The assumptions underlying the student financial need analysis performed by York College of Pennsylvania, and by the majority of post-secondary institutions nationwide, are that parents have a moral obligation to assist their children in obtaining an education and that they should do so to the degree they are able. This study was designed to determine the extent to which students actually receive the financial assistance presupposed in establishing their financial needs. A survey instrument was sent to a 20 percent random sample of the full-time undergraduate students at York College of Pennsylvania, a private four-year institution. Responses from independent students were not considered. Responses from dependent students were divided according to parental income into "high-income" and "low-income" categories, which were matched by sex and residency. The amount of expected parental support was calculated according to normal procedures and was compared to the actual parental assistance reported. Of the 48 "high-income" (over $14,999) students sampled, only 14 received at least 80 percent of the expected parental contribution, whereas 42 of the 48 "low-income" students sampled received at least 80 percent of the expected parental assistance. A literature review is included. A bibliography and the survey instrument are appended. (DC)
A Comparison Study of the Actual and Expected Parental Contribution, as a Student Financial Resource, for High and Low Income Students

by

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York College of Pennsylvania

A Practicum Presented to Nova University in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

Nova University

February 8, 1976
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1. Title
This research practicum is entitled "A Comparison Study of the Actual and Expected Parental Contribution, As A Student Financial Resource, For High and Low Income Students".

2. Statement of the Problem
The research practicum within proposed the following questions for examination and investigation:

a) What is the number of high income students, as defined for the purpose of this study, whose parents contribute at least 80 percent of their expected "parental contribution" as calculated by a unified system for determination of student financial need?

b) What is the number of low income students, as defined for the purpose of this study, whose parents contribute at least 80 percent of their expected "parental contribution" as calculated by a unified system for determination of student financial need?

c) Is there a significant difference (at .05 l.o.c.) when comparing the number of students in both high and low income groups whose parents actually meet at least 80 percent of the expected (calculated) contribution?
3. Hypothesis

It was postulated that there was no significant difference (at .05 l.o.c.) when comparing the number of students in both groups whose parents actually meet at least 80 percent of the expected (calculated) contribution.

4. Background and Significance

A parental contribution towards the cost of postsecondary education is created, and determined by a calculation referred to as a need analysis. It therefore seems appropriate that a study of this nature, should in part, discuss the theory and practice of the need analysis. It is also apparent that in order to assist in the justification of this investigation that a brief synopsis relative to the history of student financial aid, and the role which it has played on the scene of higher education is necessary.

Any educator must surely admit that higher education has probably changed more in the past decade than in any other period of its history. The concept of egalitarianism has been promoted by all segments of American society. The successful promotion of this concept, has in part, had a tremendous effect on the increased enrollments in post-secondary education, and can be evidenced by the proliferation of such institutions throughout the nation today.

As the postwar baby boom unfolded into the college student boom, simultaneously higher education came to be viewed as a right rather than a privilege by the American people. The race for space was on and the needs of science
and technology had been far from answered.

As student enrollments increased, so did the cost of their education. It soon became apparent that if equal access to postsecondary education was to in fact become a reality, steps would have to be taken which would afford all the financial opportunity to further their formal education.

The ends, equal access, had been established. The means, student financial resources, were to be provided through the auspices of governmental and non-governmental agencies.

With assertion in the belief that an educated populace is necessary to strengthen the foundation of a democratic society, the federal government began to provide student financial resources to postsecondary educational institutions. Grant, loan and work programs were established. State governments began to further provide funds for students. By virtue of the emphasis placed on equal educational opportunity, these programs existed only for students with established financial need.

Institutional scholarship programs, which had originally been established and were utilized primarily for athletic and academic incentive and success, began in part, to evolve into need based programs for students.

In review of the information previously stated we find a commitment on the part of the American society to egalitarian education. Simultaneously, an abrupt increase in the
population of those enrolled in postsecondary education occurred. The escalated cost of education was concurrent with the necessity for increased funding of and in student aid programs. Student financial aid programs existed only for those students, who without the existence of such programs would be unable to attend educational institutions of the postsecondary level. The method by which these needy students were identified, was, and continues to be the need analysis. In a study conducted by two educational researchers, Orwig and Jones (1970), entitled "Can Financial Need Analysis Be Simplified", (an investigation promoted by American College Testing - the second largest agency dealing with student need assessment), the authors state that "student financial need analysis for college applicants and students plays an important role in our society's commitment to equality of educational opportunity".

As each reader becomes more and more cognizant of the significant role which the need analysis plays in the world of student financial aid, it is of relative importance that there is some discussion presented which deals with the theory and practice of the need analysis.

The underlying assumption of the need analysis utilized for the purpose of this study, (one established by the College Scholarship Service, and subscribed to by York College of Pennsylvania, and the majority of the postsecondary educational institutions throughout the nation), philosophizes that parents have a moral obligation to assist in financing
the education of their children to the degree which they are able. (This system, as well as that of the A.C.T. and others is based on the principle of parental obligation - and deals with each student in the same manner, within the respective program.) As stated more clearly by the College Scholarship Service (1974), "... parents are expected to provide, as well as they are able, the essentials of life at home or on the college campus. These essentials include meals, room, clothing and medical care. If their means permit contributions beyond the essentials, they are expected to assist in the payment of tuition, and other direct educational expenses".

