THE FIRST SEMESTER WORK-STUDY STUDENT
AT APPALACHIAN STATE UNIVERSITY

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THE FIRST SEMESTER WORK-STUDY STUDENT
AT APPALACHIAN STATE UNIVERSITY

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This effort is dedicated to those students who have had the courage to expand their horizons when to do so caused a personal sacrifice on their part.

I wish to acknowledge the members of my research committee for their guidance while compiling my first research work.
Problem:
The thinking of many is that students should not use employment as a source of financial aid during their freshman year. With an increasing enrollment of students who have financial need it becomes more important that we know more about the effects of employment on academic progress and personal development. The purpose of this study is to provide information that will be useful when guiding the employed student.

Method:
The subject population was chosen from the first semester work-study student. Using the common factors of financial need and predicted grade point average (PGPA), a comparison between the first semester freshman grade point average (GPA) of those students who were employed and those who were not employed was studied. One hundred ninety subjects were studied. One hundred ten were employed and eighty were not.

Academic progress was measured by the difference between the mean PGPA and the mean GPA of the two groups using the non-employed as the control group.

Characteristics of the two groups were compared by questionnaire.

Results:
When the mean difference between the PGPA and the GPA were compared for the employed work-study students and the non-employed eligible work-study students, the results showed that employment was not detrimental to
academic progress. The results also showed that the employed student progressed statistically significantly better than the non-employed. No statistically significant difference was found when characteristics of the two groups were compared.

Conclusions:

Students should not be discouraged from employment as a means to meet expenses for higher education during their freshman year. In fact, it could be argued that employment is beneficial for academic progress.
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CHAPTER I
THE PROBLEM

Introduction

With an increased enrollment of students from low-income families, it has become increasingly more important to provide financial aid through work-study programs and a more permissive attitude toward off-campus employment.

It is thought by many that entering freshmen should not be allowed to engage in remunerative work because it may hinder academic and social achievement. This is especially true of high school counselors who have traditionally recommended to high school seniors and their parents a non-employed freshman year. Others have an opposite view; this view infers that entering freshmen are not significantly handicapped in scholastic or social progress by a limited employment program.

This question becomes more important as a result of an expanded federally assisted program of college work-study programs. These programs emphasize financial aid for entering freshmen from low-income families. It is essential that persons in the field of higher education know more about the effects of employment on the entering freshman student.

The studies made on this subject indicate that a freshman employed no more than fifteen hours each week on a supervised work-study program does not impair academic progress. These findings are not extensive, are not recent, and do not include a comparison of characteristics necessary for a proper understanding of this question.
The purpose of this study is to gain information regarding the effects remunerative work might have on the academic success of the first semester freshman student and to compare characteristics of the financially needy students who are employed to those who have a financial need but are not employed.

It is the hope of the author that the results of this study will be useful to those who work with the financially needy student.

The assumption may be made that emphasis has been placed on guidance of the employed student at Appalachian State University. This is especially true of the college work-study program. Informal study is made by the financial aid office regarding academic success and social progress of students employed by the college work-study program. However, this study represents the first systematic research to determine the effects of employment on the first semester freshman student using a comparison between predicted grade point average (PGPA) and grade point average (GPA) for determining factors.

**Background Information**

A movement is underway on all government levels to tap the resources of a segment of our population that is socio-economically disadvantaged. Some think that if the economic barrier to higher education can be removed, more people from this social strata will attend institutions of higher education. In order to take advantage of this human resource the federal government passed legislation to furnish financial aid to those who need it to pay the costs of higher education. The college work-study program is a part of this legislation.
Enrollment of the financially needy students will increase. As this enrollment increases, more needs to be known about their progress in academics, attitudes, etc.

Statement of the Problem

Very little information has been published concerning the first semester work-study student. Even less information has been published about the student who is eligible for the work-study program but elects not to use this opportunity for financial aid.

The present investigation is designed to determine if employment of eligible work-study students has any effect on their academic progress during this first semester of study, and to compare characteristic differences between the eligible work-study students who are employed and the eligible work-study students who are not employed.

Importance of the Study

As a result of a more complex society, post-secondary education has become important. People have a greater need to relate to a wide range of social and economic strata today than they did previously. They must know more about the many career opportunities available to them. They need more general knowledge, and, most of all, they need to feel self-fulfillment in their personal lives. Because educators recognize the importance of these factors, they need to turn their attention to the problem of providing equal opportunity for all to fulfill these needs. As more students from the middle and lower economic class become interested in post-secondary education and as the cost of this education increases, financial aid for higher education has become a necessity. The opportunity to work
has and will continue to be the deciding factor for many when seeking sources for financing higher education. In the fall of 1974 seven and four-tenths percent of all entering freshmen were independent of their parents for financial support. In the fall of 1975 fifteen and seven-tenths percent were independent of their parents regarding financial support.³

**Need for the Study**

Studies that have been made on the work-study student are divided into three broad areas: (1) The academic success of all work-study students; (2) Academic success of freshmen employed students; (3) Characteristics of all employed students. Indicated is an in-depth study of the initial academic success of the work-study student. Also needed is a study of the characteristics of the work-study student.

An emphasis has been placed on counseling the employed student at Appalachian State University. This situation is especially true of the work-study student.

"Informal studies have been made on the academic and social life of the work-study student by those concerned with their progress."⁴ However, this research represents the first formal study conducted on the work-study student at Appalachian State University.

The need for this study as it applies to any institution sponsoring a work-study program is two-fold: (1) To improve the academic progress of both the employed work-study and the non-employed work-study student; (2) To provide information about the personal characteristics of the employed work-study student and the non-employed work-study student.
History, Purpose and Explanation of the College Work-Study Program

As more and more high school graduates in this country sought education beyond high school, the gap between those who could afford and those who could not afford post high school education became wider. College is no longer exclusively a middle- and upper-class institution. Because of the outgrowth of a philosophy in this country that all persons should have equal opportunity for education, the College Work-Study Program was initiated. The College Work-Study Program is a part of the Economic Opportunity Act of 1964.

This legislation was sponsored by Congressman Wayne L. Hayes and signed into law on August 20, 1964, by President Johnson. The specific title and reference of this portion of the act is Title 1, Part C, section 121-131 of the Economic Opportunity Act of 1964, Public Law 88-452.

The purpose of this legislation was to expand part-time employment opportunities for students, particularly those from low-income families, who are in need of part-time employment in order to pursue studies in institutions of higher education.

Federal grants are made directly to the educational institution for the purpose of creating jobs for students. These jobs must be of a public interest and with a non-profit organization.

Administrative guidelines for the program are developed by participating institutions. Work-study funds are only a part of a financial package and must be apportioned according to other financial aid received by the student.

The federal share of money paid to students in this program is 80 percent. The institutional share is 20 percent. The institutional share is paid by the college when on-campus work is done. If an off-campus job is held, the off-campus employer pays the institutional share.
The college is responsible for the selection of students who are eligible for work-study and their job placement. The requirements for eligibility are given to the college by the director of Student Financial Aid, Office of Economic Opportunity. Institutions must follow certain guidelines, identify the students from low-income families and offer work-study benefits to these students first. A student who is independent of family financial support may apply on the basis of his or her own need.

