pursuing higher education came from private individuals or institutions (Coalition of Independent College and University Students [COPUS], 1980).

With the Serviceman's Readjustment Act (also known as the "G.I. Bill") the Federal government assumed a major role in student financial aid. Enacted by Congress in 1944, this bill was a response to national concern over the futures of returning servicemen. Together with its many extensions and modifications, the G.I. Bill has been successful in providing various forms of education and training to veterans and to the dependents of disabled or deceased veterans.

The G.I. Bill was the forerunner of modern Federal Students aid. The National Direct Student Loan was the first of the modern programs to develop, and had its origin as the National Defense Student Loan, Title II of the National Defense Education Act of 1958. This act, spawned by the Soviet Union's successful launching of the satellite Sputnik, intended to promote American education in the areas of science and technology, foreign languages, and mathematics. This act was the first to support the premise that students of ability should not be denied higher education because of financial need;

this tenet is the basis of all present-day Federal assistance programs. The National Defense Student Loan (NDSL) scheduled to terminate in 1966, has been extended three times, and was changed to the National Direct Student Loan in 1972. The NDSL provides long-term, low interest loans to students, to be repaid after one's education is complete (American College Testing Program [ACT], 1981).

As the sixties progressed, the public grew more determined that financial need should not bar worthy students from higher education. College costs were rising, and students from low income families made up only a minute percentage of the entire student population. In response to this concern, Congress enacted the College Work-Study Program (CWSP) as part of the Economic Opportunity Act of 1964. This program provided new part-time work opportunities for needy students as the government agreed to pay 80 percent of eligible students' salaries while the remaining 20 percent came from the employing institution. These preliminary projects, NDSL and CWSP, led up to a major breakthrough in federal financial aid for students: The Higher Education Act of 1965. This act established the first outright grants for exceptionally needy students in the form of Educational Opportunity Grants (EOG), the predecessor of Basic Educational Opportunity Grants (BEOG), and Supplemental Educational Grants (SEOG). It also furthered the development of federally funded loan programs with the introduction of the Guaranteed Student Loan (GSL).

Amendments have been added frequently to the Higher

Education Act, and are responsible for the evolution of the Educational Opportunity Grants. Because these grants had a limited amount of money, they were not available to all students desiring a college education. Therefore, the BEOG was legislated in 1972, and guaranteed to every student \$1,400 in grant support minus the amount the student's family could contribute. The SEOG program then replaced the former EOG program, benefiting both BEOG-eligible and non-eligible students.

The Guaranteed Student Loans were similar to the National Direct Student Loans in that they provided long-term, slightly higher interest loans to students. However, this program was an attempt on the part of the Federal Government to encourage banks to lend more money to students. The student must repay the loan after his or her education is complete, while the government pays the interest which accrues while the student is in school.

The Educational Amendments of 1972, which established the BEOG and the SEOG, and which revised such programs as NDSL, CWSP, and GSL, also emphasized the role of state governments in student financial aid through the State Student Incentive Grant Program (SSIG). The SSIG is used mostly to supplement the BEOG and SEOG monies of students going to private colleges and universities when these Federal grants are not sufficient to cover their needs.

When developed, all of these programs focused on the very needy students from low income households. However, the public

soon realized that the burden of escalating college costs on middle-class families not eligible for government aid was too great for them to handle. The Middle Income Student Assistance Act (MISAA) came about as a result of this realization in 1978. MISAA added many dollars to the existing financial aid programs to extend eligibility to middle and upper class families. MISAA also removed the income ceiling on the GSL program so that all students could receive in-school interest benefits.

In September of 1980, Congress once again reauthorized the Higher Education Act. The revisions and alterations implemented by Congress greatly expanded federal financial aid programs (COPUS, 1980). The Higher Education Act came up for reauthorization again in 1985 and was again reauthorized by Congress.

A Statement of the Problem

The question that is of utmost importance with regard to student financial aid is whether or not financial assistance has in fact helped retain students who otherwise would not be able to afford a college education. Thus the purpose of this research is to determine whether or not there appears to be a significant difference in the retention rates of student financial aid recipients than those who are not financial aid recipients. To date there has been no research published to determine the effectiveness of student financial assistance in retaining students at Austin Peay State University.