The parental contribution, as determined through the utilization of a need analysis is the single most significant factor in determining a student's eligibility for aid, as well as the dollar amount of aid which will be administered to that student.

In very simple terms, the calculated parental contribution is added to a calculated student (self) contribution, (from reported savings, benefits, and expected savings from summer earnings). The sum of these figures deducted from a student's cost of education yields the student's demonstrated or established financial need.

In an attempt to determine family financial strength several factors are considered in the need analysis. Among these factors, as one may already have begun to assume, are the family income and assets. Again because of the socio-economic structure of the American family, the income and
assets considered are predominantly those of the parents. Allowances are made of the following; number of children in the family, number in postsecondary education, retirement, and a moderate standard of living - contingent on family size, and based on economic statistics as compiled by the Bureau of Labor and Statistics. (The standard of living allowance is updated as necessary to reflect changes in the Consumer Price Index.)

Notwithstanding a sincere attempt to establish a reasonable need analysis - equitable and responsive to the needs of all, with particular emphasis on current economic conditions, we find that some parents cannot, or do not contribute the calculated expected amount. This is surely evident after several conferences with students and parents - for whom it is not working. Due to the aforementioned situation, this author was in agreement with members of the Student Affairs Division of York College, as well as members of the Scholarship and Financial Aid Committee of the Academic Senate, that an investigation as proposed was warranted.

Should this study reveal that there is a significant difference in the number of students from either group whose parents are meeting at least 80 percent of their expected contribution, further investigation in this area would certainly seem necessary. Modification of the need analysis may also be considered. The mathematical calculation, as well as the variables considered in the analysis would be reviewed. It may be that the calculation demands too great a contribution
from some income levels and perhaps not a large enough contribution from other income levels. At that time further studies should also be considered to determine where the problem lies, if in fact a significant difference exists. College policy regarding the need analysis, and limitations it places on students applying for college based funds may also be severely scrutinized.

There have already been several questions raised regarding the validity of the C.S.S. need analysis. While many discuss the liberal implications expressed by the need calculation, others discuss the conservative nature of the resulting student need figures. During the 1974-1975 academic year, representatives of the C.S.S. appeared before officials of the Office of Education, of the Department of Health Education and Welfare. At that time governmental officers expressed grave concern over the liberalization of the need analysis calculation. After a prolonged period of public hearings, the analysis was approved for use in determining demonstrated financial need, for campus based financial aid programs funded through the Office of Education.

The C.S.S. had liberalized their calculation in order to equitably reflect changes in the national economy due to the spiraling rate of inflation. The concern reflected by the O.E. may be justified when considering that the need analysis is used in determining the gross unmet need figures which the Office of Education attempts to meet as fully as possible through their budget for student financial aid. It was
speculated by some that the concern expressed by the Office of Education was not based on unwarranted changes in the calculation, but in the inability, or unwillingness of the Federal Government to meet the larger amounts of estimated financial need. In a "Memo to the Members", from the College Entrance Examination Board, (the base organization which established the C.S.S.), Robert Huff (1975), Vice Chairman of the C.S.S. Assembly and Director of Student Financial Aid at Stanford University was to have stated that the federal standard suggested for use in calculating estimated financial need "... would not provide for measuring need but would serve instead to ration funds". Huff (1975), also published an article entitled the "No Need Scholarship". In this article he refers to the modifications which occurred in the C.S.S. calculation for determination of student need for the 1975-1976 academic year. He states that the change "... makes the parental contribution more reasonable for families at all income levels, but particularly for hard pressed middle-income families".

In an article by E. W. Sample (1975), President of the National Association of Student Financial Aid Administrators, entitled "Federal Schedule for Financial Aid To Be Voluntary" many good points are made. Sample states that "We contend that it is inappropriate to manipulate estimates of parental ability to pay in order to keep the eligible population under control. We believe that the utilization of realistic estimates of ability to pay are extremely important in order to
reflect the real needs of students, even though the resources available from all funding sources may be inadequate to meet those needs". Table I, as it appears in the Appendix indicates the comparison of the latest C.S.S. liberalized calculation and those results, which would be suggested by the O.E. for the same income and standards (typical three-child family with one enrolled in postsecondary education), for the 1975-1976 academic year. The table is from Mr. Samples' article and the differences in expected parental contribution vary from $0 to $550.

In the January 1975 issue of Activity, a monthly publication of A.C.T., an article was printed entitled "Major Revisions Made in Need Analysis Systems". This article dealt with the rationalization for the changes made in the A.C.T. need analysis calculation. It was stated that "The first is related to the rapidly increasing inflationary rate the economy is now experiencing. The second is the need for national conformity in the need analysis systems used by students".