The requirements of the student to be eligible for the work-study program are: (1) Be in need of the earnings of such employment in order to pursue a course of study at the institution; (2) Be capable of maintaining good standing in a course of study while employed under the program; (3) Be accepted for enrollment as at least a half-time student at the institution; (4) Be a national of the United States or in the United States for the purpose of becoming a citizen of the United States.

The positions offered by the institution's work-study program should be of public interest and must be free of any political or religious movement.

The College Work-Study Program at Appalachian State University

The administrative aspects of the work-study program at Appalachian State University are shared by a director of financial aid and an assistant. The director and assistant director are in turn responsible for the Vice-Chancellor of Student Affairs. The financial aid office maintains liaison with the Office of Education, applies for federal work-study funds, develops guidelines and procedures for the selection of students under federal regulations, and documents and determines the actual work-study allocations. The financial aid office develops work-study positions on or off campus,
interviews and screens students for placement, provides work-study students with job counseling, maintains liaison with the supervisors of work-study students, places students in jobs and conducts follow-up studies. Supervisors' responsibilities include final selection of the student for the job, supervision and training for the student, provision of information as needed for follow-ups, assurance that students' work hours are adequately kept and that pay rolls are sent to the financial aid office in time for the students to receive pay on schedule. Pay rolls are completed in the financial aid office by the third working day of each month. Students receive their checks on the fifteenth calendar day of each month. In addition, off campus supervisors using work-study students under a work-study agreement with Appalachian State University must pay to the University the 20 percent which the University uses to match federal funds for the work-study students. The fiscal affairs office maintains accounting records including the federal and institutional contributions to work-study agreements, compensation to students, withholding for federal and state taxes and assists the financial aid office in preparation of fiscal reports. At present an undergraduate student can be employed up to fifteen hours per week during the academic year and forty hours per week during the summer months. The number of hours a graduate student can be employed is the same as an undergraduate. The hourly pay rate for an undergraduate is $3.25 (base pay). The hourly pay rate for a graduate student is $3.50.

In order for students to be allocated financial aid they must first make application with the financial aid office. The financial aid office then reviews his or her financial situation and makes a determination of student need. When an applicant is qualified for the work-study program, he or she is then referred to job openings for an interview and possible placement by the job supervisor.
The financial aid office seeks jobs from potential supervisors through publicity, correspondence and personal contact. Potential supervisors make application for work-study students through an application form which asks for the job title, description, needed skills, and hours per week a job requires. When the work-study students come to the financial aid office, they are counseled and interviewed. The topics covered are: the work-study program, the responsibilities of a work-study student, a description of available jobs, how the student's interest and major field fit certain jobs, hours and pay rate are also discussed. A work contract is then drawn up between the student, supervisor and financial aid officer.

A student who remains in good academic standing, as determined by each department of the university, is considered eligible for continued work-study benefits.\(^5\)

To write comprehensively on the work-study program would be too lengthy to exclude inaccuracy and boredom. It is for better research and more interesting reading that the following limitations were made.

**Limitations of the Study**

The sample is from those students who were eligible for the work-study program at Appalachian State University during the fall semester of the 1975-76 school year. Only students who were enrolled as freshmen for the first time were considered. All students were enrolled in the general college to pursue a baccalaureate degree. Therefore, the conclusions reached by this study apply only to students who were eligible for work-study benefits, were enrolled full time, were pursuing a baccalaureate degree, and were not employed more than fifteen hours per week.
Definition of Terms


2. Eligible Work-Study Student--A student who has been offered employment to meet college expenses.

3. Employed Work-Study Student (EWSS)--A first semester freshman who was eligible for the federally funded College Work-Study Program and elected to use the benefits.

4. Non-Employed Work-Study Student (NEWSS)--A first semester freshman who was eligible for the Work Study Program but declined the benefits.

5. First Semester Freshman--A student enrolled in the Fall for the first time at any institution and taking twelve or more credit hours.

6. Initial Success--Academic success at the end of the first semester of the freshman year.

7. Academic Progress--Progress as determined by the relationship between the predicted grade-point average and the grade-point average at the end of the first semester of the freshman year.

8. Employment--Any work of remunerative nature.

9. Characteristic--A variety of personality facets.

10. Predicted Grade-Point Average (PGPA)--A projected quality point based on a 0 - 4.0 as determined by high school rank and SAT scores.

11. Grade-Point Average (GPA)--An average of all academic grades during the first semester of the freshman year using the scale of 0 - 4.0.

12. Financial Need--A point at which a student is determined to be eligible for work-study benefits.

Organization of the Study

Chapter I of this study is composed of the following: research design, background information, statement of the problem, importance of the study, need for the study, history, purpose and explanation of the College Work-Study Program, the College Work-Study Program at Appalachian State University, limitations of the study, definitions of terms, and organization of the study.
Chapter II contains a review of literature that relates to the study. This portion is divided into background literature, studies made on all employed students, academic progress of the work-study student, academic progress of all first semester employed students, characteristics of the college work-study student, and summary of literature and related studies.

Chapter III consists of procedures employed in executing the research. The following steps were used: selection of subjects; matching PGPA of the EWSS with the NEWSS; questions that the eligible work-study listed as most important; refining the questionnaire; distributing the questionnaire; follow-up letter; processing data; computer analysis; and statistical treatment of data.

Chapter IV gives the results of data, discussion of data and an analysis of data.

Chapter V contains the investigator's summary of findings, conclusions and recommendations for further study.

Chapter VI summarizes the completed study.

**Research Design**

The design of this study involves two methods of research: (1) comparison of recorded data; (2) questionnaire results. In order to compare the academic success of the NEWSS with the EWSS, a list of all first semester students who were eligible for work-study benefits was made. Through records kept by the financial aid office, this list was divided into two groups: those who were employed on the work-study program and those who were eligible but elected not to be employed during the first semester. These two lists were further divided by sex. To these four lists of names were added the PGPA and GPA at the end of the first semester. Financial need was also a common factor.
A questionnaire was used to compare the characteristics of the first semester NEWSS with the first semester EWSS. The first step in making this questionnaire was informal discussions with both EWSS and students who were eligible for work-study benefits but chose not to be employed. The students contacted were selected at random and asked to volunteer information and suggest questions they thought would be appropriate to the study. As a result of this survey, a list of fifteen personal items and two identifiable items was made. To refine this list of items, a group of eligible work-study students divided by: (1) five non-employed work-study females; (2) five employed work-study females; (3) five non-employed work-study males; and (4) five employed work-study males were asked to rate each item. A scale of one (1) representing the highest rating and four (4) representing the lowest rating was used. Of the original fifteen items only four received a rating of less than two (2). Those receiving a rating of less than two (2) were discarded and those receiving two (2) or better were retained.

The resulting questionnaire was sent to all students who were eligible for the work-study program. The names and addresses of the students eligible for the work-study program were recorded from the files kept in the financial aid office. A questionnaire, explanation of the purpose, and instructions for completing the questionnaire were sent to each of the students. A stamped self-addressed envelope was included in order to encourage students to return the completed questionnaire. It should be noted that this was a confidential questionnaire. No request was made for a signature, nor was any part of the request designed to identify any student. The confidential nature of this study assured more accurate information and also kept the study consistent with good research principles.
After two weeks from the date the questionnaire was mailed, a follow-up letter was sent to each of the students. They were asked if they had returned the questionnaire, and if they had not, to please complete and return the questionnaire. After another two weeks the assumption was made that all available results were received. The data from the questionnaire and the information concerning PGPA and first semester GPA were placed on computer cards and processed for statistical results.
CHAPTER II
REVIEW OF LITERATURE AND RELATED STUDIES

Literature on the Background of the College Work-Study Student

Only a few studies have been made on the background of the work-study student except for the factor of family income. Each of the studies reviewed on family income show a higher ability level in students from higher income families. The studies do not show a difference in GPA regardless of family income level.

