

AN ABSTRACT OF THE THESIS OF

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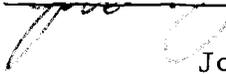
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The purpose of this study was: 1) to ascertain the effect of a student's demographic/biographic characteristics and his current values upon his decision to study in a cross-cultural educational program, 2) to determine whether there is a significant difference in student types as assessed by the Clark-Trow typologies when measured between that group of students who inquired about or applied for cross-cultural educational programs and students in the control group, and 3) to measure the influence that students feel others have upon them as they make the decision to study in a cross-cultural educational program. Participants in this study were those Oregon State University students who inquired about or applied for cross-cultural educational programs through the Office of International Education at Oregon State during 1971 (N = 97) and a matched control group (N = 97).

Since the intent of the study was to compare those students who showed an interest in cross-cultural educational programs with a disinterested control group on various factors, the members of the control group were individually selected to resemble members of the experimental group on: age, sex, class, school of enrollment, major, cumulative grade point average, and marital status.

The participants in the study completed a questionnaire during a two-week period in the 1971 spring term. All but one of the students who was contacted completed the instrument.

Null hypotheses stating that no significant differences would appear between the groups which were compared were tested. The following comparisons were made: 1) those students who inquired about or applied for a cross-cultural educational program (the experimental group) with the control group, and 2) the students who only inquired about cross-cultural educational programs with those who actually applied.

Each hypothesis was tested using the X^2 technique with the .05 level of significance being accepted as indicating degrees of confidence that the factors were independent.

From the findings of this study the following conclusions were drawn:

1. There are no significant differences between those students who are interested in cross-cultural educational programs

and the control group and the typology in which they place themselves.

2. Students who have inquired about or applied for cross-cultural educational programs do evaluate their opinions and values by the opinions of others.
3. There is a significant difference in the demographic background characteristics of those students who inquired about or applied for a cross-cultural educational program and the control group, as shown in the educational level attained by the father.
4. There are significant differences in terminal values as measured by the Rokeach Value Scale, Form D, between those students who are interested in cross-cultural educational programs and the control group.
5. There are significant differences between those students who only inquired about cross-cultural educational programs and those who actually applied in demographic characteristics as shown by the differences in father's occupation, father's educational level, and mother's educational level.

Based upon these conclusions, recommendations for further study and experimentation were made in the general areas of family values upon motivational factors, modification of student values, the influence of faculty members on student decisions, and student typologies.

Factors Which Differentiate United States Students
Who Wish to Study in Cross-Cultural
Educational Programs

by

Mary Kathryn Heisler

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FACTORS WHICH DIFFERENTIATE UNITED STATES STUDENTS
WHO WISH TO STUDY IN CROSS-CULTURAL
EDUCATIONAL PROGRAMS

CHAPTER I

INTRODUCTION

Cross-cultural educational opportunities have been traced to Biblical times or earlier, and organized American programs have been in existence in one form or another for nearly fifty years. In the 1970's in the United States, the enthusiasm which carries new ideas and projects to their limits has waned and the current world and domestic change has also helped to alter both the number of and approaches to programs used for overseas study programs for American students (Humphry, 1970). There seems, however, to be an ever increasing number of students who show an interest in spending some time in another country.

At the same time, reports made about such programs continue to contradict one another as to the benefits which students, individually and collectively, gain from these experiences. There has also been very little study in those areas which might help to determine

whether or not all students benefit equally from such experiences. Further, because of the variety of programs, the different methods of screening for selection into the various programs and other associated factors, one has almost no information about the individual student who is interested in cross-cultural educational programs.

Statement of the Problem

Much of the material which has been gathered previously suggests certain concepts about students who study in cross-cultural educational settings by attempting to assess what type of personality changes occur as a result of their experiences. On the other hand, none of the studies to date have dealt with the student as he is in the process of making the decision to participate in such a program. It is this type of information that is equally important in an evaluation of cross-cultural educational programs both from the perspective of those persons who are involved with selecting students and developing programs, and for the student who chooses to study in such programs. It is, in part, the matching of these factors which yield successful programs, and it is to this problem that this study addresses itself.

Factors which differentiate American students who wish to participate in cross-cultural educational exchange are worthy of a study of this type. One need only to review the literature, and talk with foreign study advisors and students who are interested in such

programs in order to ascertain the general agreement of the idea that the educational advantages of such programs could be strengthened by having more information about students who have an interest in this type of program.

Oregon State University offers a particularly good opportunity to study such students. There is a well-established Office of International Education that employs a full-time foreign study advisor. The institution administers several, and participates in all of the Oregon State System of Higher Education Study Abroad Programs. In addition there is material available in the Office of International Education on many other programs. Each year since the conception of the various programs and the beginning of the Office of International Education, there has been an increasing number of students who has made inquiry about the various programs. It is these students in turn who become the best advocates of the programs when they return to campus.

In summary, the current study was conceived and developed in order that more information could be obtained about students who wish to participate in cross-cultural educational programs because it was obvious that there was very little in the current literature concerning this area. By analyzing some of the factors, it is hoped that both the students who participate in the programs will have better experiences, and that the programs themselves will be strengthened.

Purpose of the Study

The general purpose of this study is to determine some of the factors that are involved when a student chooses to participate in a cross-cultural educational program. More specifically, the purposes of this study will be: 1) to ascertain the effect of a student's demographic background and his current values upon the decision; 2) to determine whether there is a significant difference in student types as assessed by the Clark-Trow typologies when measured among those students who have only inquired about or applied for cross-cultural educational programs and students in the control group; and 3) to measure the influence that students feel others have upon them as they make the decision to study in a cross-cultural educational program.

Significance of the Study

In current research on college students, there is a myriad of material which links the background of the individual student to his feelings about, motivation toward and success during his college years. Studies in these and other related areas can be used in an assessment of the processes which occur when a student becomes interested and perhaps decides to participate in a cross-cultural educational program. Astin (1968), among others, suggests that the

most important constructs that a person takes with him into his college environment are the same ones that will make the most difference in the final outcome of his experience. Namely, these are all of the inputs that have gone into a student's life before the beginning of his college experiences.

Secondly, there has been much work done in the area of different student types on today's campuses that lends itself to this type of study. Just as colleges are presently able to stratify their student populations to a certain degree by the use of these typologies, so should the people who are involved in the recruitment and selection for cross-cultural educational programs be able to know the type of student whom they are attracting.

The two possibilities mentioned above are helpful in ascertaining the backgrounds of those students who are interested in cross-cultural educational programs. The field of social psychology, however, gives a theoretical model which can be made operative in this case. It is this type of paradigm which helps tie all of the associative factors together and which in turn gives significance to the study.

Students who are interested in cross-cultural study programs are in many respects a self-selected population; that is, they have become interested in some type of foreign educational experience and are motivated enough to seek additional information. It is at this point, however, that many of the similarities end, and it is in

understanding more about the differences of these students that the potential significance of this study lies.

Many studies have been based on the premise that individuals need one another. Because of this need, a great deal of pressure is exerted upon the individual by many different groups. One of the classic studies in this area is the Bennington Study done by Newcomb and his associates (1943). Since these early efforts there has been much refinement of the broadly based theoretical tenets and there is an ever increasing number of studies which deal with changing norms and values as the result of a particular group's willingness and ability to reward or punish a certain type of behavior (Jacob, 1957).

Most of these earlier works were based on a valid, but rather broad theoretical base. In 1954, in his theory of "Social Comparison Processes," Leon Festinger takes much of the earlier material and places it in a workable theoretical framework. It is this paradigm which will be used and expanded in the course of this study.

The primary underlying hypothesis of the several which are applicable to this study is that human beings need to evaluate their opinions and abilities by something other than self-criteria. The second hypothesis then follows naturally. An individual evaluates his opinions and abilities by comparing them to the opinions and abilities of others.

It is unrealistic to expect that an individual compares his opinions with those of every other person he knows. He is, in other words, selective. Festinger takes this into account when he suggests that an individual is less likely to compare himself with another person when he finds that the difference between his own opinion and/or ability and that of the other person is increasing.

Festinger also realizes that for a variety of reasons the opinions of some groups and individuals are more important than others. His next hypothesis in somewhat abbreviated form is that factors which increase the importance of the groups or individuals for a student will also increase the pressure toward uniformity concerning their opinions for him. There are two corollaries which follow from such an hypothesis that are also important to this study. The first is that if an opinion is of no importance to the individual, there will be little need for him to evaluate it. The second is that the more attractive a group is to an individual, the more important the comparison of his opinion to those of the group will be.