In as far as the second statement referring to the need for conformity, this was also an argument used by O.E. against the C.S.S. liberalization. There does however seem to be some 'accepted' non-conformity by the O.E. in the determination of student need. As an example, two other methods of determining student financial need that are popular are the Income Tax Method, and the method used by the Basic Educational Opportunity Grant. The Federal Register (October 21, 1975) carried
comments made during recent hearings on the need analysis accepted by the Office of Education for the 1976-1977 academic year. Questions regarding this "non-conformity" were directed to officials of the O.E. The response was as follows. "It is acknowledged that neither the Basic Grants method nor the Income Tax System produces expected family contributions which are within $50 of the benchmark results on at least 75 percent of sample cases. In the great majority of cases both methods produce expected contributions considerably higher than the benchmark figures. However, the Commissioner does not consider it desirable to force institutions to use the services of a need analysis contractor and therefore feels desirable to continue to offer any institution which chooses not to use such a contractor a simple method of computing an expected family contribution. Both the Basic Grants method and the Income Tax System offer the institution such an optional system and both remain approved in the final regulation."

William Goggin (1974), in a study entitled "The Measurement of Economic Well-Being In Need Analysis Models" stated that "The impetus for the distribution of aid on the basis of need derives from the interaction of three dissimilar factors. First, equal access to postsecondary education has become an important goal of master planning at both state and federal levels. Second, there is broad agreement that the family should provide as best it can for the postsecondary education of its dependents. Third, financial aid funds are,
and will continue to be scarce. These phenomena taken together mandate the distribution of aid funds according to need. Simultaneously, the measurement of need becomes a task of central importance." This thought is in agreement with those expressed by Orwig and Jones (1970), as referred to earlier in this study.

During the 1974-1975 academic year, many institutions also modified their calculations for determination of need. In an article by K. Winkler (September 29, 1975), entitled "Narrowing the Gap in Student Aid", the author states that these institutions modified their calculations in order "... to make those with higher family incomes eligible for need-based aid. As a result, at Oberlin, students whose families earn more than $17,000 a year are receiving aid. At Michigan State there are cases of demonstrated need in families making $15,000-$20,000 a year." These groups of students would most probably not have been eligible for need based funds under the old calculation. The establishment of a student financial need figure is then not only contingent, but more important relative to the calculation utilized in its determination.

It is surely evident that the problems facing student financial aid is indeed a complex one. It involves not only the politics of governmental subsidation for education, and those social theories - pro and con surrounding it, but also the need analysis system utilized. In order to further substantiate this point consider the Basic Grant Program and the
amount of funds which have remained unspent during the past three years. Millions of dollars have remained unspent each year. Your author submits that the reason for this is not because of a communication problem in making the program known, but because the need calculation is such that many students who most financial aid officers would consider needy are determined not to be needy by the program. The Basic Grant Program has most certainly met a tremendous amount of student need; however, in the opinion of your author, the program is far too unsophisticated to fulfill its goal of enhancing equal educational opportunity. According to the "Washington Notes" (September 2, 1975), from the Chronicle of Higher Education, new rules have been proposed for this program. "The amounts that families would be expected to contribute to their children who are receiving Basic Educational Opportunity Grants would be liberalized under the new rules. . . . In calculating the family income—and, from that, the amount a family could afford to an offspring's education—the allowed deduction would be increased 10 percent for the 1976-1977 academic year. It would also be adjusted at the end of the year to reflect the increase in living costs during that period, shown by the Consumer Price Index".

It is apparent from the preceding text that increased budgets for student aid programs cannot solve the problems which may exist in a need analysis calculation. It should also be apparent that the single consistent thread running through the entire area of student financial aid is
inconsistency.

After a perusal of the limited available research directly pertaining to a study such as this, it is certainly noteworthy to draw reference to one conducted by the Pennsylvania Higher Education Assistance Agency (1975), entitled "A Study Of The Characteristics And Resources Of Students In Postsecondary Education In The Commonwealth Of Pennsylvania". This study utilized the Student Resource Survey, and encompassed surveying student information during the Spring term of the 1972-1973 academic year. The results state that "There are two measures of what parental contributions should be, which can be determined from the Student Resource Survey. The most commonly accepted is that prepared by the College Scholarship Service of the College Entrance Examination Board, which is used by most public and private institutions in the Commonwealth of Pennsylvania in the award of federal and institutional funds under their jurisdiction". Students at 150 institutions of the postsecondary level were surveyed. Of the 150 institutions participating in the study, 79 were private four-year type (as is York College of Pennsylvania). This was 85.8 percent of those invited to participate. Approximately 10 percent of the undergraduate student body composed the sample. A response ratio of 66 percent was achieved, (8,853 responded from a sample size of 13,423).