Austin Peay State University, under the control of the Tennessee Board of Regents, is a regional university, located

on an urban campus and is organized as the College of Arts and Sciences, College of Education, College of Business, College of Graduate and Professional Programs, and the Division of Public Services. It has an enrollment of 5,500 students with the majority being Middle Tennessee natives with modest financial backgrounds.

As a regional State University, Austin Peay State University provides instruction, undertakes research, and engages in public service. However, the primary task of the University is that of providing instruction through means of an educational program that includes not only the liberal arts and sciences but also curricula in applied arts and sciences, such as agriculture, business administration, industrial technology, nursing, and teacher education in many areas (Genera Bulletin, AP-265/1-85).

Austin Peay has a unique population of almost 40 percent non-traditional students with the majority of them being affiliated with the Fort Campbell Military reservation at Fort Campbell, Kentucky. Some are soldiers' spouses and some are retired military personnel with unique demands and needs.

The majority of the students at Austin Peay State University rely heavily upon federal financial aid. With approximately 70 percent of the 5,500 students receiving some type of financial aid, Austin Peay State University administrators and especially financial aid administrators, need to be aware of the effectiveness of the services they render.

Although billions of dollars in financial aid are being

funneled into need-based student aid programs nationally, as well as on the state level, little research has been conducted to determine the effects of these programs (Shaut & Rizzo, 1980).

University administrators are faced with an increasingly complex dilemma: how to maintain enrollments despite the demographic reality of a shrinking traditional college-aged population. Both private liberal arts colleges and state-supported universities are experiencing an increase in the proportion of non-traditional students in the last few years (Billson, 1985). Critical to the survival of many institutions of higher education will be increased support services to students with the objective of ensuring financial access and retention. Institutions must be extremely sensitive to the specific needs of students from various socioeconomic backgrounds and to the students' and the public's general feelings and expectations of student financial aid (Saarniit, 1985).

To achieve this, universities and colleges must identify institutional characteristics which will both attract and retain students. Previous assumptions about the economic and personal benefits an individual will derive from higher education must now stand stiffer scrutiny. Dr. Noel believes that institutions increasingly will have to demonstrate that they can provide a learning experience that explores an individual's talents. According to the cost benefit theory he described, a student will drop out when education is no longer a major priority in the student's life (McKenzie, 1981).

Findings from substantial research completed in the past decade investigating student retention suggest disturbing trends (Astin, 1975; Doerman, 1978; Freeman, 1979; Pantages, 1978). For example, the dropout rate for freshmen in four-year public institutions crept up from 32 percent in 1975 to 34 percent in 1977 (McKenzie, 1981). Research has isolated a host of factors influencing retention. One factor, student employment, could have an unexpected yet significant impact on an institution's ability to retain students. If true, school officials may consider giving new emphasis to the administration of student employment programs.

Several new factors will shape decisions made about student retention in general and student employment specifically. First, the post-war baby boom produced a generation which is now moving into its late twenties and early thirties. The succeeding generation has a smaller number of traditional college-aged people. Between 1965-1975 the birth ratio declined 24 percent (Bureau of Labor and Statistics, 1983). Only 9 percent of the United States population is aged 18-22 years (Bureau of Labor and Statistics, 1983). This obviously suggests that the age composition of an institution's student body could alter dramatically in upcoming years if it is to maintain current levels of enrollment. This new population of students probably will express different needs and interests than their predecessors (McKenzie, 1981).

Second, the proportion at lower income students is likely to increase in the foreseeable future. Since the previously

mentioned decline in the birth rate occurred predominately in the middle and upper income families, low income students might comprise a greater proportion of the college eligible population. This projection takes on new significance when one considers that research has established a direct correlation between parental income and the dropout rate (McKenzie, 1981).

Third, new uncertainties are being expressed about the economic value of a college education. A calculation developed by Richard B. Freeman estimates that higher education improved lifetime earning power by 10-11 percent in the 60's but that it had shrunk to 7-8 percent in 1977. That calculation has been challenged; nevertheless the perception that college has a declining financial advantage persists (McKenzie, 1981).