Callihan, using the Sterns Activity Index (SAI), studied personality and background differences between the employed student and the non-employed student. The author found no statistically significant difference between those two groups when personality and background variables are considered.

Academic Progress of All Employed Students

A study by Henry shows that limited employment is not detrimental to academic achievement during the freshman year. Information reveals no detrimental effects if the employment load does not exceed fifteen clock hours per week and the academic load does not exceed a normal number of credit hours. Some studies show no detrimental effects of forty hours of employment as long as the academic load is normal and the student is properly supervised.

Hay and Lindsay conducted a study at Pennsylvania State University in which males and females were divided by employed and non-employed.
A third group of associate degree students were studied using the same grouping and using the same criteria for evaluating academic success. Their findings show a detrimental effect as a result of employment when studying the four-year degree student, but no detrimental effect of employment when studying the two-year degree student. However, the authors pointed to limitations in their study and suggested that other studies be made. This is the only research found which reported detrimental effects on grades when the number of employed hours was less than fifteen.

**Academic Progress of the College Work-Study Student**

A study that is dated but one of the most thorough is that of Henry. This study was made on the work-study student and the Student Labor Program. The subjects were divided into four ability levels using high school rank and scores from the Scholastic Aptitude Test. The author found that the Student Labor Program students had higher ability ratings but found no difference in the two groups when grade-point average was matched. These results conclude that the work-study student who comes from a low income family either spends more time at study, is more highly motivated or both of these. Henry also found that if a work program is properly supervised, there are no detrimental effects on grades for the lower ability student or higher ability level student as a result of employment.

In the same year (1967) Laverty conducted a study on freshman students who were on the work-study program. The results of this study indicate that there is no statistically significant difference between the academic achievement of those work-study students who were employed and those who were not employed during their freshman year.
This experiment indicates that freshman work-study students can be employed up to fifteen hours during their freshman year with no detrimental effect on their academic achievement for that year.

Baker of Butler University made a study of the effects of employment on freshmen and sophomores and found no detrimental effects from employment up to forty hours per week and only one-half letter grade difference when forty to sixty hours were taken up with employment. It should be noted here that no aptitude criteria were used. In support of Baker's studies, Trueblood of Indiana University, found similar evidence in his studies. An orientation test was used to establish ability and all students employed were considered. The conclusions were that no detrimental effect could be established as a result of employment regardless of sex, class, college major, etc.

The most comprehensive study of the effects of the work-study student and his academic achievement as it relates to employment was made in a doctoral dissertation by Hamm. In this study the College Aptitude Test was used to determine aptitude for college work. Also, findings were made according to class, sex, age and according to enrollment in different colleges within the university.

As a result of this study, the researcher generally concluded that no adverse effects on academic performance could be traced to the College Work-Study Program regardless of the number of hours employed.

Academic Progress of All First Semester Employed Students

Henry of the American College Testing Program, made a study on the academic success of first semester employed freshmen. This study included students on the College Work-Study Program and the Student Labor
Program. Henry compared these two groups with each other and with a control group from the non-employed student body. His conclusions are: no statistically significant difference when academic success is considered between the student labor employee and the non-employed student. Therefore, it may be concluded that a well supervised employed student can carry up to fifteen employed hours and a full course of college work without harmful effects from employment.

Characteristics of the College Work-Study Student

Understanding the role of personality in the performance of the work-study student may be of use in a number of applications. Two examples are selection and counseling. In the selection of program members, among the qualified candidates those who are most likely to complete a program of studies should be chosen first.

Those students who have characteristics that may be harmful to their efforts should be given the extra attention they need to achieve their goals. Through proper counseling it can contribute to a more rewarding life after college.

Johnson,15 of Boston University, studied the effect of self-esteem as it relates to the type employment engaged in by the work-study student. The conclusions were: students involved with employment related to their major course of study have a more positive self-image than students involved with employment not related to their major course of study.

Falck,16 of the University of Colorado, compared the attitudes, academic achievement, and perceptions of the University environments of the work-study student who received guidance with those work-study students who did not receive guidance. No statistically significant differences were found between the two groups.
Bradfield,\textsuperscript{17} of the University of North Dakota, investigated the low income male student and made a comparison with the middle class student. The experimental group was taken from the work-study male population. The control group was taken from the non-employed male students. The findings showed no significant difference between the two groups. A slight (non-statistical) difference was found when a like for structure was studied. The work-study student showed a dislike for structure both imposed by others and self-imposed.

Baker\textsuperscript{18} of Butler University researched the employed student as to the effects of the number of hours worked, psychological ratings and extra-curricular activities. The findings were: regardless of the number of hours given to employment the amount of time given to extra-curricular activities did not diminish.

Summary of Literature and Related Studies

Although some studies show a higher academic ability in students who come from a more affluent segment of our society, there is no evidence that points to a higher academic achievement level in this same group.

Studies made on the employed student are varied in purpose and results. Generally, these studies conclude: no significant difference in academic performance of associate of arts degree candidates, regardless of the number of hours employed. Studies do show a difference when comparing the four-year degree student with the two-year degree student as to academic progress and the number of hours spent in remunerative work. As the number of hours increases above twenty per week, the four-year degree student is detrimentally affected in academic performance.
The work-study student has been studied from these viewpoints: class, sex, age, ability level, college major. Studies that have been made show no significant difference in academic success or personality traits of the EWSS and the NEWSS. (Note: work-study students are limited to fifteen hours employment week.) Significant in this review is that there are no studies on the first semester EWSS as compared to the first semester NEWSS.

Characteristics of the work-study student have received even less attention than academics of the work-study student. Studies that have been made are enlightening for background information in that they treat the selection of work-study students, counseling the work-study student, the type of employment in which the student is involved (high-level career, low-level career), number of hours employed, etc. These studies indicate that there is little difference in the characteristics of a student who is a member of the work-study program and one who is not.
CHAPTER III
PROCEDURES

The purpose of this study is to determine if employment has any detrimental effects on the academic performance of the first semester freshman in the College Work-Study Program and to compare the characteristics of the first semester work-study student. The procedures in this study involved: (1) selecting subjects who could be divided into two distinct groups, those students who were employed by the work-study program and those who were not employed by the work-study program; (2) designing an appropriate method to compare academic progress; (3) designing an appropriate method to compare the characteristics of the two groups; (4) collecting data; (5) processing data; (6) statistical treatment of data.