As reported in this study, the smallest percentage of students with no parental contribution was reported from
students enrolled at the private four-year type institution. This was 16.6 percent. The mean student reported parental contribution was $1338. (This was also the largest mean student reported parental contribution for all institutions surveyed.) All students reported a mean parental contribution of $934. The C.S.S. would have predicted a mean parental contribution for this group of students at private four-year institutions of $1820. (A difference of $482.) The C.S.S. would further have calculated an expected mean parental contribution for all students surveyed of $1386. (A difference of $634.) The C.S.S. calculation expected no parental contribution from 11.2 percent of all students surveyed. There were 21.8 percent of all students reporting no parental contribution. (A difference of 10.6 percent.)

Tables II, III, and IV as they appear in the Appendix will indicate to the reader some of the striking dissimilarities reported in this study dealing with reported and expected parental contributions.

J. L. Kaplan (1969), conducted a study entitled "Undergraduate Financial Aid Recipients and Non-Recipients: A Comparison of Selected Social-Educational Characteristics". In this study he states that "There are significant differences between recipients and non-recipients of financial assistance in terms of . . . percentages of support received from parents . . . ."

In summation, it would most certainly seem that a strong case has been presented in defense of this research study.
review would begin by reminding the reader that the purpose of student financial aid programs is to assist needy students in meeting the cost of postsecondary education. A needy student is identified by means of a need analysis. The calculation used in the need analysis deals with the family's income and assets, and determines what the family should contribute to a child's cost of postsecondary education. The calculation utilized in the various need analysis systems are not always valid. Families cannot, or do not contribute the expected amount. When considering the scope of this proposed study, some specific questions have been alluded to:

a) Are the parents of high and/or low income families meeting at least 80 percent of the expected parental contribution as calculated by a need analysis method - for this purpose the method utilized by the College Scholarship Service?

b) If a particular group is not - is there a significant difference in the number of students whose parents are not meeting at least 80 percent of the expected calculation?

c) If a significant difference exists, what steps should York College of Pennsylvania consider - with respect to modification of the need analysis method utilized?

5. Definition of Terms

The following list of terms have been defined for the purpose of this research study:

a) Actual parental contribution - the financial resources,
dollar amounts actually provided by the parents for the student's cost of education.

b) **commuter student** - a dependent student living with parents during the academic year.

c) **control variables** - sex and residency have been controlled through matching from the random sample drawn for this study.

d) **cost of education** - the direct and indirect costs of a student including books, transportation, tuition, fees, room and board allowances, spending money allowances.

e) **demonstrated financial need** - see established financial need.

f) **dependent student** - a student who is claimed as a deduction on parents' or guardians' income tax, or was the year before he applied for aid, or henceforth, receives $600 or more in financial assistance from parents or guardians for that same time period, or who has lived at home with parents or guardians for that same time period.

g) **dependent variable** - the percentage of expected parental contribution, as calculated, actually contributed by parents.

h) **established financial need** - the established financial need is the difference between the family contribution (primarily made from the parental contribution) and the cost of education.
i) **expected parental contribution** - the dollar amount calculated through the need analysis that parents should contribute toward the cost of the post-secondary education of their child.

j) **family financial strength** - the established amount of total family financial resources - liquidable and non-liquidable - as determined through the need analysis.

k) **financial aid programs** - programs established to provide financial assistance for the cost of education for those students with established financial need.

l) **grant** - non-repayable financial resources for students.

m) **high income** - a family income before taxes and/or deductions of $14,999 or above - income included earned and unearned.

n) **independent student** - any student who does not meet the criteria for being a dependent student.

p) **independent variable** - family income as reported by the student.

q) **institutional scholarship program** - established to provide financial resources for students regardless of need - usually as incentive or reward.

r) **intervening variables** - the knowledge a student will have regarding his home financial situation, the attitude of the parents and/or student regarding parental assistance towards the cost of a student's
education.

r) loan - a financial resource program for students which must be repaid - usually with interest.
s) low income - a family income before taxes and/or deductions of less than $14,999.
t) maintenance figure - a dollar allowance available for room, board, medical expenses, necessities of life.
u) need analysis - a system of calculation whereby parents' and student's income and assets and indebtedness are considered - the results allow one to determine the expected family contribution.
v) needy student - a student who has demonstrated or established financial need.
w) private four-year institutions - institutions of the postsecondary level which offer a baccalaureate degree and receive no public financial assistance.
x) resident student - a dependent student not living with parents or guardians while enrolled in postsecondary education - usually housed in dormitories or private off-campus facilities.
y) student resource form - survey form developed by the College Entrance Examination Board for use as a measure of student financial resources.
z) work programs - programs where students are employed and earn money to assist them in meeting their cost of education - a financial resource program.
6. Limitations of the Study

The following limitations placed some restrictions on the validity, reliability, and applicability of the results of this study.

a) The effectiveness of the survey instrument utilized may have imposed some limitations of this study. The form itself had no way for students to indicate extraordinary family expenses or circumstances. No student was able to do this so all students were assessed in the exact same manner. No information was indicated regarding age of parents, assets of parents or parental contribution for siblings enrolled in postsecondary educational institutions.

b) The maximum mean income was used for responses which indicated a family income of $30,000 or more.

c) The use of a 20 percent random sample may have been somewhat limiting.

d) Response survey forms from independent students were not used.

e) Commuting students may not have considered allowable room, board, or maintenance figures when computing the parental contribution.

f) The intervening variables and basic assumptions may have further imposed additional limitations to this study.