Since all federal financial aid programs (including student employment) are being financed with taxpayer's money, with the exception of the Guaranteed Student Loan Program, it is hoped that this research will be able to support the assumption that financial aid recipients persist in college equal to or better than those students who do not receive financial aid.

The null hypothesis is that there is no difference in the persistence rates of students who receive financial aid and those who do not receive aid. The research hypothesis is designed to show that students who receive aid have an equal or greater persistence rate than those students who do not receive aid.

CHAPTER 3

Method

Subjects

The data for this research were compiled by using files made available through the cooperation of the Student Financial Aid Office and the Office of Admissions and Records of Austin Peay State University. The data obtained consisted of demographic, academic, and financial information including age, sex, ethnic origin, grade point average (GPA), hours earned, hours attempted, classification, number of quarters enrolled, aid applied for, aid received, average amount of aid received, and number of hours attempted per quarter. Data were obtained on 760 subjects who enrolled for the first time at Austin Peay State University in the fall quarter of 1981.

Procedure

A total of twelve variables was selected from the data provided by Austin Peay State University's Admissions and Records Office and the Office of Student Financial Aid.

The 12 variables selected from the data are as follows:

1. Sex
2. Grade Point Average (GPA) for the six quarter sampling
Period
3. Hours earned during the sampling period
4. Average hours enrolled per quarter during the sampling
Period
5. Age

6. Percentage of quarters the subjects applied for and received aid during the sampling period.

7. Percentage of quarters the subjects did not apply but received aid during the sampling period.

8. Percentage of quarters the subjects did not apply and did not receive aid during the sampling period.

9. Percentage of quarters the subjects did apply and did not receive aid during the sampling period.

10. Average aid awarded per quarter.

11. Percentage of quarters the subjects received aid during the sampling period.

12. Number of quarters enrolled during the sampling period.

Variable 1 was selected to determine if gender played a significant role in the retention of students. Variable 2 was selected to evaluate the significance of grade point average or academic performance on persistence. Variables 3, 4, and 12 were selected to determine whether or not the student persisted or dropped out. Variable 5 was selected to determine if non-traditional students that received aid were as successful as traditional students. Variables 6-11 were selected to determine what role financial aid played in persisters and non-persisters.

The Department of Computer Services at Austin Peay was asked to program computer files to print lists from 760 cases (students) that would fall within the following parameters:

Group 1. Students enrolled for the first time in the fall of 1981 for a minimum of six hours and who remained

enrolled for at least five quarters with a minimum of six hours earned per quarter and who had been enrolled during the Spring Quarter 1983, excluding summer quarters. In order to determine the effects of ethnic origin on persistence, this group (N=597) was divided into two specific categories: White students with GPA's greater than 1.8 and Black students with GPA's greater than 1.8. The total number in this group consisted of 597 cases.

Group 2. Students enrolled for the first time in the fall of 1981, not in Group One because they were not enrolled Winter 1983 nor Spring 1983 and who had not graduated.

The two groups clearly represented those students who persisted and those who did not. Group One will be referred to as persisters and Group Two as non-persisters throughout the remainder of this report. For the purpose of this study, persistence will be operationally defined as those students who have remained in college and missed no more than one quarter during an academic year and who are enrolled for and earned at least six hours per quarter. The word retention is used synonymously with persistence.

Both groups, persisters and non-persisters, were divided into two specific subgroups: (1) those who received financial aid and (2) those who did not. The purpose of this division was to answer the question initially proposed: Does financial aid help to retain students?

The data were processed on the 1170 VAX Computer System using the Statistical Package for Effective Educational

Decisions (SPEED) developed by Dr. Garland Blair, Professor
of Psychology at Austin Peay State University.

CHAPTER 4

Results

Findings of the study are presented in Tables 1, 2, and 3. Table 1 indicates that Austin Peay retains 56% of its students who are under 25 years of age and received financial aid. Of this same group, 43% are not retained. For those students in the same age group who do not receive aid, 42% are retained while 57% are not retained. Those students older than 25 years of age who receive aid are retained at a rate of 56% for males and 72% for females; 43% for males and 27% for females are not retained. On the other hand, those students in the same age bracket who do not receive aid are retained at a rate of 26% for males and 29% for females; 73% for males and 70% for females are not retained.