Using Festinger's model as the theoretical basis, one can expand the paradigm by superimposing it on the Clark-Trow typologies of college students. It is important to understand before doing this, however, that these four subgroupings of collegiate, vocational, academic and nonconformist are meant only as typologies, and there may be wide variations among individual students. On the other

hand, it may be suggested that students may react in different ways to making a decision about cross-cultural educational opportunities depending upon in which typology they place themselves. This reaction is dependent in part on the relationship that the students in these various typologies have with parents, peers, and faculty members. Fitting the Clark-Trow hypotheses concerning relationships among various groups on the campus and the feelings of these student types to the campus in general, one might be able to see that students relate more strongly to those groups and individuals who best help them evaluate their own opinions and abilities.

In a study such as this one, the base of the paradigm can be even further extended. Interest in cross-cultural educational programs is dependent upon how a student perceives himself, which is a function of both his background and his current interaction with significant others. The variety of interactions should, in turn, affect the student's decision to study in a cross-cultural educational setting.

Using such a theoretical model as a basis will have particular relevance at Oregon State. Knowledge in the area of cross-cultural educational programs is increasing, but the theory behind these programs, whether educational or socio-psychological has not kept pace with the programs themselves. Under certain limited conditions, this study will show if there are differences between students who show an interest in such programs and those students who have little

or no interest. Once this can be established, recruitment for the programs, and even the programs themselves have the possibility of being altered so that a greater number of students may have an interest in participating in them.

Limitations of the Study

This study is limited to the male and female students from Oregon State University who inquired about the possibilities of overseas study opportunities through the Office of International Education at Oregon State University during the 1970-1971 academic year, and who were on the campus in Corvallis during the 1971 spring term. The students who chose overseas study are those students who will participate in a cross-cultural educational program at an overseas study center of the Oregon State System of Higher Education for a full or part year (one or more terms) beginning in the summer of 1971. The specific centers are located in Germany, England, Sweden, Italy, France, and Japan.

Students in the control group will be a sample of Oregon State students matched as closely as possible in the following criteria: age, sex, marital status, class, school of enrollment, and cumulative grade point average.

The study will then examine some of the factors which differentiate those students who inquired about and/or applied for an

overseas study program as compared with a matched sample of students who did not. Because these programs are designed as academic centers, the study is not concerned with those students who are primarily interested in travel or independent study. There can, therefore, be no conclusion at the end of this particular study as to whether or not those students who participate in such a program are the "best qualified" among all of those students who might have participated.

The study will be further limited by the fact that the data are accurate only so far as the paragraphs which were written by Trow as a part of the College Student Questionnaire--Part II and the Rokeach Value Scale, Form D, are valid instruments to measure student responses. Both instruments have been shown to be valid in other studies. In the case of the Rokeach Scale, only the top two values which a student places in each of the two categories will be assessed. Analyzing four values will serve the same purpose for this study as analyzing all thirty-six would, and will make the study more feasible (Rokeach, 1971c).

The study is also limited by the fact that it will be attempting to measure the way which the students feel about the amount and kind of support that they are receiving from parents, peers and faculty members. Because none of these people (parents, peers and faculty members) were questioned directly, it must be assumed that the

students who were questioned gave an appraisal of the situation as it appeared to them at the time.

Finally, it is always possible that some uncontrolled variables could have affected the responses of the students.

Research Hypotheses

In order to facilitate the statistical treatment of the data the following research hypotheses were formulated in null form:

1. There will be no significant differences between the group of students who showed an interest in cross-cultural educational programs and the control group in the proportions which select the various categories of the Clark-Trow typologies as being self-descriptive.
2. There will be no significant differences in distinctions of ratings of perceived support from parents, peers and faculty members between the group of students who show an interest in cross-cultural educational programs and the control group.
3. There will be no significant differences in the demographic/biographic characteristics of those students who are interested in cross-cultural educational programs and the demographic characteristics of the control group.

4. There will be no significant difference in values as measured by the Rokeach Value Scale, Form D, between those students who are interested in cross-cultural educational programs and the control group.
5. There will be no significant differences in the student types, support factors, values or demographic patterns between those students who only inquire about the various programs and those who actually apply.

Definition of Terms

Cross-cultural educational opportunity

As it is used in this study, "cross-cultural educational opportunity," refers to the programs that are available to United States students whereby they may study and become involved in a culture other than their own to varying degrees while pursuing a set program of academic interests.

Applying student

A male or female student from Oregon State University who completed all of the application requirements for one of the programs sponsored by the Oregon State System of Higher Education during the 1970-1971 school year.

Inquiring student

A male or female student at Oregon State University who inquired about the possibility of cross-cultural educational opportunities at the Office of International Education during the 1970-1971 school year, but who did not complete an application or who withdrew an application before the final selection process was made.

Control group

A group of disinterested Oregon State students who were individually matched with a student who either inquired about or applied for cross-cultural educational programs on the characteristics of: age, class, major, cumulative grade point average, sex, and marital status.

Interested student

A male or female student in the matched sample control group who indicated on the questionnaire that he had an interest in cross-cultural educational programs but had not inquired about them at the Office of International Education at Oregon State University.

Non-interested student

A male or female student in the matched sample control group who indicated on the questionnaire that he had no interest in cross-cultural educational programs.

Cumulative grade point average

Cumulative grade point average was compiled at the end of the Winter Term, 1971. It is the average of the student's grade points earned at Oregon State University.

Experimental group

For the purposes of this study, experimental group is defined as those students who had inquired about or applied for cross-cultural educational programs through the Office of International Education at Oregon State University.

Demographic

Demographic is used in this context to include biographic and other background factors of the individual students.

CHAPTER II

A REVIEW OF THE RELATED LITERATURE

The decision to participate in a cross-cultural educational exchange is in many respects the same one which is made when a student decides to attend a college or university. Because the main part of this study deals primarily with those factors which differentiate students who wish to participate in such ventures, the review of the literature will primarily be concerned with studies that deal with the factors that are involved when a student chooses to continue his education at a college or university. Further, because of the nature of this particular study, it is important that one review studies which deal specifically with the socio-economic status of the family, demographic material, and the influence of family, peers and faculty members on such a decision.

In addition to this area, one needs to be concerned with the background material for the theoretical bases of the study, and with studies which have been done in order to validate several of the instruments which are used as a part of the study. Specifically, it is important to study the material which deals with attitudes and values, that which lends itself to more fully explaining several of Festinger's models, and the material which deals with college and university

environments and the student subcultures within them.

Because this study deals with cross-cultural educational programs, however, it is also important that the reader understand some of the rationale for educational and cultural exchange programs for United States students. For this reason, the first part of the review of the literature deals with the current rationale for such programs in order that the study can be placed in proper perspective.

Current Rationale

Brickman (1964) in an article prepared for a Phi Delta Kappa symposium, has prepared the only major work to this point in time that traces the history of international education. While the article does an excellent job of tracing the history of the movement, it has made an even more important contribution to the literature. An article of this type makes it obvious that while scholars and educators are interested in international education, most of them are not ready at this time to delve into the area from the point of view of its roots and origins. It was not, in fact, until the relatively new philosophy of world responsibility as an objective of education began to be important to educators in the United States, that cross-cultural educational exchanges began to gain status. In turn, it is this rationale, both written and unwritten, which serves as the base for many of the cross-cultural educational programs today.

Abrams (1965) suggests that the American undergraduate program abroad represents the mingling of two traditions, that of the wandering scholar and the American love for travel. What programs for the undergraduate should do then is to subordinate the two traditions with the hope that the traveler will want to become a scholar.

It was first individuals and later private institutions who began to experiment in a small way with the concept of allowing their students to study abroad. As might be expected, the first organized programs were begun for those students who were interested in the languages and literature of Europe. Later as the programs began to be expanded both from a geographical and academic perspective, those who were interested in the goals and objectives of international education for the undergraduate realized that these objectives and goals needed to be defined in broader terms.

The Carnegie Endowment for International Peace and the Institute for International Education are two organizations of long standing which are concerned with the rationale used to promote cross-cultural educational programs for United States students. The primary rationale used by both of these organizations is based on the need for international understanding and the place which education should have in helping to create this understanding. In order to work toward these goals, both organizations designed practical and theoretical studies which were meant to help colleges and universities think

through the problems and possibilities inherent in their relation to world affairs (Wilson and Wilson, 1963).

Although private institutions and foundations initiated programs of cross-cultural education, to understand the rationale more fully, one must also understand the involvement of the United States government in such programs. The government is, of course, involved because it is the Department of State which issues passports and visas, but the critical involvement comes to international education programs in the way that the various governmental agencies have developed and interpreted the idea of education for world responsibility.