7. Basic Assumptions

The following lists the basic assumptions considered for
this study:

a) It was assumed that the number of responses received would total at least 50 percent of the sample population.

b) It was further assumed that the students who responded to the survey form would be knowledgeable of the family financial situation and answer all questions honestly and sincerely.

c) It was also assumed that the students were from two parent families if they were dependent students.

d) In order to maintain objectivity it had been further assumed that all parents of dependent students would be contributing toward the cost of education of their children— to the degree to which they were able.

e) It was assumed that the limitations as previously stated would not adversely affect the study.

f) The final assumption made was that this study was of significant importance to warrant carrying it out.

3. Procedure Followed for Collection of Data

The following procedure was followed for the collection of the data:

a) The computer center of the college drew a 20 percent random sample of the full-time undergraduate students enrolled. They also printed up gummed labels to assist in mailing out the survey response forms.

b) A form letter, copy of which is included in the Appendix, was mailed with the Student Resource
Survey form to the students selected for participation. A self-addressed stamped envelope was also included.

c) A follow-up letter was sent to all participants emphasizing the importance of the study and of returning the survey. A copy of this follow-up letter is in the Appendix.

d) As the Student Resource Survey forms were returned to the Student Financial Aid Office, they were identified and separated in the following manner:

1) Those students answering that they were self-supporting, or independent, were removed from consideration.

2) Those students who reported family income of less than $14,999 were separated from the rest.

3) The following information was listed for each of the response forms in the high, or low income group, respectively; mean income, actual parental contribution, number of dependent children, number of dependent siblings in post-secondary education, sex, residency.

e) A matched sample was drawn according to sex and residency between each respective group.

f) The calculation for determination of need according to the College Scholarship Service (1975) formula. Those students whose parents met at least 80 percent of the calculated contribution were labeled
as such. Those students in each respective group whose parents did not meet at least 80 percent of the calculated contribution were also labeled.
g) The data collected and dichotomized in the aforementioned manner was then ready for treatment.

9. Treatment of the Data

A 2 x 2 chi square ($X^2$) formula was utilized to determine significance at .05 level. The results were compared in the following manner:

a) $H_0 : \Pi_{HM} = \Pi_{LM}$
b) $H_a : \Pi_{HM} \neq \Pi_{LM}$
c) $\alpha : .05$
d) Critical value of $X^2 = 3.84$
e) $H_0$ was to be rejected and $H_a$ accepted if the calculated $X^2 > 3.84$.

10. Results of the Study

The following is the data resulting from the study:

<table>
<thead>
<tr>
<th>Table I</th>
<th>Number whose parents did not meet at least 80 percent of expected contribution</th>
<th>Number whose parents met at least 80 percent of expected contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of students</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>$nx = 48$</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Low</td>
<td>$ny = 48$</td>
<td>42</td>
</tr>
<tr>
<td></td>
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</table>

Table II

Critical $X^2$ value = 3.84  Calculated $X^2$ value = 36.04
11. Conclusions and Significance

The data clearly indicates that there is a significant difference in the number of students in the high and low income groups whose parents meet at least 80 percent of their expected (calculated) contribution towards the cost of the student's postsecondary education.

Implications for York College of Pennsylvania:

a) It is apparent that there is a legitimacy to the concerns voiced by our students regarding the fact that their parents are unable or unwilling to assist them to the degree which the need analysis utilized by the college indicates that they should be able.

b) It is further evident that the Student Financial Aid Office at the college enlist the assistance of members of the college community to look more deeply into the calculation for determination of student financial need, and to conduct further research into this area to determine where the problem exists.

c) The importance of the Director of Student Financial Aid to use his professional judgement and expertise to the fullest (as supported under federal statute for use in administering federal financial aid funds) should be emphasized to all members of the college community.

12. Residual Findings

The following data as reported is incidental to the research. Comparisons were drawn using sub-groups of the
students utilized in this study.

Table I

<table>
<thead>
<tr>
<th></th>
<th>Number whose parents met at least 80 percent of expected contribution</th>
<th>Number whose parents did not meet at least 80 percent of expected contribution</th>
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<tbody>
<tr>
<td>High</td>
<td>nx = 24</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
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<td></td>
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<tr>
<td>Low</td>
<td>ny = 24</td>
<td>22</td>
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</table>

Table II

Critical $x^2$ value = 3.84  Calculated $x^2$ value = 15.84

Table III

<table>
<thead>
<tr>
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<th>Number whose parents met at least 80 percent of expected contribution</th>
<th>Number whose parents did not meet at least 80 percent of expected contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>nx = 24</td>
<td>4</td>
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<tr>
<td>Male</td>
<td></td>
<td></td>
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<tr>
<td>Low</td>
<td>ny = 24</td>
<td>20</td>
</tr>
</tbody>
</table>