The only difference in the data with regard to sex and retention is in the over 25 group of students who receive financial aid. Females (N=454) are retained at a higher percentage rate than males (N=306) with 72% to 56%, respectively. These data are probably contaminated due to the disproportionate male-female ratio in the sample.

Table 2 divides the sample by ethnic origin. The only two groups with adequate sample size are Caucasians (N=630) and Blacks (N=112). There are not enough foreign, American Indian, Oriental, and Spanish-American students in the sample to make a valid assumption about them. Therefore, comparisons

with regard to financial aid and ethnic origin on persistence will be directed toward the two groups with adequate sample size. Only 12 Blacks did not receive financial aid and of that 12, only two were retained. Two-hundred and forty Caucasians did not receive aid and 94 of those were retained.

Table 3 divides samples using ethnic origin and GPA as variables. All students in this group had maintained grade point averages equal to or greater than 1.8.

The single most significant data item in this table is in the group of females who are over 25 years of age. Females who receive financial aid have a retention rate of 92% as opposed to those who did not receive aid whose retention rate is 32%.

Other statistical tests were run on the data. However, none produced any statistical significance, thus, were not reported in this research paper.

CHAPTER 5

Discussion

The results of this research support the hypothesis that persistence is independent of financial aid. This is consistent with the results of research reported by Jensen (1983) who concluded that financial aid was not significantly related to persistence. The overall data suggest that the best predictors of persistence are those variables that tie in with academic performance (hours earned, hours per quarter, and overall GPA).

Although the relationship between receiving aid and persistence is non-significant, it moves in the right direction. When grouped with the variables of hours earned and age, percent of quarters the student received aid did have statistical significance in the group identified as persisters. This significance can be explained by the fact that 80% (N=607) of students in the sample (N=759) received some type of aid. The above information was retained from a non-significant statistical test that was mentioned earlier in the results section.

The data from Table 1 indicate that students who receive financial aid are retained, although not significantly, at a higher percentage rate than those who did not receive aid. These statistics, from an aid administrator's viewpoint, are very encouraging because student financial aid is a need-based program, and most students who apply and receive aid

are students in the lower socio-economic strata. These students have not had the academic background of students who come from middle and upper-middle class economically secure families, therefore, retention can present a problem (Fife, 1976).

Also, the high percentage rate of older females who do not persist and do not receive aid (70%) seems to support the null hypothesis of this study. The President's Task Force on Retention of Academically Talented Students (1982) indicated that females between 25 to 35 years of age have the highest rate of leaving Austin Peay without degrees. For administrators interested in improving retention rates, this would be an area worthy of further investigation.

The results shown in Table 2 indicate that Blacks rely more heavily on student financial aid than Caucasians. This finding is not surprising since numerous studies have indicated that Blacks constitute a large proportion of the lower socio-economic strata and thus are more dependent on need-based programs.

It was interesting to note only three Blacks over 25 years of age were in the sample compared to 98 Caucasians in the same age group. These results generate numerous hypotheses and should be considered for additional research.

There is a substantial difference in the retention rates of Black males under the age of 25 who receive aid compared to the same group of Caucasians (36% to 61%, respectively). Data in Table 3, where GPA is used as a

variable, show that the retention rate is about equal. These findings are supported by the Faculty Senate Academic White Committee (1982) and the President's Task Force on Retention of Academically Talented Students (1982).

Although the results of this research support the null hypothesis that there is no relationship between retention and financial aid, in almost every group when financial aid and other variables were combined, the retention rates of financial aid students were higher than non-financial aid students.

One noteworthy result of the study was the assurance that financial aid was being awarded (as mandated by federal law) solely on the basis of need with no apparent consideration being given to other variables such as age and ethnic origin.

A question often raised is whether financial aid should be used as a continuing means of financing higher education for economically deprived individuals. Data from this study indicate that aid recipients do as well academically as non-recipients and persist equally. Since financial aid recipients included in this sample were selected solely on the basis of need, the concept of student financial aid as a means of financing education for those students in need and who otherwise would not be able to afford a college education is supported.