In summary, the current rationale for cross-cultural educational programs has been established by both institutions of higher education and the Federal government working separately and in joint efforts. That rationale is based on the idea that a student in the United States should understand world responsibility as a goal of education and the private and public institutions who wish to become involved in international education will have to take this fact into account. There is much to be gained from such a partnership as long as the roles of the government and the university are clearly defined and understood, and both parties work together toward common educational, in contrast to propagandizing, results. As Richard Humphry states, "The question for international education is not

whether, but in what direction and at what level of investment in relation to all other demands of national interest is the need for government and academic co-operation." (1970, p. 23)

Factors Which Differentiate Students

Introduction

Since the choice to study in a cross-cultural educational setting is in many respects a self-selection process, as is the choice to continue with some type of higher education after high school, many of the studies which have been completed in the latter area are applicable to the former. Most of the researchers who have worked in the area of the development of post-high school youngsters have come to the same conclusion that was reached by Medsker and Trent in a rather recent survey; namely, that ". . . the pursuits and development of young people after high school are dependent upon a multiplicity of psychological and situational factors, many of them interrelated." (1968, p. xx)

Most of the studies in the last twenty years have dealt with many of the same factors: mental ability, societal and familial expectations, individual motivation, and financial ability in relation to the cost of higher education. Further, the results of the majority of the studies are very similar, the differences lying chiefly in which

factors a particular research team found to be the most important under certain given conditions of a particular study. It is, therefore, the purpose of this section of the review of the literature to deal with the major studies in this area, to show their development and interrelatedness, and to point out their significance to the current study.

Early Studies of Socio-Economic Status

After the publication of W. Lloyd Warner's, Social Class in America (1949) in which he defined the criteria for social class in terms of the father's occupation, family income, and neighborhood on a weighted scale from one to seven, people in all areas of social research began to use these criteria in order to measure the socio-economic status of a family. It is little wonder then that many of the early studies in college attendance counted heavily upon this particular criteria.

At the end of World War II, the Commission on Human Resources and Advanced Training of the United States government undertook a survey of forty-one colleges in order to determine the type of financial support that would be needed for college students in the immediate postwar period. This survey showed that among the factors which are most important in shaping a growing child's educational plans are the general economic and cultural environment in

which he is raised (Wolfe, 1954).

In 1952, Robert C. White completed a somewhat larger survey in order to determine the educational needs for the next decade in northeastern Ohio. In his study, which used 1,053 students randomly selected from northeastern Ohio high schools and 666 college students in the institutions of higher education which sponsored the study, he showed that membership in a particular social class is an important factor in who attended college in this particular geographical location. Specifically, the study based on Hollinshead's early theoretical model, showed that children in the upper and upper middle classes attended colleges as a matter of course, while the students in the lower socio-economic classes do not have a tendency to go, in spite of their I. Q. It was further shown that for this particular population, the two highest social classes will send their children to college in numbers twice as great as their proportion to their numbers in the total population, while the lower two classes send only one-half of their proportion of the total population.

In a study of more national scope in which Charles Cole and his associates at the College Entrance Examination Board were looking at the future need for scientists in the United States, a national study of high school students and their plans revealed a high correlation between the socio-economic pattern of the family and the plans of a gifted student to continue his education. This study showed another

trend which an ever increasing number of social researchers were beginning to study carefully, that of other motivational forces within the home (1956). Perhaps Cole placed this whole area of motivation into perspective most succinctly when he stated, "It is the home and not the school which sends people to college." (p. 91) The different forms which this motivation of different family members upon the student can take must thus be explored.

Familial Motivational Factors

Byron Hollinshead was one of the first researchers in the area of educational sociology to realize that "the two terms 'financial aid' and 'motivation' are curiously mixed so that it is hard to say where one begins and the other ends." (1952, p. 11) In a large study which took into account the entire high school population of the United States, Who Should Go to College?, the author comes to the conclusion that in spite of all the other factors which must be discussed when one examines all of the students who seek some type of higher education, the crucial factor is that of family attitude, the tradition and respect which they have for learning.

From Hollinshead's early study, other researchers in the field began to isolate particular factors which might serve as a motivational force for students who would continue in college. In a study done in the early 1950's, Ralph Berdie looked at the post-high school

plans of 25,000 Minnesota students. As previous studies had done, he looked at much demographic data, but he was also interested in attaining some measure of the familial attitude toward higher education. Of those students in the survey who said that they planned to attend college, 15% of the students said that their parents insisted that they go on to college, and 80% of the students said their parents wanted them to continue their education (1954).

Berdie and other members of the staff at the University of Minnesota continued their study of the state's high school population and consequently, later studies showed even more definitely the complexity of student motivation to attend college. In a study published in 1965, Berdie says that

students seldom know much about the process that they go through in reaching a decision and know relatively little about the influences determining their plans. . . . A surprising number of students who attend college will explain that parents had nothing to do with the decision, and that their parents insisted that the decision was the student's and not theirs. Many students are unaware of the more subtle influences exerted by the family (p. 5).

The subtlety of this influence becomes more apparent in the present study, as one looks at the responses which the students make concerning the influence of their parents upon their decision to participate in cross-cultural educational programs.

Cole, in his 1956 study of academically gifted high school students throughout the United States, attempted to isolate even more factors than had previously been done. Basing his study on an

earlier study done by Joseph Kahl in The Harvard Educational Review (Vol. 23(3), 1953), he determined that the personality of the mother was a much larger factor than had previously been suggested. He concluded his study by saying that "in order to be effective . . . this influence must be in the form of encouragement and not in overbearing domination that stifles individual initiative or independent thought." (p. 189)

In studies done in 1954 (Dressel and Mayhew) and 1964 (Krauss), the point of parental influence in the student's choice of continuing in some form of higher education was pursued. The earlier study by Dressel and Mayhew of entering freshmen in the Basic College at Michigan State University found that a high percentage of parents expected a higher level of educational attainment for their children than they had themselves, regardless of the socio-economic class in which they placed themselves.

Irving Krauss' study (1964) of the educational aspirations of working class youth in the San Francisco Bay area uses a different sample of the population, but speaks basically to the same question. His study of 387 male seniors in high school showed that one of the most significant factors which influenced these students in their decision about college was the educational level which the mother had attained. That is, the higher the educational level of the mother, the more likely the son was to continue his educational pursuits. This

factor, although with a different sample, shows up again in the present study.

The relationship between the educational level of the family members, parents and siblings, and the motivation of the student to attend college is shown in Max Wise's 1958 study for the American Council on Education. Basically, as might be expected, the higher the educational level of all of the family members, the higher was the motivation of the student to attend college.

Havinghurst and others in Growing Up in River City, the action research project of the University of Chicago which studied the young people in a midwestern city with a population of 45,000 for nine years, 1951-1960, found that the motivation of the student was more important than money in his decision to continue with some form of higher education. As in earlier studies, Havinghurst points to the family as a strong motivational force, but he also mentions the very strong influence of significant others, and the social pressures which might influence a student in the direction of college as strongly as familial motivation (1961).

Several other major studies have been done which test the motivational factors which influence those students who continue their education past the high school level. Leonard Baird and John Holland took a random sample of 3% of all of the high school seniors who took the ACT in November of 1965 and February of 1966. The

use of multiple indices showed that the most important source of support, financial and otherwise, of all students who began college regardless of their academic standing or predictability of academic success in college, was their families (1968).

Although William Sewell and Vimal P. Shah at the University of Wisconsin were working only with students in a limited geographical area, 10,318 Wisconsin high school seniors, the rigorous methods of cross-tabular analysis and the large sample, make it one of the most valuable in the field (*American Journal of Sociology* 74:559-572, 1967-68). This study showed that parental encouragement is the strongest intervening variable between socio-economic status, intelligence of the child, and his educational aspirations.

Finally, in a four-year longitudinal study of 10,000 high school graduates, Trent and Medsker look at the multiplicity of interrelated psychological and situational factors which influence the pursuits and development of young people after they complete high school. As in earlier studies, the fact that parents want and/or expect a child to continue in college is a major factor.

Success in college is rooted in parental encouragement and expectation, the acceptance of the child of his family viewing either traditional college attendance or of upward social mobility through such attendance, and the youngster's internalization of the norms and aspirations of adults who look with favor, probably for a high diversity of reasons on higher education (1968, p. ix).

The studies which have been discussed above certainly do not exhaust all of the possibilities of studies in this particular area. They are, however, representative of work which has been done in the area. This type of study is particularly important to the present one because of the relationship between a student's background and motivational factors and his decision to attend college and the importance of these same factors as he decides whether or not to study in a cross-cultural educational setting.

Theoretical Background Material for the Current Study

Introduction

To this point in the review of the literature there has been an attempt to look at the material which has dealt with international education, per se as well as that which showed the variety of factors which might influence a student as he chose to continue his education past high school. This material, although somewhat tangential, is very important to a study of this type. Equally important, however, is that literature which is supportive to the theoretical material for the current study.

For this reason, the remaining review of the literature will be divided into four sections: 1) material dealing with the variety of college environments, 2) material which deals with the related area

of student typologies or subgroups on the various campuses, 3) material necessary to further explain Festinger's socio-psychological paradigm, and 4) supporting material for the Rokeach Value Scale, Form D.