Selection of Subjects

Through the permission of the director of financial aid and the cooperation of the financial aid department, a complete list of students who were eligible for college work-study benefits was made. This list was divided by those students who were employed and those who for reasons of their own elected not to use work-study benefits as a part of their college costs. The admissions office consented to provide the PGPA and the first semester GPA for all eligible work-study students. No identifying data were used that would reveal any student's name with his PGPA or GPA. This is in keeping with good research principles and the Family Right to Privacy Act of 1964. There were one hundred ninety subjects. One hundred ten
were EWSS and eighty were NEWSS. Table 1 depicts the number of subjects by total number, status, and sex. Table 2 shows an analysis of returned questionnaires by the number mailed, number returned and percent of returns. The returns are also divided by employment status and sex. It should be noticed that the numbers for the academic progress comparison of this study are not the same as the number used for the characteristics of the work-study student. This is due to the difference in those number of subjects who were eligible to receive a questionnaire and the number who returned the answered questionnaire. Also, the number of responses to the items on the questionnaire were not consistent due to omitted answers. Item 1, sex, was omitted on some of the questionnaires. As a result, Table 4 is not consistent by numbers with Tables 5, 6, and 7. The questionnaires that did not indicate sex were removed before analysis by sex became a factor in the study.

With the two common factors (a) eligibility for work-study benefits and (b) common PGPA, the researcher was able to proceed with an academic progress comparison of the two groups.

Designing a Method to Compare Academic Progress of the Work-Study Student

The first step of the study was to have common factors for the control group and the experimental group. Financial need as determined by eligibility for the work-study program, and PGPA were the factors common to both subject groups. With these two common factors, academic progress was compared by a difference between PGPA and GPA. The non-employed work-study student was used as the control group and employed work-study as the experimental group. The difference in GPA was used as the dependent variable to determine if employment has an effect on academic progress during
TABLE 1
SUBJECTS BY TOTAL NUMBER, EMPLOYMENT STATUS, AND SEX

<table>
<thead>
<tr>
<th>Total Number of Subjects</th>
<th>Total Non-Employed Work-Study</th>
<th>Total Employed Work-Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>190</td>
<td>80</td>
<td>110</td>
</tr>
<tr>
<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
</tr>
<tr>
<td>90 100</td>
<td>40 40</td>
<td>50 60</td>
</tr>
<tr>
<td></td>
<td>Mailed</td>
<td>Returned</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>Employed Work-Study Males</td>
<td>50</td>
<td>33</td>
</tr>
<tr>
<td>Employed Work-Study Females</td>
<td>60</td>
<td>51</td>
</tr>
<tr>
<td>Total Employed</td>
<td>110</td>
<td>84</td>
</tr>
<tr>
<td>Non-Employed Work-Study Males</td>
<td>40</td>
<td>31</td>
</tr>
<tr>
<td>Non-Employed Work-Study Females</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>Total Non-Employed</td>
<td>80</td>
<td>61</td>
</tr>
<tr>
<td>Grand Total</td>
<td>190</td>
<td>145</td>
</tr>
<tr>
<td>Males</td>
<td>90</td>
<td>64</td>
</tr>
<tr>
<td>Females</td>
<td>100</td>
<td>81</td>
</tr>
</tbody>
</table>
the first semester of the freshman year. For a more complete study, both groups were also evaluated by sex.

**Designing a Method to Compare the Characteristics of the Work-Study Student**

A questionnaire was designed to compare the characteristics of the first semester work-study students who elected employment with the first semester work-study students who declined employment. The first step in making this questionnaire was informal discussions with both EWSS and students who were eligible for work-study benefits but chose not to work. The students contacted were selected at random and asked to volunteer information and suggest questions they thought would be appropriate for the study. An equal number of EWSS and NEWSS were contacted. As a result of this survey, a list of sixteen personal items were made. Two identifiable items, employment status and sex, were noted. Table 3 shows the results of this objective. To refine the questionnaire, a group of eligible work-study students divided by: (1) five employed work-study females; (2) five non-employed work-study females; (3) five employed work-study males; and (4) five non-employed work study males, were asked to rate each item. A scale of one (1) representing the highest rating and four (4) representing the lowest rating was used. Of the original sixteen items only four received a rating of less than two (2), which were discarded, and those receiving a rating of two (2) or better were retained. Tables 4 and 5 show the ratings of each questionnaire item. The final questionnaire used in the study is found in Appendix A.

**Collecting Data**

The resulting questionnaire was mailed to all students who were eligible for the work-study program. The names and addresses of the students eligible for the work-study program were obtained from the files
<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have held summer jobs.</td>
</tr>
<tr>
<td>2. My first choice of schools was A.S.U.</td>
</tr>
<tr>
<td>3. I schedule my time well.</td>
</tr>
<tr>
<td>4. I have a definite career choice.</td>
</tr>
<tr>
<td>5. I chose college study because of parental pressure.</td>
</tr>
<tr>
<td>6. I chose college study because of my personal desire to excel in a</td>
</tr>
<tr>
<td>career.</td>
</tr>
<tr>
<td>7. I feel confident that I will graduate from college.</td>
</tr>
<tr>
<td>8. I relate better with other students now than in high school.</td>
</tr>
<tr>
<td>9. I feel inferior to other students because of my financial status.</td>
</tr>
<tr>
<td>10. I relate better with college professors than with high school</td>
</tr>
<tr>
<td>teachers.</td>
</tr>
<tr>
<td>11. I held jobs during the school year in high school.</td>
</tr>
<tr>
<td>12. The most important purpose of a college education is career</td>
</tr>
<tr>
<td>development.</td>
</tr>
<tr>
<td>13. The most important purpose of a college education is social</td>
</tr>
<tr>
<td>development.</td>
</tr>
<tr>
<td>14. Do you think employment interferes with social development at A.</td>
</tr>
<tr>
<td>S.U.?</td>
</tr>
<tr>
<td>15. I am active in one or more extra-curricular activities on campus</td>
</tr>
<tr>
<td>(example: Intramurals, Student Government, Drama, Yearbook,</td>
</tr>
<tr>
<td>Fraternities, Sororities, etc.)</td>
</tr>
<tr>
<td>16. I am happy.</td>
</tr>
<tr>
<td>Rating</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1.86</td>
</tr>
<tr>
<td>1.90</td>
</tr>
<tr>
<td>1.28</td>
</tr>
<tr>
<td>1.74</td>
</tr>
<tr>
<td>Rating</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>3.15</td>
</tr>
<tr>
<td>3.16</td>
</tr>
<tr>
<td>3.42</td>
</tr>
<tr>
<td>2.15</td>
</tr>
<tr>
<td>2.84</td>
</tr>
<tr>
<td>2.27</td>
</tr>
<tr>
<td>2.56</td>
</tr>
<tr>
<td>3.96</td>
</tr>
<tr>
<td>3.81</td>
</tr>
<tr>
<td>3.29</td>
</tr>
<tr>
<td>2.95</td>
</tr>
</tbody>
</table>
kept in the financial aid office. A questionnaire, explanation of the purpose, and instructions for completing the questionnaire were sent to each of the students. A stamped, self-addressed envelope was included in order to encourage students to return the completed questionnaire. It should be noted that this was a confidential questionnaire. No request was made for a signature nor was any part of the request designed to identify any student. The confidential nature of this study assured more accurate information and also kept the study consistent with good research principles.

After two weeks from the date the questionnaire was mailed, a follow-up letter was sent to each of the students (Appendix B). The students were asked if they had returned the questionnaire, and, if they had not, to please help by completing and returning the questionnaire. After another two weeks the assumption was made that all results were returned.