Table IV

Critical $x^2$ value = 3.84  Calculated $x^2$ value = 24.08

13. Discussion

Table I draws the comparison of all females in the group studied. Table III compares the sub-group of all males in the group studied. Tables II and IV respectively record the critical and calculated $x^2$ values for Tables I and III. It is evident that within each of the sub-groups referred to in the residual findings that a significant difference exists.
These findings, are of course incidental and irrelevant to the study. They are however of interest. It may also give added strength to the importance of further research being undertaken.
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Appendix I

Table I


<table>
<thead>
<tr>
<th>Income Level After Taxes</th>
<th>O.E. Suggested Contribution</th>
<th>C.S.S. Suggested Contribution</th>
<th>Difference in Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 3,000.00</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>6,000.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9,000.00</td>
<td>400.00</td>
<td>0</td>
<td>400.00</td>
</tr>
<tr>
<td>12,000.00</td>
<td>980.00</td>
<td>590.00</td>
<td>390.00</td>
</tr>
<tr>
<td>15,000.00</td>
<td>1,730.00</td>
<td>1,240.00</td>
<td>490.00</td>
</tr>
<tr>
<td>18,000.00</td>
<td>2,910.00</td>
<td>2,190.00</td>
<td>720.00</td>
</tr>
<tr>
<td>21,000.00</td>
<td>4,230.00</td>
<td>3,680.00</td>
<td>550.00</td>
</tr>
</tbody>
</table>

(From The College Board News, June 1975)
## Appendix II

Table II

**STUDENT REPORTED MEAN PARENTAL CONTRIBUTION COMPARED TO C.S.S. CALCULATED CONTRIBUTION**

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Student Reported</th>
<th>C.S.S. Calculated</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Institutions</td>
<td>$934.00</td>
<td>$1,568.00</td>
</tr>
<tr>
<td>Private Four-Year</td>
<td>1,338.00</td>
<td>1,820.00</td>
</tr>
<tr>
<td>State Owned</td>
<td>697.00</td>
<td>1,408.00</td>
</tr>
<tr>
<td>State Related</td>
<td>754.00</td>
<td>1,471.00</td>
</tr>
<tr>
<td>Private Two-Year</td>
<td>750.00</td>
<td>1,557.00</td>
</tr>
<tr>
<td>Public Two-Year</td>
<td>362.00</td>
<td>1,311.00</td>
</tr>
<tr>
<td>Proprietary</td>
<td>628.00</td>
<td>1,078.00</td>
</tr>
</tbody>
</table>

(From Pennsylvania Higher Education Assistance Agency Report, 1975)
Appendix III

Table III

DISTRIBUTION OF STUDENT REPORTED PARENTAL CONTRIBUTION

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Total All Institutions</th>
<th>Four-Year</th>
<th>Two-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>State Owned</td>
</tr>
<tr>
<td>None</td>
<td>21.8%</td>
<td>16.6%</td>
<td>19.7%</td>
</tr>
<tr>
<td>$1 - 200</td>
<td>18.2%</td>
<td>14.3%</td>
<td>22.4%</td>
</tr>
<tr>
<td>201 - 400</td>
<td>9.5%</td>
<td>8.1%</td>
<td>10.7%</td>
</tr>
<tr>
<td>401 - 600</td>
<td>7.7%</td>
<td>7.1%</td>
<td>8.2%</td>
</tr>
<tr>
<td>601 - 1000</td>
<td>8.8%</td>
<td>7.6%</td>
<td>9.8%</td>
</tr>
<tr>
<td>1001 - 1500</td>
<td>8.4%</td>
<td>7.3%</td>
<td>10.5%</td>
</tr>
<tr>
<td>1501 - 2000</td>
<td>7.5%</td>
<td>6.8%</td>
<td>10.4%</td>
</tr>
<tr>
<td>2001 - 2500</td>
<td>5.1%</td>
<td>6.5%</td>
<td>4.9%</td>
</tr>
<tr>
<td>2501 - 3000</td>
<td>4.0%</td>
<td>7.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>3001 &amp; above</td>
<td>9.1%</td>
<td>18.7%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Mean: $934, $1338, $697, $754, $750, $362, $628

(From Pennsylvania Higher Education Assistance Agency Report, 1975)
## Appendix IV