College and University Environments

As colleges continue to expand and as more students are deciding to continue their education at the college and university setting, many studies have been conducted in order to determine the different types of environments which may be found on campuses and how these environments might influence students who attend a particular college or university. Such findings are important to a study such as this one because they give the necessary background which is needed to determine whether or not an institution with particular characteristics would be more interested in programs of cross-cultural education for its students, and whether the students themselves would be more interested in such programs than students who attended other institutions of higher education. In other words, this study is attempting to draw parallels between both the self-selection process which occurs to varying degrees when a student chooses his college and when he chooses a cross-cultural educational setting, to look at those factors which might influence a student while he is enrolled in college, and to determine whether or not a particular

student type is more likely to participate in a cross-cultural educational exchange than another.

There are two basic approaches to the study of college environment. The first is classed as the "image approach," and the second as "the student characteristic approach" (Astin, 1968). The first systematic empirical approach to college environment was Pace and Stern's 1958, College Characteristic Index, which was in turn based on Murray's 1938 Need-Press Theory. In 1963 Pace shortened the CCI by means of item and factor analysis and this resulted in the College and University Environment Scales (CUES), an instrument which shows which factors within that environment most adequately define the various college environments.

The first basic approach to college environments suggests that college environments are transmitted by people and that the college environment depends primarily on the characteristics of the students which it attracts. This student characteristic approach is exemplified by the Environmental Assessment Technique (EAT) of Astin and Holland.

The latter approach to the study of college environment assumes that the output which a college or university has is related to the input of students which it receives. In other words, the most important attributes which a student takes with him into his college environment are all of the factors which have influenced his life to the

point of his college entry (Holland, 1959; and Astin, 1961, 1963). Such an approach also assumes that once the self-selected student places himself in such an environment he will find that it is in a state of change and that the majority of the students who attend the institution become more homogeneous as they spend more time in the same environment (Astin, 1965). This explains in part why such a high percentage of students in the present study feel that they should be classed as members of the collegiate subculture.

Many major studies have been conducted which lend support to both the hypothesis on selective rather than random college selection and the increasingly homogeneity of students on the same campus. The largest was conducted by Astin (1965). In this study, he sent questionnaires to 127,214 freshmen at 248 colleges and universities. By the use of factor analysis, he was able to show the differences in importance of twenty-five predefined and validated attributes of students at the various institutions. Other studies which show basically the same differences among and similarities within college student populations are Goldsen's study of males at all class levels in eleven colleges and universities (Rose K. Goldsen et al., 1960); Richards, Holland and Lutz's study of second semester males and females at thirty-one colleges (1965); Rose's 1964 study of males and females of each class at eleven institutions; and Gaff's random sample of freshmen at thirty colleges (1965).

Such studies are important additions to the research in higher education because they point up the importance of understanding the self-selection process which students use as they choose their college or university and the importance that this phenomena has on the shaping of the ethos of the college or university itself. Many of the same factors may be operable as a student decides to participate in a cross-cultural educational exchange.

Student Typologies

Studies which have been cited thus far in the review of the literature have been involved with the early background of the student and the influence of significant others as the choice of a college or university is made by the prospective student. In order to fully understand the different attributes which an institution holds important, one must also understand more about the different student types as one discusses the increasing amount of homogeneity with other students as one continues in his collegiate career, and the effect that this might have on the decision-making process--in this case, the decision to study in a cross-cultural educational setting.

The analysis of campus subcultures is not a new phenomena (Goldsen et al., 1960) but the subcultures most widely discussed today, those of collegiate, vocational, academic, and nonconformist, are the ones based on the theoretical model proposed by Clark and

Trow (Trow, 1960, 1962; Clark and Trow, 1966). These typologies are good working tools in an assessment of the campus community, but three points need to be considered. The first is that these are meant only to be prototypes, and therefore, not every student is going to have all of the criteria which are mentioned and individual students may interpret the criteria which is stated in a different manner. The second point has been made previously; namely, that although a student may appear to be more similar than he is different to other students who place themselves in the same typology, it is the experiences which he has before he enters the university that will be more important to him and have more effect on him than the subculture in which he places himself. The final point is that these subcultures have emerged as a combination of two variables: "the degree toward which students are involved with ideas and the extent to which students identify with their college." (Clark and Trow, 1966)

Lewis Mayhew's statement, "How the student and the collegiate environment interact is still unknown in any precise detail, but current research and theory are beginning to suggest some ways," can serve as a beginning point for a discussion of how student subculture and institutional ethos are important to this particular study (Mayhew, 1966, p. 218). One of the most important areas within the student subcultures is an understanding of how they see themselves in relationship to various aspects of campus life. Although

there is much work to be done in this area, brief descriptions are available from some of the Clark-Trow material.

The student who labels himself as collegiate is loyal to his college as an institution, but he is resistant to serious academic demands from the faculty. On the other hand, the vocational subculture has the world of work as his main focus. The college degree means only a better job and he is both resistant to the intellectual demands of the faculty and detached from the campus and all of those activities which are so often considered a part of collegiate life.

The academic typology suggests the student who has a strong emotional tie to the institution, but this identification comes through the emotional ties that he has with faculty members. These members of the campus community are those who are the serious students and who have accepted the intellectual values of the faculty. The last of the four subcultures, the nonconformist uses ideas not necessarily associated with the university and off-campus groups as points of reference. It is these people who have a critical detachment from all of the campus community. (Clark and Trow, n.d.)

One other factor needs to be considered before a discussion of the relevance of these particular typologies for this study can follow. Namely, it is important to have some estimate of the number of students who would place themselves in each of the categories. Davis and Coakley surveyed 13,000 freshmen in thirty-two colleges

and universities in order to see how they would respond to the four paragraphs which are used to represent the typologies devised by Clark and Trow. In this sample, 51% of the respondents said that they were collegiate, 27% said that they were vocational, 19% felt that they were academic, and the remaining 4% were nonconformist (1965). Since this study was representative of many different types of institutions of higher education and all geographical regions of the United States were represented, one can assume that these figures are fairly normative for all campuses.

Given what we know about students who place themselves in the various typologies as far as their relationship to the institution and various factors within it, part of this study is involved with examining how these same factors might affect a student's decision to study in a cross-cultural educational setting. That is to say, that a portion of the study is interested in whether or not a student's feeling toward the institution which is sponsoring the cross-cultural exchange affects his decision to participate in such a program. Tangential to this is the idea that students who place themselves in the various typologies might find it more important to consider the feelings of a particular segment of the campus community; that is, the faculty if a student considered himself to be academic, than would the student who placed himself in a different typology. These findings could be particularly important if one subgroup had a signif-

icantly higher number of students interested in cross-cultural educational programs than did any of the other three subcultures.

Festinger's Social-Psychological Paradigm

The studies which are cited above are representative of all of those which might have been used in order to show the influence which a person's background has upon his current situation. Background material is, of course, important in the shaping of a student's life style, but equally important are those pressures which are placed upon a person because of his need to be with others.

Theodore Newcomb, an important researcher in studies concerned with peer group pressure among college students (1943, 1962a) states it well when he says, "Students, like other people, are members of groups and all groups (as distinguished from arbitrary categories) have power over their members." (Newcomb, 1962, p. 469)

Since the early studies of Newcomb and others, there has been much refinement of broadly based theoretical models. Because of these refinements, there are an ever increasing number of studies which deal with changing norms and values as a result of a particular group's willingness and ability to reward or punish certain types of behavior. Most early material was based on a valid but rather broadly based theoretical model. In 1954, in his theory of "Social Comparison Processes," Leon Festinger took much of the early

material and placed it in a compact and workable theoretical framework. It is this paradigm that is used and expanded in the course of this study.

The primary underlying hypothesis of the several which are applicable to this study is that human beings need to evaluate their opinions and abilities by something other than self-criteria. The second hypothesis then follows naturally. An individual evaluates his opinions and abilities in comparison to the opinions and abilities of others.

It is unrealistic, however, to expect that an individual compares his own opinions with those of every other person whom he knows. He is, in other words, selective. Festinger takes this into account when he suggests that an individual is less likely to compare himself with another person when he finds the differences between his own opinions and abilities and those of the other person increase.

Festinger also realizes that for a variety of reasons, the opinions of some individuals and groups are more important than others. His next hypothesis, in somewhat abbreviated form, is that factors which increase the importance of a group or an individual for a person will also increase the pressure toward uniformity concerning the opinions of these people for him.

There are two corollaries which follow such a hypothesis that are also important to this study. The first is, that if an opinion is of

little or no importance to an individual, there will be little need to evaluate it. The second is that the more attractive a group is to an individual, the more important the comparison of his opinions to those of the group will be.