Statistical Treatment of Data

Academic Progress--The non-employed work-study students were used for the control group and the employed work-study students were used for the experimental group. The effects of employment on the experimental group were to be measured by the difference in academic progress of the two groups. Academic progress for this study is defined as the difference between PGPA and GPA during the first semester of the freshman year. A t-test was used to determine if a statistically significant difference existed between the mean gain scores (PGPA - GPA) for the two groups studied. The level of significance was established at .05.

Tabulation sheets were used to record PGPA and GPA on computer cards. A second person checked the tabulations for accuracy. A format was developed to obtain the needed statistical results. Computer print-outs gave the results by employment status, sex only, and sex and employment status.
Characteristic Comparison--To determine if a difference in characteristics existed between the employed work-study student and the non-employed work-study student, a comparison study was made using questionnaire results. Questionnaire results came from those students who were compared by academic progress. \( \chi^2 \) was used for test of significance with .05 as the level of significance. The item results were placed on data sheets and processed by computer using a different format than that used for the academic progress information. Computer results gave the comparison by number and percent. The format was designed to give results by employment status, sex, sex and employment status, and eligibility without employment status. As with the academic progress, the NEWSS were used for the control group and the EWSS for the experimental group. In order to have a more complete study of the characteristics of the work-study student, additional information was obtained. The percent of returns by employment status and sex and employment status was determined. An item analysis of omitted responses was also included.
CHAPTER IV

RESULTS OF DATA

Chapter IV will show by tables the results of the study on the EWSS and the NEWSS, by academic progress and personal characteristics.

Results of the study on academic progress will be given by these three categories: (1) academic progress of all EWSS, all NEWSS; (2) academic progress of male EWSS, male NEWSS; (3) academic progress of female EWSS, female NEWSS.

The results of the questionnaire concerning characteristics will be given by these categories: (1) EWSS, NEWSS; (2) male or female EWSS, male or female NEWSS; and (3) male or female students who were eligible for work-study benefits.

Academic

The t-test analysis in Table 6 reveals that there was a statistically significant difference at the .05 level between the difference in the mean PGPA and GPA for the employed work-study students and the non-employed work study students. The employed work-study students had better GPA's than predicted, whereas the non-employed work study students did not.

The t-test analysis in Table 7 indicates that there was a statistically significant difference at the .05 level of significance between the difference in the mean PGPA and GPA for the male employed work-study students and the male non-employed work study students. The employed work-study male student had better GPA's than predicted, whereas the non-employed work-study males did not.
TABLE 6

A t-TEST ANALYSIS OF ALL FIRST SEMESTER EMPLOYED WORK-STUDY STUDENTS WITH ALL FIRST SEMESTER NON-EMPLOYED WORK-STUDY STUDENTS USING THE DIFFERENCE BETWEEN THE MEAN PREDICTED GRADE POINT AVERAGE AND THE GRADE POINT AVERAGE

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean PGPA</th>
<th>Mean GPA</th>
<th>Mean Difference</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed Work-Study</td>
<td>110</td>
<td>2.389</td>
<td>2.449</td>
<td>+ 0.060</td>
<td>2.119*</td>
</tr>
<tr>
<td>Non-Employed Work Study</td>
<td>80</td>
<td>2.317</td>
<td>2.124</td>
<td>- 0.193</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant beyond the .05 level.
**TABLE 7**

A t-TEST ANALYSIS OF MALE FIRST SEMESTER EMPLOYED WORK-STUDY STUDENTS WITH MALE FIRST SEMESTER NON-EMPLOYED WORK-STUDY STUDENTS USING THE DIFFERENCE BETWEEN THE PREDICTED GRADE POINT AVERAGE AND THE GRADE POINT AVERAGE

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean PGPA</th>
<th>Mean GPA</th>
<th>Mean Difference</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Employed Work-Study</td>
<td>50</td>
<td>2.350</td>
<td>2.418</td>
<td>+ 0.068</td>
<td>2.201*</td>
</tr>
<tr>
<td>Male Non-Employed Work</td>
<td>40</td>
<td>2.314</td>
<td>2.119</td>
<td>- 0.195</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant beyond the .05 level.
The t-test analysis in Table 8 indicates that there was a statistically significant difference at the .05 level of significance between the difference in the mean PGPA and GPA for the female employed work-study students and the female non-employed work-study students. The employed work-study female students had better GPA's than predicted, whereas the non-employed work-study females did not.

**Characteristics**

Chi square was used to determine if there were significant differences in the response of the employed work-study student as compared to the non-employed work-study students. Table 9 shows the responses to each item of the questionnaire on the characteristics of the work-study student by employed and non-employed.

When using work-study status to determine characteristics of the employed work-study and non-employed work-study students, the results show that very little difference exists. Only item eleven of the questionnaire, "The most important purpose of a college education is social development," showed statistically significant difference. The results show a tendency of the employed work-study student to disagree with the premise and a tendency of the non-employed work-study student to agree.

Chi square was used to determine if there were significant differences in the responses of the employed work-study students as compared to the non-work students by sex. Tables 10 and 11 show the results of data on the characteristics of the work-study student by sex and employment status.
**TABLE 8**

A t-TEST ANALYSIS OF FEMALE FIRST SEMESTER EMPLOYED WORK-STUDY STUDENTS WITH FEMALE FIRST SEMESTER NON-EMPLOYED WORK-STUDY STUDENTS USING THE DIFFERENCE BETWEEN THE MEAN PREDICTED GRADE POINT AVERAGE AND MEAN GRADE POINT AVERAGE

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean PGPA</th>
<th>Mean GPA</th>
<th>Mean Difference</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Employed</td>
<td>60</td>
<td>2.397</td>
<td>2.448</td>
<td>+0.051</td>
<td>2.432*</td>
</tr>
<tr>
<td>Work-Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Non-Employed</td>
<td>40</td>
<td>2.322</td>
<td>2.123</td>
<td>-0.199</td>
<td></td>
</tr>
<tr>
<td>Work-Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant beyond the .05 level.*
### TABLE 9

RESULTS OF CHI SQUARE ANALYSIS OF EACH ITEM FOR THOSE SUBJECTS WHO RESPONDED WITH A YES OR NO ANSWER BY EMPLOYMENT STATUS

<table>
<thead>
<tr>
<th>Item</th>
<th>Employed Work-Study Students</th>
<th>Non-Employed Work-Study Students</th>
<th>Chi Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes N (%)</td>
<td>No N (%)</td>
<td>Yes N (%)</td>
</tr>
<tr>
<td>3</td>
<td>70 (84%)</td>
<td>14 (16%)</td>
<td>53 (87%)</td>
</tr>
<tr>
<td>4</td>
<td>65 (81%)</td>
<td>16 (19%)</td>
<td>46 (75%)</td>
</tr>
<tr>
<td>5</td>
<td>65 (78%)</td>
<td>19 (22%)</td>
<td>46 (77%)</td>
</tr>
<tr>
<td>6</td>
<td>52 (64%)</td>
<td>30 (36%)</td>
<td>44 (72%)</td>
</tr>
<tr>
<td>7</td>
<td>71 (85%)</td>
<td>13 (15%)</td>
<td>50 (82%)</td>
</tr>
<tr>
<td>8</td>
<td>61 (75%)</td>
<td>21 (25%)</td>
<td>42 (69%)</td>
</tr>
<tr>
<td>9</td>
<td>42 (50%)</td>
<td>42 (50%)</td>
<td>25 (41%)</td>
</tr>
<tr>
<td>10</td>
<td>56 (67%)</td>
<td>27 (33%)</td>
<td>34 (56%)</td>
</tr>
<tr>
<td>11</td>
<td>29 (34%)</td>
<td>55 (66%)</td>
<td>35 (57%)</td>
</tr>
<tr>
<td>12</td>
<td>23 (29%)</td>
<td>59 (71%)</td>
<td>15 (25%)</td>
</tr>
<tr>
<td>13</td>
<td>45 (54%)</td>
<td>39 (46%)</td>
<td>34 (56%)</td>
</tr>
</tbody>
</table>