REFERENCES

- American College Testing Program. (1981). Iowa City, Iowa.
- Astin, A. W. (1975). Preventing students from dropping out. San Francisco: Jossey-Bass.
- Bean, J. P. (1983). The interaction effects of GPA on other determinants of student attrition in a homogeneous population. Paper presented at the annual meeting of the American Educational Research Association (ERIC Document Reproduction Service No. ED 216 657).
- Billson, J. M. (1982). In search of the silken purse: Factors in attrition among first generation students. College and University, 58, 57-75.
- Bureau of Labor and Statistics. (1983). U. S. Department of Labor, City Workers Family Budget. Bulletin, 1570-1, vi.
- Cope, R. G. (1978). Why students stay, why they leave. In R. G. Cope (Ed.) Reducing the dropout rate. San Francisco: Jossey-Bass.
- Edwards, H. (1979). Higher education and the law. Cambridge, Mass.: Institute for Educational Management.
- Faculty Senate Academic White Committee. (1982). Report to the President on retention of academically talented students, Austin Peay State University Faculty Senate, Media Center.
- Fields, C. R. & LeMay, M. L. (1973). Student financial aid: Effects on educational decisions and academic achievement. Journal of College Student Personnel, 425-429.

- Fife, J. D. (1975). The college student grant study. Center for the Study of Higher Education: The Pennsylvania State University (a).
- Fife, J. D. (1976). Applying the goals of student financial aid. Washington, D. C.: American Association for Higher Education. (ERIC/Higher Education Research Report No. 10).
- General Bulletin (AP-265/1-85). Austin Peay State University, Vol. 54, No. 4.
- Hook, J. (1982, September 1). Colleges open with big backlog in aid offices. The Chronicle of Higher Education, 25, 1, 22.
- Jensen, E. L. (1983). Financial aid and educational outcomes: A review. College and University, 58, 287-302.
- Martin, D. (1984). Student aid cuts proposed in president's draft FY 86 budget. Newsletter: National Association of Student Financial Aid Administrators, Vol. 16, No. 21.
- McCreight, K. & LeMay, M. (1982). A longitudinal study of the achievement and persistence of students who received basic educational opportunity grants. Journal of Student Financial Aid, 12, 11-15.
- McKenzie, D. (1981). Student employment and persistence. Journal of Student Financial Aid, 11, 38-42.
- New York Times. (1978, January 24). p. 13.

- Fife, J. D. (1975). The college student grant study. Center for the Study of Higher Education: The Pennsylvania State University (a).
- Fife, J. D. (1976). Applying the goals of student financial aid. Washington, D. C.: American Association for Higher Education. (ERIC/Higher Education Research Report No. 10).
- Freeman, R. B. (1979, September). The declining value of going to college. Change Magazine, 24-31.
- General Bulletin (AP-265/1-85). Austin Peay State University, Vol. 54, No. 4.
- Hook, J. (1982, September 1). Colleges open with big backlog in aid offices. The Chronicle of Higher Education, 25, 4, 22.
- Jensen, E. L. (1983). Financial aid and educational outcomes: A review. College and University, 58, 287-302.
- Martin, D. (1984). Student aid cuts proposed in president's draft FY 86 budget. Newsletter: National Association of Student Financial Aid Administrators, Vol. 16, No. 21.
- McCreight, K. & LeMay, M. (1982). A longitudinal study of the achievement and persistence of students who received basic educational opportunity grants. Journal of Student Financial Aid, 12, 11-15.
- McKenzie, D. (1981). Student employment and persistence. Journal of Student Financial Aid, 11, 38-42.
- New York Times. (1978, January 24). p. 13.