In applying Festinger's model to the present study, two factors must be taken into consideration. The first is that for the beginning college student, even though he may be hesitant to admit to it, the influences of those significant others in his life previous to the time when he enters college are for the most part going to be stronger than those of his college peers. Nevitt Sanford makes this point when he suggests in his article, "Developmental Status of the Entering Freshman," that because the incoming freshman has not yet had the time to develop a system based upon his own experiences, the values which he supports are those of his family and home community. On the other hand, this support is adequate enough that the entering student is able to present a picture of organization and self-containment (1962).

A study by Alexander and Campbell of senior males in South Carolina high schools who planned to attend college made the same point concerning the importance of parental values as they related to educational aspirations and attainments (1964). At the same time, however, this study also showed the importance of peer influence at this early level of educational aspiration and attainment, as the

tendency to attend college was stronger at all levels of parental educational attainment and goals for their sons, if an individual's best friend was also planning to continue his education at a college or university. The importance of both of these significant others must thus be kept in mind, as one considers the variety of persons that could possibly influence a student in his decision to study in a cross-cultural educational setting.

The second point which must be taken into consideration when using Festinger's model is that parents and peers are not the only ones who might influence students in the decision-making process. Faculty members and students might also communicate in order to reach the consensual validation necessary in the decision-making process.

Several studies have been done in order to determine how well students knew faculty members and how important the opinions of the faculty were as a student worked through the decision-making process. Birney, Coplin, and Grosse asked a representative sample from all classes at Amherst the amount of contact that they had with faculty members outside of class (1960) while Harp and Taietz (1964) asked the same question to students at Cornell in 1962. Weiss (1967) sampled the entire student body of St. Louis University in order to determine how well they felt they knew the faculty and how easy it was for the student body to communicate with faculty on matters other

than those which pertained directly to classroom matters.

In all of the above studies, relatively few students discussed matters, other than academic ones, that they felt were significant with faculty members. Yet, there were enough students in each of the studies who felt that faculty influence was important so that professors cannot be entirely ignored in a study of the decision-making process of college students. This is especially true when one considers that the decision to study in a cross-cultural educational setting may be considered an academic one.

The review of the literature has been concerned with four different areas: the variety of factors which influence a student as he chooses to continue his education past high school, the variety of college environments, student typologies or subgroups on the various campuses, and material which is necessary to explain Festinger's socio-psychological paradigm. The expansion of Festinger's model is accomplished in this study by interrelating the first three areas to it.

It has been shown previously, for example, that the experiences which a student has before he enters the university do more to shape his life than either the college environment which he chooses or the subgroup in which he places himself. On the other hand, by the nature of the college environment, the student subgroup or typology in which a student perceives himself, also has the possibility of

influencing his decision-making processes, particularly in the case of this study, the decision to study in a cross-cultural educational setting.

Festinger hypothesizes that it is important for a person to test the validity of decisions against those of other people, within, of course, the guidelines which he establishes. The subgroup in which students place themselves is dependent to a great degree both upon how they view themselves and the institution which they are attending. In other words, in the college environment a student deals with both past and present perceptions of himself.

The concern of this study lies in part with whether or not a student relates differently to parents, peers and faculty members if he is in a particular typology. That is to say, this study attempts to determine whether a student values the opinion of one of these groups of significant others, parents, peers, or faculty members, more if he is in a particular student typology as the opinions of these significant others relate to his decision to study in a cross-cultural educational setting.

Attitudes and Values

Social scientists have been concerned with attitudes and values for many years, but the study of them in a manner which lends itself to further research and development is rather recent. The early

work of Allport and others in the construction of a value scale (1931, 1951) on those value clusters suggested by Sprague, and the testing of college students in order to measure attitudinal and value changes by Feldman, Newcomb and Jacob, should not be discredited as these studies provided much of the groundwork for the current construction of tests and the studies which ensue from them. On the other hand, part of the reason for the lack of solid research material in this area of psychology is the difficulty that persons interested in the field have had in defining the areas which they wish to discuss and in finding some way of measuring the concepts once they have been defined. Much of the latest work in the area has been done by Milton Rokeach, and it is basically his definitions and scale that are used as a part of this study.

In the introduction to his book, Beliefs, Attitudes, and Values, Rokeach's main thesis is that although beliefs cannot be directly observed, they are organized and their importance to the individual lies in the connectedness which they have with one another. Basically, beliefs concerned with one's own existence and identity are more important and hence have more functional connections and consequences for an individual than other beliefs would have. Further, shared beliefs have more functional connections than others, and those beliefs which are learned from others are not as important to the individual as those which are classified as "primitive beliefs." A belief

system, therefore, represents the total universe of an individual-- beliefs about his physical world, his social world, and himself (1969).

Values as Rokeach defines them, can be introduced into this total belief system because they are a type of belief about how one ought or ought not behave. Further, these values may be subdivided into terminal and instrumental values. An instrumental value deals with modes of behavior or conduct as they relate to objects while a terminal value is one which takes into account an end-state of existence that a person believes is personally and socially worth striving toward. In summary, a person's value system may be said to be "a learned organization of rules for making choices and for resolving conflicts between two or more modes of behavior or between two or more states of existence." (1969, p. ix)

When Rokeach and his colleagues began working with values, they discovered that adults in our society have a relatively small number of values that they are able to rank with a reasonable amount of stability. In order to measure these values as they have been defined above the Rokeach Value Scale, Form D was designed following the procedure first introduced by Guttman. A Guttman Scale is defined as a "non-metric method for scaling attitudinal items based on the idea that items can be arranged in an order such that an individual who responds positively to any particular item also responds positively to all other items having lower rank" (Shaw and Wright,

1967, p. 25). Further methodological notes on construction of the survey can be found in Cochrane and Rokeach (1970).

Test and retest reliabilities for each of the values considered separately for time intervals ranging from three to seven weeks. For terminal values, the reliabilities range from .51 for a sense of accomplishment to .88 for salvation. For instrumental values, individual reliabilities range from .45 for responsible to .70 for ambitious (Rokeach, 1971c).

Reliability of a total value system was obtained for each subject by correlating the rankings obtained from test and retest data. The table below shows the median reliabilities obtain for five samples of college students (Rokeach, 1971c):

N	Time between test-retest	Terminal Value Scale	Instrumental Value Scale
117	3 weeks	.78	.72
36	4.5 weeks	.80	.70
100	7 weeks	.78	.71
108	3-5 months	.73	-
103	15-17 months	.65	-

The material which has now been published concerning the Rokeach Value Scale, Form D is now significant enough to show that

it is a valid instrument for measuring the personal and societal values of an individual. Because for the purposes of this study, the scale was used in a slightly different manner, further investigation was also undertaken. In order to ascertain whether or not students who choose to study in a cross-cultural educational setting have different instrumental and terminal values than those who do not, subjects were asked to rank their values according to the directions given in the front of the test booklet. Because of the feasibility of the statistical analyses concerned with this part of the study they were asked to select only the four most important values out of eighteen. Before the questionnaire was designed in the manner described above, however, Rokeach was consulted since there was nothing in the literature to date which described slightly different usage of the test than that of the initiator. After describing the methodology which was to be employed and the rationale for using it, Rokeach agreed that there was nothing wrong with the procedure as it had been outlined to him (Rokeach, 1971b).

Summary

In order to undertake a study of this type, much material needed to be reviewed in order to cover both the theoretical and practical aspects concerned with cross-cultural education. Although the material which dealt with the multiplicity of factors which

influence students in their decision to continue their education is, for the most part both sound and plentiful, the review of the literature also indicates that much more research needs to be undertaken if cross-cultural educational programs are to be strengthened.

The material dealing with the theoretical bases of the study, especially the work of Festinger is well done. The problem in this particular area is that it is difficult to find current research material which deals with theoretical models. With the ever increasing amount of institutional research being done, the same problem does not hold true for the material that deals with college and university environments and the student subcultures within them.

Studies dealing with values, especially those based on Rokeach's work, have been slow to come into print. With the material that is now available as well as that which is slated for publication in the next year, this should no longer pose as great a problem.

In conclusion, there have been many inroads made in all areas of research concerned with international education. In many cases, however, research and research findings need to be better systematized in order that one may gain the full benefits of such efforts. In all areas, more work needs to be done so that research may be used as a tool to strengthen existing programs and to help create the kind of programs that will be needed in future years if these programs are to continue to be a viable part of our educational system.

CHAPTER III

METHODOLOGY AND PROCEDURE

This chapter describes the design of the study, how the sample of students was selected, how the data were collected from the study participants, and how the data were analyzed.