*Statistically significant beyond the .05 level.
<table>
<thead>
<tr>
<th>Item</th>
<th>Employed Work-Study Students</th>
<th>Non-Employed Work-Study Students</th>
<th>Chi Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males N (%)</td>
<td>Females N (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males N (%)</td>
<td>Females N (%)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>28 (52%)</td>
<td>42 (61%)</td>
<td>0.067046</td>
</tr>
<tr>
<td></td>
<td>26 (48%)</td>
<td>27 (39%)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>28 (57%)</td>
<td>38 (60%)</td>
<td>0.02108</td>
</tr>
<tr>
<td></td>
<td>21 (43%)</td>
<td>25 (40%)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>28 (56%)</td>
<td>38 (60%)</td>
<td>0.07309</td>
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<tr>
<td></td>
<td>20 (44%)</td>
<td>25 (40%)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>22 (48%)</td>
<td>31 (61%)</td>
<td>1.5743</td>
</tr>
<tr>
<td></td>
<td>24 (52%)</td>
<td>20 (39%)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>28 (53%)</td>
<td>43 (63%)</td>
<td>0.93543</td>
</tr>
<tr>
<td></td>
<td>25 (47%)</td>
<td>25 (37%)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>25 (63%)</td>
<td>36 (62%)</td>
<td>0.21630</td>
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<td>20 (37%)</td>
<td>22 (38%)</td>
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<td>9</td>
<td>18 (64%)</td>
<td>24 (62%)</td>
<td>0.00072</td>
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<td></td>
<td>10 (36%)</td>
<td>15 (38%)</td>
<td></td>
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<tr>
<td>10</td>
<td>24 (53%)</td>
<td>32 (71%)</td>
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<tr>
<td>11</td>
<td>10 (30%)</td>
<td>19 (61%)</td>
<td>5.00643*</td>
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<tr>
<td></td>
<td>23 (70%)</td>
<td>12 (39%)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>11 (52%)</td>
<td>12 (71%)</td>
<td>0.65285</td>
</tr>
<tr>
<td></td>
<td>10 (48%)</td>
<td>5 (29%)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>24 (49%)</td>
<td>21 (54%)</td>
<td>2.55115</td>
</tr>
<tr>
<td></td>
<td>25 (51%)</td>
<td>9 (46%)</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant beyond the .05 level.
<table>
<thead>
<tr>
<th>Item</th>
<th>Employed Work-Study Student</th>
<th>Non-Employed Work-Study Student</th>
<th>Chi Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males N (%)</td>
<td>Females N (%)</td>
<td>Males N (%)</td>
</tr>
<tr>
<td>3</td>
<td>5 (50%)</td>
<td>9 (75%)</td>
<td>5 (50%)</td>
</tr>
<tr>
<td>4</td>
<td>5 (33%)</td>
<td>10 (67%)</td>
<td>10 (67%)</td>
</tr>
<tr>
<td>5</td>
<td>5 (35%)</td>
<td>13 (46%)</td>
<td>9 (65%)</td>
</tr>
<tr>
<td>6</td>
<td>11 (61%)</td>
<td>18 (64%)</td>
<td>7 (49%)</td>
</tr>
<tr>
<td>7</td>
<td>5 (45%)</td>
<td>8 (62%)</td>
<td>6 (55%)</td>
</tr>
<tr>
<td>8</td>
<td>8 (42%)</td>
<td>13 (62%)</td>
<td>11 (58%)</td>
</tr>
<tr>
<td>9</td>
<td>15 (42%)</td>
<td>27 (64%)</td>
<td>21 (58%)</td>
</tr>
<tr>
<td>10</td>
<td>8 (44%)</td>
<td>19 (53%)</td>
<td>10 (56%)</td>
</tr>
<tr>
<td>11</td>
<td>23 (74%)</td>
<td>33 (65%)</td>
<td>8 (26%)</td>
</tr>
<tr>
<td>12</td>
<td>21 (50%)</td>
<td>38 (60%)</td>
<td>21 (50%)</td>
</tr>
<tr>
<td>13</td>
<td>9 (60%)</td>
<td>31 (60%)</td>
<td>6 (40%)</td>
</tr>
</tbody>
</table>
Only one characteristic was found to be different when work status and sex were considered. Item eleven of the questionnaire, "The most important part of a college education is social development," showed that male students who elected not to work tended to agree. There was no statistically significant difference between female students when work status was considered.

Results of the Study When Characteristics of the Students Who Were Eligible for the Work-Study Program are Compared by Sex Only

Chi square was used to determine if there were significant differences in the responses for male and female. Table 12 shows the responses to each item of the questionnaire on the characteristics of the work-study student by employed and non-employed.

This part of the study concerned itself with the significance of sex of the students who were eligible for work-study benefits. Work status was not a factor. There was a statistically significant difference when extra-curricular participation was studied. Males who were eligible for work-study benefits were more active in extra curricular activities than females.

Item Analysis by Number of Omitted Responses

Previously mentioned was the fact that some of the responses on the returned questionnaires were omitted. Table 13 shows by employment status and sex those omitted responses. More employed female work-study students failed to respond to all items than any of the other sub-groups. The number of employed female work-study subjects is greater than the other sub-groups and it is reasonable to expect more omitted responses. The non-employed work-study group had fewer omitted responses than the employed work-study group. Again this is due to fewer subjects in this group.
**TABLE 12**

RESULTS OF CHI SQUARE ANALYSIS OF EACH QUESTIONNAIRE ITEM BY NUMBER AND PERCENT FOR ALL ELIGIBLE WORK-STUDY STUDENTS WHEN EMPLOYMENT IS NOT A FACTOR

<table>
<thead>
<tr>
<th>Item</th>
<th>Males</th>
<th>Females</th>
<th>Chi Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes N (%)</td>
<td>No N (%)</td>
<td>Yes N (%)</td>
</tr>
<tr>
<td>#</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>54 (84%)</td>
<td>10 (16%)</td>
<td>69 (85%)</td>
</tr>
<tr>
<td>4</td>
<td>49 (77%)</td>
<td>15 (23%)</td>
<td>63 (81%)</td>
</tr>
<tr>
<td>5</td>
<td>50 (78%)</td>
<td>14 (22%)</td>
<td>63 (78%)</td>
</tr>
<tr>
<td>6</td>
<td>46 (72%)</td>
<td>18 (28%)</td>
<td>51 (65%)</td>
</tr>
<tr>
<td>7</td>
<td>53 (83%)</td>
<td>11 (17%)</td>
<td>68 (84%)</td>
</tr>
<tr>
<td>8</td>
<td>45 (70%)</td>
<td>19 (30%)</td>
<td>58 (73%)</td>
</tr>
<tr>
<td>9</td>
<td>28 (44%)</td>
<td>36 (56%)</td>
<td>39 (48%)</td>
</tr>
<tr>
<td>10</td>
<td>45 (71%)</td>
<td>18 (29%)</td>
<td>45 (56%)</td>
</tr>
<tr>
<td>11</td>
<td>33 (52%)</td>
<td>31 (48%)</td>
<td>31 (37%)</td>
</tr>
<tr>
<td>12</td>
<td>21 (33%)</td>
<td>42 (67%)</td>
<td>17 (21%)</td>
</tr>
<tr>
<td>13</td>
<td>49 (77%)</td>
<td>15 (23%)</td>
<td>30 (37%)</td>
</tr>
</tbody>
</table>