- Noel, L. (1978). Reducing the dropout rate. New Directions for Student Services. Jossey-Bass.
- Pantages, T. J. & Creedon, C. F. (1978). Studies of college attrition 1950-75. Review of Educational Research, 48, 57-72.
- President's Task Force on Retention of Academically Talented Students. (1982). Austin Peay State University, Media Center.
- Riccobono, J. A. & Dunteman, G. H. (1979). National longitudinal study of the high school class of 1972: Preliminary analyses of student financial aid. Arlington, VA. (ERIC Document Reproduction Service No. ED 170 303).
- Rootman, I. (1972). Voluntary withdrawal from a total adult socialization organization: A model. Sociology of Education, 45, 258-270.
- Saarniit, M. (1983). Implications of reduced financial aid of student enrollment. Journal of Student Financial Aid, 15, 2.
- Sanders, C. B., Jr. (1982, Jan./Feb.). Sorry this commitment may be cancelled--Higher education and Ronald Reagan. Change, 14, 7-9.
- Shaut, W. E. & Rizzo, L. M. (1980). Impact of a tuition assistance program on students' freedom of choice in college selection. Journal of Student Financial Aid, 10, 34-42.
- Spady, W. G. (1971). Dropouts from higher education:

Toward an empirical model. Interchange, 2, 38-62.

Stamper, J. O. (1983). Student aid and public higher education: A progress report. American Association of State Colleges and Universities, Washington, D.C.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research, 45, 89-125.

Voorhees, R. A. (1985). Financial aid and persistence: Do the federal campus-based aid programs make a difference? Journal of Student Financial Aid, 15, 21-30.

TABLES

Table 1

All Students--Retention Rates by Grade Point Averages (GPAs)

Sex, Aid, Age	Total (N)	Retained (%)	Not Retained (%)
Males, No Aid, 25 or Under	89	38 (42%)	51 (57%)
Males, Aid, 25 or Under	178	100 (56%)	78 (43%)
Males, No Aid, 25+	23	6 (26%)	17 (73%)
Males, Aid, 25+	16	9 (56%)	7 (43%)
Females, No Aid, 25 or Under	100	41 (41%)	59 (59%)
Females, Aid, 25 or Under	288	163 (56%)	125 (43%)
Females, No Aid, 25+	47	14 (29%)	33 (70%)
Females, Aid, 25+	18	13 (72%)	5 (27%)
Groups 1 & 2--GPA > 1.8 Only			
Males, No Aid, 25 or Under	66	35 (53%)	31 (46%)
Males, Aid, 25 or Under	135	92 (68%)	43 (31%)
Males, No Aid, 25+	19	6 (31%)	13 (68%)
Males, Aid, 25+	16	9 (56%)	7 (43%)
Females, No Aid, 25 or Under	77	40 (51%)	37 (48%)
Females, Aid, 25 or Under	234	156 (66%)	78 (33%)
Females, No Aid, 25+	46	14 (30%)	32 (69%)
Females, Aid, 25+	14	13 (92%)	1 (7%)
Groups 1 & 2--GPA < 1.8 Only			
Males, No Aid, 25 or Under	23	3 (13%)	20 (86%)
Males, Aid, 25 or Under	43	8 (18%)	35 (81%)
Males, No Aid, 25+	4	0	4 (100%)
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	23	1 (4%)	22 (95%)
Females, Aid, 25 or Under	54	7 (12%)	47 (87%)
Females, No Aid, 25+	11	0	1 (100%)
Females, Aid, 25+	4	0	4 (100%)

Table 2

All Students--Groups 1 & 2--By Race

Sex, Aid, Age	Total (N)	Retained (%)	Not Retained (%)
Caucasian			
Males, No Aid, 25 or Under	79	34 (43%)	45 (56%)
Males, Aid, 25 or Under	135	83 (61%)	52 (38%)
Males, No Aid, 25+	23	6 (26%)	17 (73%)
Males, Aid, 25+	16	9 (56%)	7 (43%)
Females, No Aid, 25 or Under	95	40 (42%)	55 (57%)
Females, Aid, 25 or Under	223	137 (61%)	86 (38%)
Females, No Aid, 25+	43	14 (32%)	29 (67%)
Females, Aid, 25+	16	12 (75%)	4 (25%)
Foreign			
Males, No Aid, 25 or Under	1	0	1 (100%)
Males, Aid, 25 or Under	0	0	0
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	0	0	0
Females, Aid, 25 or Under	0	0	0
Females, No Aid, 25+	0	0	0
Females, Aid, 25+	0	0	0
American Indian			
Males, No Aid, 25 or Under	1	1 (100%)	0
Males, Aid, 25 or Under	1	0	1 (100%)
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	1	0	1 (100%)
Females, Aid, 25 or Under	0	0	0
Females No Aid, 25+	0	0	0
Females, Aid, 25+	1	1 (100%)	0