Design of the Study

The objective of this study as outlined in Chapter I was to evaluate certain factors which might differentiate students who wish to participate in cross-cultural educational opportunities. Since it was the intent of the study to compare those students who showed interest in such programs, by either inquiring about or applying for such programs through the Office of International Education at Oregon State University, and other Oregon State students who had no apparent interest in such studies, the following factors were controlled: age, sex, marital status, class standing, school of enrollment, major, and cumulative grade point average. It was necessary to match on each of these control factors in order to insure that the individual pairs were as similar as possible in other areas which might have been considered as intervening variables. Because of the method of matching the differences attributed to the above-mentioned

factors are minimized.

Selection of Subjects

Two groups of students were chosen to participate in this study. The first group was those students who had either applied or inquired about cross-cultural educational programs through the Office of International Education at Oregon State University during the 1970-1971 academic year. The control group consisted of those students who were individually matched to each one of the students who inquired or applied on the criteria which was described above.

Students Who Applied or Inquired About

Cross-Cultural Educational Programs

When students came to the Office of International Education to inquire about cross-cultural educational programs during the 1970-1971 school year when this study was conducted, they were asked to complete a file card with their name, address, phone number and major. A total of 116 students filled out these cards. Of that number, 18 students were not enrolled at Oregon State University during the spring term, 1971, when the questionnaires were administered. Of the 98 students in the final sample, 97 participated in the study.

Disinterested Student Control Group

After each of the students who had inquired or applied for a cross-cultural educational program had filled out a questionnaire and it was coded to insure anonymity, they were matched with another student in the following manner. The criteria of school of enrollment, class standing and cumulative grade point average, and sex were taken from the master list which the university has available through the Dean of Students Office. A student who inquired was matched with the next person on the list alphabetically who fit all of the criteria. In the case of cumulative grade point average which was figured according to grades up to and including the grades from winter term, 1971, students were matched with a permissible variation of .25 in the grade point average.

After the student was matched with a control subject on the academic criteria and on sex, the student personnel record of the control subject was checked to ascertain his chronological age, marital status, and enrollment in the university for the spring term. If these criteria also matched, the student's address and phone number were taken from these records so that he could be contacted. If the last two criteria did not match, or if the student was not enrolled in school for the spring, 1971 term, the process was begun again with the earlier criteria, and the next person on the list alphabetically

was selected as the match. Of the 97 students who were individually selected in this manner, all of them participated in the study.

Collection of Data

The data in this study, used in attempting to look at selected factors which might differentiate students who wish to study in cross-cultural educational settings, was collected by means of a questionnaire which was constructed for this purpose. It was administered in the following manner.

- (a) Students Who Inquired and Applied. A letter was sent to all of the people in this group on May 11, 1971. The letter briefly described the study and asked for their cooperation in filling out a questionnaire at a designated room in the Memorial Union. The first testing date was May 13, 1971, and the second testing date was May 14, 1971. There were blocks of time set aside in the morning, afternoon, and evening of each of these days when students could fill out the questionnaire. During these two days, 23 students completed questionnaires.

During the week of May 17-24, 1971, the remaining 74 students were contacted, either by phone or personally. If the student was in agreement, the questionnaire was delivered to him and he was permitted to complete the ques-

tionnaire at his convenience. In the large majority of the cases, the questionnaires were collected from the student within twenty-four hours after he received it. In all cases, the questionnaire was back to the experimenter within forty-eight hours after the student received it.

- (b) Disinterested Control Group. Letters were sent to the members of the control group on May 23, 1971, explaining briefly about the study and asking for their cooperation. The testing dates were May 25, 26, and 27, 1971. The same setting and time schedule was used for this group as was used for the experimental group. During these three days, 28 students completed questionnaires. During the following week, the remaining students were contacted, and the same procedure was used in delivering and collecting their data as had been done with the experimental group. All of the students who were contacted completed the questionnaire within the week.

The questionnaires administered to the control group were slightly altered in order to accommodate the fact that certain of the students in the control group may have an interest in cross-cultural educational programs, but had not inquired or applied about such programs through the Office of International Education at Oregon State, while other students may have had little or no interest in

cross-cultural educational programs. If the former was the case, when the experimenter asked the student the question about his interest in such programs, he received an identical questionnaire to those students in the experimental group. If, on the other hand, a student indicated that he had little or no interest in cross-cultural educational programs, he received a slightly different questionnaire in order to determine the reasons that he had little or no interest in cross-cultural educational opportunities. The questions used to gather data for the testing of the hypotheses were, however, identical.

Once each of the questionnaires was checked to make certain that there was a match on each of the criteria mentioned above, the questions were hand scored and then rescored to check for possible error. All of the data were then punched on standard key punch cards and analyzed for significant difference by the Control Data 3300 machine located in the Oregon State University Computer Center.

Analysis of Data

The following null hypotheses were tested:

1. There will be no significant differences between the group of students who showed an interest in cross-cultural educational programs and the control group in the proportions which select the various categories of the Clark-Trow

typologies as being self-descriptive.

2. There will be no significant differences in distinctions of ratings of perceived support from parents, peers and faculty members between the group of students who show an interest in cross-cultural educational programs and the control group.
3. There will be no significant differences in the demographic/biographic characteristics of those students who are interested in cross-cultural educational programs and the demographic characteristics of the control group.
4. There will be no significant difference in values as measured by the Rokeach Value Scale, Form D, between those students who are interested in cross-cultural educational programs and the control group.
5. There will be no significant differences in the student types, the support factors, the values, or the demographic patterns between those students who only inquire about the various programs and those who actually participate.

In addition to the hypotheses which were tested certain other questions were analyzed and descriptive statistics were compiled as an aid to the staff of the Office of International Education at Oregon State University. These questions were concerned primarily with the effectiveness of publicity of the various programs, the financing of such programs, and the length of time that students had been interested in such programs. These questions will be discussed in

Appendix G.

In order to statistically test the hypotheses, the following comparisons were made:

1. Those students who inquired about or applied for cross-cultural educational programs through the Office of International Education with a control group (disinterested students matched to the experimental group). The students in the control group may have had an interest in cross-cultural educational programs but had not inquired through the Office of International Education, or they may have had no interest in such programs.
2. Those students who had applied for such programs with those students who had only inquired about the programs.

Comparisons were not made between interested and noninterested students in the control group or between the differences that might have occurred between the males and females in the experimental group (those who inquired about or applied for the programs) or between male and female differences in the control group because the purpose of the disinterested comparisons was solely to control for the criteria of age, sex, marital status, class standing, school of enrollment and cumulative grade point average.

The questionnaire was constructed in such a manner that questions would yield categorical data, that is, the data was capable of

showing how many people from the experimental group (applied and inquired) and how many people from the control group (interested and noninterested) were in each category. The X^2 Test of Independence was used in order to test whether or not the marginal distribution for the fraction in each category was the same for each group; that is, that the probability of a sample being in a given category is independent of the group from which it came. The .05 level of significance is accepted as indicating degrees of confidence that differences are real (Snedecor and Cochran, 1967).

Setting up contingency tables for all of the questions, and assuming that the null hypothesis of independence of the two groups is true, the following general formula is used to compute the X^2 :

$$X^2 = \sum_{ij} \frac{(O_{ij} - \hat{E}_{ij})^2}{\hat{E}_{ij}}$$

where

O_{ij} - is the observed frequency in the ij cell

E_{ij} - is the maximum likelihood estimate of the ij cell

The expected frequencies, E_{ij} , were estimated using the maximum likelihood procedure. For the first four null hypotheses where matched pairs were being used, the method further assured that the estimated sum of the E_{ij} for any one category was the same for both groups. This gave a more powerful test for the matched

pairs. The mathematical model and the rationale for this statistical method are explained further in Appendix E.

CHAPTER IV

ANALYSIS OF DATA

This study was conducted and the results analyzed in order to provide data about those factors which might differentiate United States students who wish to study in cross-cultural educational settings. The study was also conducted in order to ascertain whether there were significant differences between those students who inquired about cross-cultural educational programs and those who actually applied for them.

In this chapter the data are tabulated and analyzed in the following five sections:

1. Differences between the group of students who showed an interest in cross-cultural educational programs (those who applied and inquired) and the control group in the proportions which select the various categories of the Clark-Trow typologies as being self-descriptive.
2. Differences between students who show an interest in cross-cultural educational programs and the control group in distinctions of ratings of perceived support from parents, peers and faculty members.
3. Differences between students who show an interest in cross-cultural educational programs and the control group on

demographic patterns.

4. Differences among students who show an interest in cross-cultural educational programs and the control group on values as measured by the Rokeach Value Scale, Form D.
5. Differences among students who only inquired in cross-cultural educational programs and those who actually applied on the four Clark-Trow student typologies, the support factor, the demographic patterns, and the values as measured by the Rokeach Value Scale.

For the first four comparisons, the following general hypotheses were tested using a Chi-square test for paired data:

Null Hypothesis H_0 : There is no significant difference between the paired groups.