*Statistically significant beyond the .05 level.
TABLE 13

OMITTED QUESTIONNAIRE ITEMS

<table>
<thead>
<tr>
<th>Item</th>
<th>Employed</th>
<th>Non-Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>#</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
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<td>6</td>
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<td>2</td>
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<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

No statistically significant difference.
Discussion of Results

Confirmation of earlier data seemed to be apparent in the investigator's research. It is important to note that no previous studies have compared the academic success of work-study freshmen during their first semester with the academic success of eligible work-study freshmen who elected not to work during the first semester of college study. Previous studies which relate to this research are reviewed below.

Laverty (1967) conducted a study of freshmen students who were on the work-study program during their freshman year. His research was made for the entire year and the measure for academic success was a comparison of work-study students and all non-employed students. He concluded that there is no statistically significant difference between the work-study student and those who were not employed when academic achievement was compared.

The most comprehensive study of the effects of employment on academic success was made by Hamm. In this study the College Aptitude Test was used to determine ability to do college work. His studies showed no detrimental effects on academic success could be traced to employment with the College Work-Study Program regardless of sex, class, and number of hours worked.

The study that most nearly parallels the study at hand is one by Henry, of the American College Testing Program. Henry compared the academic success on the College Work-Study Program with students on the Student Labor Program. He concluded that no statistically significant difference between the two groups existed. Therefore, it may be concluded that a well-supervised employed student achieves as well as a non-employed student.
Hay and Lindsay conducted a study at Pennsylvania State University. Their findings showed detrimental effects as a result of employment. The researchers pointed out that theirs was the only study made up to that date that showed detrimental effects when employment hours did not exceed fifteen hours per week. They, also, recommended further studies on the subject.

The importance of knowing personality facets, characteristics, etc. of the employed student has been recognized for some years. Only a few studies have been made on this area of college environment. None of the previous studies has compared the non-employed work-study student with the employed work-study student. The most significant study is one made by Johnson of Boston University. He studied the effects of self-esteem in relation to the type of work engaged in by the work-study student. His conclusions were that students who were involved with work related to their major course of study had a more positive self-image than students who were involved with work not related to their major course of study. No research, including the present study, shows detrimental effects on positive characteristics as a result of employment.
CHAPTER V

SUMMARY OF FINDINGS, CONCLUSIONS AND
RECOMMENDATIONS FOR FURTHER STUDIES

Results of studies on academic comparisons

The difference between the predicted grade point average (PGPA) and the grade point average (GPA) was statistically significant for the employed and non-employed work-study student. The employed work-study student exhibited greater gain in the GPA over the PGPA than did the non-employed work-study student. Further analysis by sex produced the same results.

Results of the study of the characteristics of the work-study student as compared to the non work-study student

There were few differences in the characteristics of employed work-study students as compared to non-employed work-study students. Only item eleven of the questionnaire, "The most important purpose of a college education is social development" showed a statistically significant difference. The results show a tendency of the work-study student to disagree with the premise and a tendency of the non work-study student to agree.

Results of the study of the characteristics of the work-study student as compared to the non work-study student by sex

Only one characteristics was found to be different when work status and by sex were considered. Item eleven of the questionnaire, "The most important part of a college education is social development," showed that male students who elected not to work tend to agree as compared to the
disagreement of the other subjects. There was no statistically significant difference between female students when work status was considered.

**Conclusions**

Academic: The results of this study indicate that there is a significant difference between the academic achievement of the employed work-study student and the non-employed work-study student during the first semester of the freshman year. The employed work-study students exhibited superior academic achievement when compared to the non-employed student eligible for work study. It is apparent that financial aid officers and high school counselors can advise entering freshmen who need financial aid to apply for the work-study program without fear of the students sacrificing academic achievement. This evidence is in contradiction to much of the advice currently given to high school seniors and has significance in attracting disadvantaged who may be helped by the work-study program.

Characteristic: Using the number of yes or no responses to the questionnaire characteristics do not vary significantly, except when an attitude toward the importance of social development and extra-curricular activities was compared.

The non work-study student tended to say that social development was the most important purpose of a college education. When the subjects were grouped by sex, the results showed that it is the male non work-study student who is more concerned with social development. It is the conclusion of this writer that males who chose not to work did so because they thought the time required for work would interfere with time required to develop good social behavior and healthy social attitudes. Another factor or supporting factor may be that males are more vain about economic status
than are girls. Perhaps females are more concerned about competing for career placement with males and are not as concerned with social activity as they once were.

When employment status was removed and only sex and eligibility were used as variables item number fourteen, "I am active in one or more extra-curricular activities," showed a statistically significant difference. More males were active in extra-curricular activities than females.

**Strengths and Weaknesses of the Study**

The researcher became more aware as this study progressed that the study omitted certain important areas, did not treat other areas as thoroughly as would be needed, and thus has certain design weaknesses.

Weaknesses of the study include:

1. PGPA should have been divided by class rank and entrance examination scores and studies made separately.

2. Students who, as a result of dropping a course or adding courses, were not carrying a normal load should have been studied separately.

3. The author's personal feelings for the financially needy student. (Subconscious identify)

Strengths of the study include:

1. Strong common factors on which to start a study.

2. Accurate information of the study of academic progress and the characteristics study.

3. Limitation on the study was such that the researcher centered on the subject.
CHAPTER VI

SUMMARY

The Introduction

The College Work-Study Program, a part of the Economic Opportunity Act of 1964, was passed into legislation for the purpose of making possible higher education for those in American society who have the ability but not the financial resources to meet the cost of higher education. Students who are considered to be financially needy are given the opportunity to earn a portion of this cost by employment either on or off campus. Most institutions prefer that students work on campus in order that there may be proper supervision. The individual institutions of higher education are responsible for selecting the students who are eligible for work-study benefits and for determining how many hours each student is to work. The pay rate for an undergraduate student is $3.25 per hour. The pay rate for a graduate student is $3.50 per hour. Both undergraduate students and graduate students are limited to a maximum of fifteen hours per week during the school year and forty hours per week during the summer. Federal grants are made directly to the school. These grants must be matched by the participating institutions on a 20 percent institution and 80 percent federal grant basis. The jobs held by the work-study student must be of a public interest and with a non-profit organization.

The need for this study comes as a result of (1) an increase of students from financially needy families who will attend some type of higher education, (2) a lack of information on the subject. The purposes of the
study are to give information to those who work with the work-study student in order that better selection, supervision, etc. can be made, and to stimulate interest in the subject and encourage further studies on the subject.

Review of Literature and Related Studies

Although some studies show a higher academic ability in students who come from a more affluent segment of our society, there is no evidence that points to a higher academic achievement level in this same group.