### Table IV.

**DISTRIBUTION OF C.S.S. EXPECTED PARENTAL CONTRIBUTION**

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Total All Institutions</th>
<th>Four-Year</th>
<th>Two-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>State Owned</td>
</tr>
<tr>
<td>None</td>
<td>11.2%</td>
<td>9.4%</td>
<td>11.5%</td>
</tr>
<tr>
<td>$1 - 200</td>
<td>3.3</td>
<td>2.8</td>
<td>3.6</td>
</tr>
<tr>
<td>201 - 400</td>
<td>4.8</td>
<td>4.3</td>
<td>5.0</td>
</tr>
<tr>
<td>401 - 600</td>
<td>8.6</td>
<td>7.2</td>
<td>9.8</td>
</tr>
<tr>
<td>601 - 1000</td>
<td>9.6</td>
<td>7.8</td>
<td>11.3</td>
</tr>
<tr>
<td>1001 - 1500</td>
<td>21.8</td>
<td>18.5</td>
<td>24.2</td>
</tr>
<tr>
<td>1501 - 2000</td>
<td>7.7</td>
<td>7.7</td>
<td>7.5</td>
</tr>
<tr>
<td>2001 - 2500</td>
<td>7.7</td>
<td>8.1</td>
<td>8.3</td>
</tr>
<tr>
<td>2501 - 3000</td>
<td>4.5</td>
<td>5.2</td>
<td>4.2</td>
</tr>
<tr>
<td>3001 &amp; above</td>
<td>20.7</td>
<td>29.0</td>
<td>14.8</td>
</tr>
<tr>
<td>Mean</td>
<td>$1568</td>
<td>$1920</td>
<td>$1408</td>
</tr>
</tbody>
</table>

(From Pennsylvania Higher Education Assistance Agency Report, 1975)
Dear Student:

You have been randomly selected to participate in a student financial resource survey sponsored by the Financial Aid Office and the Student Affairs Division of York College of Pennsylvania. This survey is designed so that we can better evaluate the needs of all our students.

It is important that you read each question carefully, answer all questions, and return it to the Financial Aid Office by January 27, 1976. Any identifiable information such as name, student I.D. number is not requested.

Enclosed you will find a self-addressed envelope for use in returning the survey.

Thank you so much for your time and effort in this matter.

Sincerely yours,

John J. Pierog
Director, Student Financial Aid

JJP/rs
Encl.
January 27, 1976

Dear Student:

On January 19 you received a Student Resource Survey and a self-addressed, postage-paid envelope for your use in returning the survey.

Because of the nature of this form, we did not request any information which could identify individual student participant. As a result, we are mailing this follow-up to all students selected for participation urging return of the completed survey.

The results of the survey may have an effect on all students, not merely those receiving financial assistance, therefore it is essential that as many completed survey forms are returned as possible.

If you have not completed and returned this form, please take a few moments to do so. If you have, we thank you for your assistance.

Sincerely yours,

John J. Pierog
Director, Student Financial Aid

JJP/rs
Encl.
The purpose of this study, conducted jointly by this institution and the College Entrance Examination Board, is to collect information for use in annual applications to the Federal Government for student financial aid program funds and for use in reports to the Federal Government and state agencies. It is hoped that the results will be helpful in the assessment of the adequacy of student financial aid programs. The information needed can be collected only from students, we will be grateful for your cooperation.

You are not asked to provide your name or other identifying data, and your responses will be completely confidential. Please enter your response to each question by recording the response number in the appropriate box on the accompanying response coding form.

Spaces 1, 2, and 3 are reserved for institutional identification.

---

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your current class level?</td>
<td>0. High school senior, 1. College sophomore, 2. College junior, 3. College senior, 4. Fifth-year undergraduate, 5. Fourth-year (or more) graduate or professional student</td>
</tr>
<tr>
<td>2. What class load are you carrying?</td>
<td>0. Never enrolled, 1. First-year graduate or professional student, 2. Second-year graduate or professional student, 3. College sophomore, 4. College junior, 5. College senior, 6. Third-year graduate or professional student, 7. Fourth-year (or more) graduate or professional student</td>
</tr>
<tr>
<td>3. Age at nearest birthday?</td>
<td>0. 18 or under, 1. 19, 2. 20, 3. 21, 4. 22-24, 5. 25-29, 6. 30-34, 7. 35-39, 8. 40-44, 9. 45 and over</td>
</tr>
<tr>
<td>4. Sex</td>
<td>0. Male, 1. Female</td>
</tr>
<tr>
<td>7. If you have children, how many of them are dependent upon you for support?</td>
<td>0-1, 2, 3, 4, 5-6, 7-9, 10 or more</td>
</tr>
<tr>
<td>9. What is the highest level of education you plan to complete here or elsewhere?</td>
<td>0. Doctor's degree (Ph.D., Ed.D., J.D., M.D., D.D.S., etc.), 1. Master's degree (M.A., M.S., etc.), 2. Bachelor's degree (B.A., B.S., etc.), 3. Non-degree Certificate Program, 4. 2-year Associate degree</td>
</tr>
</tbody>
</table>

---


---

RESPONSE CODING FORM

Enter the appropriate box, the number associated with your response to each question. June 1974
Questions 28 to 49 - Continue to use following series of response codes:

**Code** | **Range**
---|---
0 | for $0 or None
1 | $1 to $200
2 | $201 to $400
4 | $501 to $1,000
5 | $1,001 to $1,500
6 | $1,501 to $2,000
7 | $2,001 to $2,500
8 | $2,501 to $3,000
9 | $3,001 and above