Alternate Hypothesis H_1 : There is a significant difference among the groups tested.

For the fifth comparison, the same null and alternate hypotheses were tested using a Chi-square test of independence for nonpaired data.

Appendix E explains the use of the two slightly different Chi-square tests of independence for the paired and nonpaired data.

These hypotheses were tested at the .05 confidence level.

Interested Students and Control Group

Clark-Trow Typologies

As is indicated in Table I (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Four Clark-Trow Student Typologies), there is no significant difference on the Clark-Trow student typologies between those students who show an interest in cross-cultural educational settings (those students who inquired and/or applied) and the control group (those students who were matched on the characteristics mentioned above who may or may not have an interest in cross-cultural educational settings).

Support Factors

The next section of the analysis of data is concerned with the amount of perceived support that interested students and those students in the control group felt that they received toward such a project from three different groups of people: parents, peers and faculty members. This section is also concerned with the importance that individuals placed on the feelings of each of these groups of people.

A slight adjustment was made in the Chi-square contingency tables in this section because in all cases, no one strongly disagreed with cross-cultural educational programs. This means that in the

TABLE I Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Four Clark-Trow Student Typologies

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	Vocational	Intellectual	Collegiate	Non-conformist
Control ↓ Vocational	1 ^a (1.00)	1 (1.15)	5 (4.06)	3 (2.33)
Intellectual	4 (3.53)	4 (4.00)	5 (3.67)	5 (3.52)
Collegiate	2 (2.60)	5 (7.84)	31 (31.00)	5 (4.72)
Non-conformist	1 (1.41)	1 (1.73)	7 (7.43)	8 (8.00)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = 3.23$$

Since $3.23 < \chi^2_{.05} = 7.81$

The H_0 is not rejected

There are no significant differences

^aRefer to Appendix E for further explanation of all matched sample contingency tables.

adjusted contingency tables, the four categories read: 1) have never discussed it with them, 2) strongly agree, 3) agree, 4) disagree. Although it was necessary to combine some of the raw data because of the limits set by the Chi-square test, the changes made no difference in the final analysis of the data. That is to say that all of the questions involved were first analyzed without combining categories. When they were run a second time after the one category was deleted, the results were the same--those questions which were significant remained significant and those which showed no significant difference on the first run showed none on the second.

There were also adjustments made in the contingency tables for responses dealing with the importance of these feelings. In both the case of friends and faculty members, the two categories of "very important" and "important" were combined in order to meet the limitations of the Chi-square test.

Table II A (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Their Parents' Feelings Toward Programs) indicates that there is a significant difference between the interested students and the control group in the feeling of the parents toward such programs. The interested students discussed the programs with parents and found them to be in agreement while the control group did not discuss cross-cultural educational programs with their parents, so did not know

TABLE II A Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Their Parents' Feelings Toward Programs

N = 86 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental→	Never Discussed It	Strongly Agree	Agree	Disagree
Control ↓ Never Discussed It	3 (3.00)	1 (7.68)	2 (4.93)	0 (0)
Strongly Agree	6 (3.21)	9 (9.00)	22 (17.25)	1 (.50)
Agree	15 (9.41)	8 (11.04)	16 (16.00)	3 (1.74)
Disagree	0 (0)	0 (2.23)	0 (0)	0 (0)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = 19.10$$

Since $19.10 > \chi^2_{.05} = 7.80$

The H_0 can be rejected

There are significant differences

what their feelings would be.

Table II B (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Importance That They Place on Their Parents' Feelings Toward Such Programs) indicates that there is no significant difference between students who have an interest in cross-cultural educational programs and the control group. The lack of difference between the experimental and the control group shows that they both placed the same amount of importance upon their parents' opinions of cross-cultural educational programs.

As is shown in Table III A (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Their Friends' Feelings Toward Programs), there is a significant difference between the experimental group and the control group on the perceived opinions of friends concerning cross-cultural educational programs. The interested students, who is the experimental group, said that their friends agreed with the idea of cross-cultural study programs while the control group never discussed it with their friends.

Table III B (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Importance That They Place on Their Friends' Feelings Toward Such Programs) shows that there is no significant difference between the

TABLE II B Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Importance That They Place on Their Parents' Feelings Toward Such Programs

N = 97 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental	Very Important	Important	Not Very Important	Not at all Important
Control Very Important	3 (3.00)	13 (12.81)	6 (5.24)	0 (0)
Important	12 (12.19)	27 (27.00)	10 (8.85)	1 (.92)
Not Very Important	5 (5.85)	7 (8.05)	7 (7.00)	2 (2.09)
Not at all Important	0 (0)	1 (1.10)	2 (1.92)	1 (1.00)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = .55$$

Since $.55 < \chi^2_{.05} = 7.80$

The H_0 is not rejected

There are no significant differences

TABLE III A Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Their Friends' Feelings Toward Programs

N = 87 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	Never Discussed It	Strongly Agree	Agree	Disagree
Control ↓ Never Discussed it	4 (4.00)	2 (5.21)	3 (7.71)	0 (1.21)
Strongly Agree	7 (4.33)	8 (8.00)	12 (11.94)	0 (0)
Agree	15 (9.31)	11 (11.06)	23 (23.00)	0 (0)
Disagree	1 (.50)	0 (0)	1 (.72)	0 (0)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_3 = 11.80$$

Since $11.80 > \chi^2_{.05} = 7.80$

The H_0 can be rejected

There are significant differences

TABLE III B Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Importance That They Place on Their Friends' Feelings Toward Such Programs

N = 85 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	Important	Not Very Important	Not at all Important
Control ↓ Important	11 (11.00)	16 (16.56)	0 (0)
Not Very Important	16 (15.48)	29 (29.00)	5 (4.48)
Not at all Important	1 (1.09)	3 (3.39)	4 (4.00)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2 = .15$$

$$\text{Since } .15 < \chi^2_{.05} = 5.99$$

The H_0 is not rejected

There are no significant differences

experimental group and the control group in their feelings about the importance of friends' opinions. That is to say that even though the experimental group discussed cross-cultural educational programs with their friends while the control group did not, a majority of both groups felt that the opinions of their friends in this matter were not very important.

Table IV A (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Faculty Members' Feelings Toward Programs) indicates that there is a significant difference between the experimental group and the control group on the perceived opinion of faculty members concerning cross-cultural educational programs. Students who were interested in these programs felt that faculty members whom they knew agreed with such programs while the control group of disinterested students did not discuss cross-cultural educational programs with faculty members.

The importance of faculty opinions in the matter of cross-cultural educational programs appeared to be the same as that of parents and friends. Table IV B (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Importance That They Place on Faculty Members' Feelings Toward Such Programs) shows that there is no significant difference between the experimental and the control group on

TABLE IV A Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Faculty Members' Feelings Toward Programs

N = 85 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	Never Discussed It	Strongly Agree	Agree	Disagree
Control ↓ Never Discussed It	12 (12.00)	3 (11.84)	4 (9.40)	0 (1.20)
Strongly Agree	25 (14.32)	13 (13.00)	7 (5.97)	0 (0)
Agree	12 (7.62)	7 (8.45)	0 (0)	0 (0)
Disagree	1 (.50)	0 (0)	1 (.70)	0 (0)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = 22.44$$

Since $22.44 > \chi^2_{.05} = 7.80$

The H_0 can be rejected

There are significant differences

TABLE IV B Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Importance That They Place on Faculty Members' Feelings Toward Such Programs

N = 96 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	Important	Not Very Important	Not at all Important
Control ↓ Important	24 (24.00)	23 (22.13)	4 (2.67)
Not Very Important	20 (20.82)	7 (7.00)	10 (6.89)
Not at all Important	2 (3.98)	3 (5.54)	3 (3.00)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_2 = 4.32$$

Since $4.32 < \chi^2_{.05} = 5.99$

The H_0 is not rejected

There are no significant differences

this question. This shows that even though those students who are interested in cross-cultural educational programs discuss the matter with faculty members and find them in agreement, they do not feel that the opinion of faculty members is very important, just as the control group does not feel that it is important.

Demographic Data

Demographic data was determined by six criteria: father's occupation, father's education, mother's education, total family income for the past year, size of home community, and home state. Because of the limits imposed by the Chi-square test, certain adjustments needed to be made in the original categories. Of the eight original categories in the question dealing with father's occupation, categories two and three were combined, as were categories five and six. This means that certain professionals and semi-professionals were grouped together, and skilled employees were grouped with clerks, technicians, and sales clerks.

In the questions dealing with mother's and father's educational background, the first three categories were grouped together. This means that the four categories with which we were dealing were: high school graduate, some college, college graduate, and post graduate. This was done because of the fact that the responses to the first two categories, elementary school or less and some high school, were

minimal in both cases.