Sex, Aid, Age	Total (N)	Retained (%)	Not Retained (%)
<i>Black</i>			
Males, No Aid, 25 or Under	5	1 (20%)	4 (80%)
Males, Aid, 25 or Under	38	14 (36%)	24 (63%)
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	4	1 (25%)	3 (75%)
Females, Aid, 25 or Under	62	25 (40%)	37 (59%)
Females, No Aid, 25+	3	0	3 (100%)
Females, Aid, 25+	0	0	0
<i>Oriental</i>			
Males, No Aid, 25 or Under	3	2 (66%)	1 (33%)
Males, Aid, 25 or Under	2	1 (50%)	1 (50%)
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	0	0	0
Females, Aid, 25 or Under	2	1 (50%)	1 (50%)
Females, No Aid, 25+	0	0	0
Females, Aid, 25+	0	0	0
<i>Spanish-American</i>			
Males, No Aid, 25 or Under	0	0	0
Males, Aid, 25 or Under	2	2 (100%)	0
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	0	0	0
Females, Aid, 25 or Under	1	0	1 (100%)
Females, No Aid, 25+	1	0	1 (100%)
Females, Aid, 25 +	1	0	1 (100%)

Table 3

Students--Groups 1 & 2 with GPA > 1.8--By Race

Sex, Aid, Age	Total (N)	Retained (%)	Not Retained (%)
Males, No Aid, 25 or Under	58	31 (53%)	27 (46%)
Males, Aid, 25 or Under	113	78 (69%)	35 (30%)
Males, No Aid, 25+	19	6 (31%)	13 (68%)
Males, Aid, 25+	16	9 (56%)	7 (43%)
Females, No Aid, 25 or Under	74	39 (52%)	35 (47%)
Females, Aid, 25 or Under	195	133 (68%)	62 (31%)
Females, No Aid, 25+	43	14 (32%)	29 (67%)
Females, Aid, 25+	13	12 (92%)	1 (7%)
Foreign			
Males, No Aid, 25 or Under	1	0	1 (100%)
Males, Aid, 25 or Under	0	0	0
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	0	0	0
Females, Aid, 25 or Under	0	0	0
Females, No Aid, 25+	0	0	0
Females, Aid, 25+	0	0	0
American Indian			
Males, No Aid, 25 or Under	4	1 (25%)	3 (75%)
Males, Aid, 25 or Under	18	11 (61%)	7 (38%)
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	3	1 (33%)	2 (66%)
Females, Aid, 25 or Under	37	22 (59%)	15 (40%)
Females, No Aid, 25+	2	0	2 (100%)
Females, Aid, 25+	0	0	0

Sex, Aid, Age	Total (N)	Retained (%)	Not Retained (%)
Black			
Males, No Aid, 25 or Under	4	1 (25%)	3 (75%)
Males, Aid, 25 or Under	18	11 (61%)	7 (38%)
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	3	1 (33%)	2 (66%)
Females, Aid, 25 or Under	37	22 (59%)	15 (40%)
Females, No Aid, 25+	2	0	2 (100%)
Females, Aid, 25+	0	0	0
Oriental			
Males, No Aid, 25 or Under	2	2 (100%)	0
Males, Aid, 25 or Under	2	1 (50%)	1 (50%)
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	0	0	0
Females, Aid, 25 or Under	2	1 (50%)	1 (50%)
Females, No Aid, 25+	0	0	0
Females, Aid, 25+	0	0	0
Spanish-American			
Males, No Aid, 25 or Under	0	0	0
Males, Aid, 25 or Under	2	2 (100%)	0
Males, No Aid, 25+	0	0	0
Males, Aid, 25+	0	0	0
Females, No Aid, 25 or Under	0	0	0
Females, Aid, 25 or Under	0	0	0
Females, No Aid, 25+	1	0	1 (100%)
Females, Aid, 25+	0	0	0