**SUMMER EMPLOYMENT (Total amount, before taxes, earned last summer)**

28. College Work-Study
30. On-Campus employment (Non-Work-Study)
29. Assistantships, teaching, or research
31. Other employment

**PERSONAL SAVINGS**
32. From savings (exclude amounts in 28-31)
33. Non-Resident Tuition Waiver
34. State Scholarship Awards and Fellowships
35. Basic Educational Opportunity Grants
36. Supplementary Educational Opportunity Grants
37. Institutional grants or scholarships (include grants, fellowships, and traineeships)
38. Other federal fellowships, grants, and traineeships not previously listed (including Nursing, Health Professions, or Law Enforcement Education Program Grants
39. Scholarships or grants or fellowships from sources not previously listed
40. G. I. Bill
41. Social Security
42. Welfare
43. State Vocational Rehabilitation
44. Other Federal or State benefits not previously listed

**LOANS**
45. National Direct Student Loans
46. Law Enforcement Education Program or Nursing or Health Professions Loan
47. Federally Insured Student Loan, or other state guaranteed loans (loans obtained through banks or other lending agencies)
48. Institutional long-term loans not previously listed
49. Other Loans

**50. How much will you and your spouse earn, before taxes, this calendar year?**

0 | $1 to $999
1 | $1,000 to $1,999
2 | $2,000 to $2,999
3 | $3,000 to $3,999
4 | $4,000 to $4,999
5 | $5,000 to $5,999
6 | $6,000 to $6,999
7 | $7,000 to $7,999
8 | $8,000 to $8,999
9 | $9,000 to $9,999

51. Indicate the amount of your (and your spouse's) present indebtedness under all long-term student loan programs (include loans taken out this year, items 45 to 49, as well as educational debts incurred in prior academic years.)

0-10 | $1,000 to $1,499
1-20 | $2,000 to $2,499
21-30 | $3,000 to $3,499
31-40 | $4,000 to $4,499
41-50 | $5,000 to $5,499
51-60 | $6,000 to $6,499
61-70 | $7,000 to $7,499
71-80 | $8,000 to $8,499
81-90 | $9,000 to $9,499

52. Did you apply for financial aid at your institution for this academic year? (Refers to college work-study #28 & 29, federal and institutional grants #35 to 37, and federal loans #45 & 46.)

0 | No
1 | Yes, I applied for aid and it was granted
2 | Yes, I applied for aid, but I was told that I was ineligible
3 | Yes, I applied for aid, but I was told no funds were available

53. Are you participating in your institution's Educational Opportunity Program or similar campus program?

0 | No
1 | Yes

54. For EOP participants only, indicate the types of assistance you are receiving

0 | None
1 | Financial aid and tutoring
2 | Tutoring only
3 | Counseling only

55. How many of your brothers or sisters are dependent on your parents or legal guardian for financial support? (0 to 11)

56. How many of your dependent brothers or sisters are also in college this academic year? (Cannot exceed response to item #55.)

57. Did you apply for financial aid at your institution for this academic year?

0 | Yes
1 | No
2 | I don't know

58. Did you apply for Federal tax purposes for the last calendar year?

0 | Yes
1 | No
2 | I don't know

59. Are you receiving food stamps?

0 | Yes
1 | No

60. When at college, where do you normally live?

0-10 | for $100 to $200
1-20 | for $201 to $400
21-30 | for $401 to $600
31-40 | for $601 to $800
41-50 | for $801 to $1,000
51-60 | for $1,001 to $1,500
61-70 | for $1,501 to $2,000
71-80 | for $2,001 to $2,500
81-90 | for $2,501 to $3,000
91-100 | for $3,001 and above

62. How do you usually get to your college campus?

0 | Walk
1 | Automobile
2 | Use public transportation
3 | Car pool
4 | Bike or motorcycle
5 | College bus
6 | Hitchhike

63. How would you rate your academic achievement as measured by grades in college?

0 | Mostly A's
1 | Mostly B's
2 | Mostly C's
3 | Mostly D's

64. Are you a veteran of the U.S. Armed Forces?

0 | Yes
1 | No

65. How were you admitted?

0 | As a first-time freshman
1 | As a transfer from an in-state community college
2 | As a transfer from an out-of-state community college
3 | As a transfer from an in-state public college or university
4 | As a transfer from an out-of-state college or university
5 | As a graduate of a 2-year institution
6 | As a graduate of a 4-year institution
7 | Other

66. Are you planning to return to this institution next term?

0 | No
1 | Yes, I plan to return to my degree
2 | Yes, I plan to return to the state
3 | No, I plan to drop out and return later

67. How satisfied are you with this institution as a whole?

0 | Completely satisfied
1 | Satisfied
2 | Indifferent
3 | Unsatisfied
4 | Completely unsatisfied

An additional 13 local questions may have been added to this version of the survey. If so, please answer questions 66 to 80 according to the instructions on the separate question sheet.

UNIVERSITY OF CALIF.
LOS ANGELES
MAY 5 1976
CLEARINGHOUSE FOR JUNIOR COLLEGES