Studies made on the employed student are varied in purpose and results. Generally, these studies conclude: no significant difference in academic performance of associate of arts degree candidates, regardless of the number of hours worked. Studies do show a difference when comparing the four-year degree student with the two-year degree student as to academic progress and the number of hours spent in remunerative work. As the number of hours increases above twenty per week, the four-year degree student is detrimentally affected in academic performance.

The College-Work Study student has been studied from these viewpoints: class, sex, age, ability level, college major. Studies that have been made show no significant difference in academic success or personality traits of the employed work-study student and the non-employed work-study student. (Note: employed work-study students are limited to fifteen hours per week.) Significant in this review is that there are no studies on the first semester employed work-study student as compared to the first semester non-employed work-study student.

The characteristics of the work-study student have received even less attention than academics of the work-study student. Studies that have been completed are enlightening for background information as they treat the selection of work-study students, counseling the work-study student,
the type of work in which the student is involved (high level career-
low level career), number of hours worked, etc. These studies indicate
that there is little difference in the characteristics of a student who
is a member of the work-study program and one who is not.

Procedure

In order to compare the academic progress and characteristics of
the employed work-study student with the non-employed work-study student,
a list of all students who were eligible for the work-study program for
the fall semester of 1977 was made. This list was divided into two groups:
those who used the work-study program to partially support their college
expenses, and those who elected not to use the work-study benefits. For
further analysis, both employed work-study students and non-employed work-
study students were divided by sex. The PGPA and first semester GPA were
recorded for all students by work-study status and sex from records kept
by the student personnel office.

To compare the characteristics of the employed work-study student
with the non-employed work-study student, a questionnaire was devised. The
questions on the questionnaire were the results of an on-campus interview
with students who were eligible for the work-study program. A equal number
of male employed work-study, male non-employed work-study, female employed
work-study, and female non-employed work-study students was used to suggest
questions they thought important. These questions were then rated by the
same groups. Using addresses only (no names were used to insure confiden-
tiality) questionnaire with a self-addressed, stamped envelope was sent to
all students who were eligible for work-study benefits. The information
obtained as a result of the questionnaire and the comparison of PGPA and
first semester GPA were placed on computer cards and processed for the
following findings.
Results of Data

Positive results in favor of the employed work-study student were found when academic achievement was studied. The studies made on all three categories: male, female, and both male and female showed a statistically significant difference when the differences in PGPA and first semester GPA were compared. The findings in all three categories show that the employed work-study student did better in academic achievement than the non-employed work-study student.

When using employment status to determine characteristics of the work-study student, little difference was found. Only item eleven of the questionnaire, "The most important purpose of a college education is social development," showed a statistically significant difference. The results show a tendency of the employed work-study student to disagree with the premise and a tendency of the non-employed work-study student to agree.

Only one characteristic was found to be different when work status and sex were considered. Item eleven of the questionnaire, "The most important purpose of a college education is social development," showed that male students who elected not to work tended to agree. There was no statistically significant difference between female students when employment status was considered.

One part of the study concerned itself with the significance of the sex of the students who were eligible for work-study benefits. Work status was not a factor. There was a statistically significant difference in extra curricular participation. Males who were eligible for work-study benefits were more active in extra curricular activities than females.
Conclusions and Recommendations for Further Study

It can be concluded from this study that the first semester employed work-study freshman can achieve as well academically as the first semester non-employed work-study student. High school counselors, parents, financial aid administrators and others who are concerned with the financially needy student need not discourage a student from using work-study benefits. 

The significant difference between the male non-employed work-study student and the employed work-study student on the subject of social development may be an indication that males think time taken up with employment will take time away from good social behavior. The reason may also be that males are more vain about economic status than females. Another factor or supporting factor may be that at this time females are increasingly more concerned about competition with males for career placement and are not as concerned with social activity as they once were. 

When employment was not used as a factor, more males were active in extra-curricular activities than females. The conclusion may be that males chose not to work in order to take part in extra-curricular activities. Another reason may be that more extra-curricular activity is provided for males than females. 

Thus, in view of the inflationary economy and changing roles of the male and female in our society, the conclusions drawn in the study seem especially pertinent at this time. The findings clearly indicate that the work-study student is and will continually be of vital interest to a successful administration of a college.
To research the effects of employment on the first semester freshman, the investigator recommends that far-reaching outcomes be studied, such as, what is the ratio of graduates who were employed to those who were not employed; income level of these two groups; opinions of the two groups after graduation; opinions of those who did not graduate.
FOOTNOTES


5 From interview with John Wesley, Assistant Director of Financial Aid, Personal Interview. February 1977.

6 Callihan, Dorothy J., Ph.D. "An Analysis of Differences in Experimental Background and Personality Variables Between Work-Study and Non Work-Study Freshmen at the University of Alabama." Dissertation Abstracts, University of Alabama, 1966.


BIBLIOGRAPHY
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Callihan, Dorothy J., Ph.D., "An Analysis of Differences in Experimental Background and Personality Variables Between Work-Study and Non Work-Study Freshmen at the University of Alabama," Dissertation Abstracts, University of Alabama, 1966.


APPENDIXES
QUESTIONNAIRE

This confidential questionnaire will be used for freshman guidance. The results of findings will be invaluable in assisting those concerned with student personnel services. Your help is greatly appreciated.

Please check the appropriate space:

1. Male____ Female____
2. Did you work Fall Semester? Yes____ No____
3. I have held summer jobs. Yes____ No____
4. My first choice of schools was A.S.U. Yes____ No____
5. I schedule my time. Yes____ No____
6. I have a definite career choice. Yes____ No____
7. I feel confident I will graduate from college. Yes____ No____
8. I relate better with other students now than in high school. Yes____ No____
9. I relate better with college professors than with high school teachers. Yes____ No____
10. The most important purpose of a college education is career preparation. Yes____ No____
11. The most important purpose of a college education is social development. Yes____ No____
12. Do you think working interferes with social development at A.S.U.? Yes____ No____
13. I am active in one or more extra-curricular activities on campus (Ex. intramurals, student government, drama, yearbook, fraternities, sororities, etc.) Yes____ No____

Please return in the enclosed envelope.

Thank you for your help.

(sg) D. B. Blalock
Graduate Student
Dear Student:

If you have returned the confidential questionnaire concerning freshman guidance please disregard this letter. If you have not, it will be greatly appreciated if you could find the time to do so in the next few days.

Thank you for your help!

Sincerely,

(sg) D. B. Blalock
Graduate Student
APPENDIX C

ACCEPTED QUESTIONNAIRE ITEMS

1. I have held summer jobs.
2. My first choice of schools was A.S.U.
3. I schedule my time.
4. I have a definite career choice.
5. I feel confident I will graduate from college.
6. I relate better with other students now than in high school.
7. I relate better with college professors than with high school teachers.
8. The most important purpose of a college education is career development.
9. The most important purpose of a college education is social development.
10. Do you think employment interferes with social development?
11. I am active in one or more extra-curricular activities on campus. (Example: Intramurals, Student Government, Drama, Yearbook, Fraternities, Sororities, etc.)
APPENDIX D

REJECTED QUESTIONNAIRE ITEMS

1. I chose college study because of parental pressure.
2. I chose college study because of my personal desire to excel in a career.
3. I feel inferior to other students because of my financial status.
4. I held jobs during the school year in high school.