The same type of grouping needed to be done in the question dealing with total family income in order that the results of the Chi-square test of independence would be valid. In this case, category two, \$15,000-19,999, was combined with category three, \$13,000-14,999; and category seven, \$5,000-6,999, was combined with category eight, Under \$5,000. The resulting categories were: category two--\$14,999 to 19,999, and category six--Under \$5,000 to \$6,999.

In the question which dealt with size of home community, categories one and two were combined. The resulting contingency table had six categories, and the first category read, "live in the country or in a community under 2,000."

Table V (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Father's Occupation) indicates that there is no significant difference between the occupations of the fathers of students in the experimental group and those in the control group. There was, in other words, no occupational grouping which had a significantly higher number of respondents than any other group.

Table VI (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Father's Education) indicates that there is a significant difference between the experimental and the control group in the educational level

TABLE V Differences between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Father's Occupation

N = 87 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis.

Control	Higher Execu- tives, Major Professionals, Owners-Large Concerns	Other Pro- fessionals Or Semi- profession- als	Farm Owners and Operators	Clerks, Technicians, Skilled Laborers
Higher Execu- tives, Major Professionals, Owners-Large Concerns	8 (8.00)	10 (10.06)	3 (2.11)	7 (5.68)
Other Pro- fessionals Or Semi- professionals	11 (10.93)	19 (19.00)	2 (1.40)	8 (6.46)
Farm Owners And Operators	1 (1.72)	2 (3.48)	1 (1.00)	0 (0)
Clerks, Technicians, Skilled Laborers	4 (5.21)	4 (5.25)	2 (1.68)	5 (5.00)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = 2.867$$

Since $2.867 < \chi^2_{.05} = 7.81$

The H_0 is not rejected

There are no significant differences

TABLE VI Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Father's Education

N = 87 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis.

Experimental →	High School or Less	Some College	College Graduate	Post Graduate
Control ↓ High School or Less	5 (5.00)	3 (7.98)	2 (4.97)	2 (4.22)
Some College	6 (3.69)	2 (2.00)	5 (4.87)	11 (10.02)
College Graduate	10 (6.26)	6 (6.16)	7 (7.00)	3 (2.80)
Post Graduate	11 (7.21)	4 (4.44)	5 (5.39)	5 (5.00)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$X^2_3 = 11.90$$

Since $11.90 > X^2_{.05} = 7.80$

The H_0 can be rejected

There are significant differences

which their fathers attained. In the experimental group, those who showed an interest in cross-cultural educational programs, there was a significantly higher number of fathers who had some type of post baccalaureate education than among the fathers of the control group.

As is indicated in Table VII (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Mother's Education) there is no significant difference between the educational level of the mothers of members of the experimental group and mothers of the control group. The lack of significant difference shows that one group of mothers had not attained a higher educational level than the other.

As is indicated in Table VIII (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Total Family Income for the Past Year), there is no significant difference in the income levels of the families of the experimental and control groups. That is, those who inquired about or applied for cross-cultural educational programs were not in a higher income bracket than the control group.

Table IX (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Size of Home Community) indicates that there is no significant difference in the size of the home communities of the experimental and

TABLE VII Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Mother's Education

N = 87 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	High School or Less	Some College	College Graduate	Post Graduate
Control ↓ High School or Less	12 (12.00)	6 (6.40)	9 (8.39)	1 (2.48)
Some College	7 (6.59)	11 (11.00)	9 (7.92)	0 (0)
College Graduate	7 (7.56)	7 (8.11)	6 (6.00)	1 (3.04)
Post Graduate	5 (3.13)	0 (0)	4 (2.39)	2 (2.00)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = 4.88$$

Since $4.88 < \chi^2_{.05} = 7.80$

The H_0 is not rejected

There are no significant differences

TABLE VIII Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group in Total Family Income for the Past Year

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental→ Control	\$20,000 or over	\$13,000- 19,999	\$11,000- 12,999	\$ 9,000- 10,999	\$7,000- 8,999	\$5,000 or Under	
\$20,000 or over	4 (4.00)	10 (9.86)	5 (4.71)	3 (2.06)	1 (1.04)	3 (2.72)	$H_0: O_{ij} = E_{ij}$ for all i, j where O_{ij} is the observed frequency and E_{ij} is the expected frequency $\chi^2_5 = 2.79$ Since $2.79 < \chi^2_{.05} =$ 11.10 The H_0 is not rejected There are no signif- icant differences
\$13,000 - 19,999	7 (7.10)	7 (7.00)	5 (4.78)	4 (2.78)	1 (1.06)	1 (.92)	
\$11,000 - 12,999	4 (4.26)	2 (2.10)	1 (1.00)	1 (.72)	3 (3.33)	0 (0)	
\$ 9,000 - 10,999	1 (1.84)	2 (3.58)	0 (0)	0 (0)	0 (0)	1 (1.54)	
\$ 7,000 - 8,999	4 (3.85)	0 (0)	1 (1.91)	1 (1.67)	0 (0)	0 (0)	
\$ 5,000 or under	3 (3.35)	1 (1.10)	0 (0)	1 (1.74)	0 (0)	0 (0)	

TABLE IX Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Size of Home Community

N = 85 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	Live in the country or in community under 2,000	2,000-10,000	10,000-50,000	50,000-200,000	200,000-1,000,000	Over 1,000,000
Control ↓						
Live in the country or in community under 2,000	2 (2.00)	0 (0)	2 (2.37)	3 (2.85)	1 (2.26)	0 (0)
2,000-10,000	1 (.76)	4 (4.00)	3 (2.59)	5 (3.65)	3 (3.96)	2 (2.28)
10,000-50,000	5 (4.33)	3 (3.57)	14 (14.00)	3 (2.48)	2 (3.35)	1 (1.39)
50,000-200,000	1 (1.06)	3 (4.75)	4 (5.05)	1 (1.00)	0 (0)	1 (1.96)
200,000-1,000,000	1 (.64)	5 (4.02)	5 (3.56)	4 (2.48)	2 (2.00)	0 (0)
Over 1,000,000	1 (.70)	1 (.89)	2 (1.56)	2 (1.34)	1 (1.14)	0 (0)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_5 = 6.52$$

Since $6.52 < \chi^2_{.05} = 11.10$

The H_0 is not rejected

There are no significant differences

the control groups. Students from larger communities were not attracted to cross-cultural educational programs in greater numbers than those from less populated areas or visa versa.

As indicated in Table X (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Home State) there is no significant difference between the experimental and the control group on the state from which they came. In this case it shows that a significantly larger number of students from one group or the other did not come from outside the state of Oregon.

Values

In order to ascertain those values which students held most highly, both those students who were interested in cross-cultural educational programs, the experimental group, and the control group were asked to list the top four values on both pages of the Rokeach Value Scale, Form D. From the top four values which they listed, the top two were analyzed. There are only seventeen values listed in both the terminal and instrumental values because "social recognition" was never listed in the terminal values and "obedience" was not listed in the instrumental values. In the analysis of data concerning values, a standard Chi-square test was used rather than one for paired data because it was unfeasible to adapt the computer program for that amount of paired data.

Table XI (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on

TABLE X Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on Home State

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

Experimental →	Oregon	Washington	California	Other
Control ↓ Oregon	51 (51.00)	1 (.88)	10 (7.79)	5 (6.82)
Washington	0 (0)	1 (1.00)	1 (.88)	0 (0)
California	6 (8.38)	0 (0)	0 (0)	1 (2.22)
Other	9 (7.11)	0 (0)	3 (1.94)	0 (0)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency
 $\chi^2_3 = 3.58$

Since $3.58 < \chi^2_{.05} = 7.80$

The H_0 is not rejected

There are no significant differences

TABLE XI Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Terminal Values which They Feel are Most Important

N = 350 Observed frequency and expected frequency for each cell are listed with the expected frequency in parenthesis. This is a standard Chi-square analysis. Both the first and second choices were analyzed.

	Experimental	Control	
Comfortable Life	2 (1.01)	0 (.99)	
Exciting Life	7 (4.53)	2 (4.47)	
Sense of Accomplishment	8 (8.55)	9 (8.45)	$H_0: O_{ij} = E_{ij}$ for all i, j where
World at Peace	12 (17.60)	23 (17.40)	O_{ij} is the observed frequency and
World of Beauty	3 (4.53)	6 (4.47)	E_{ij} is the expected frequency
Equality	6 (9.55)	13 (9.45)	
Family Security	5 (8.55)	12 (8.45)	
Freedom	22 (19.61)	17 (19.39)	
Happiness	19 (20.62)	22 (20.38)	$\chi^2_{16} = 30.30$
Inner Harmony	18 (16.59)	15 (16.41)	Since $30.30 > \chi^2_{.05}$ $= 26.30$
Mature Love	12 (12.07)	12 (11.93)	
National Security	0 (1.01)	2 (.99)	
Pleasure	1 (1.01)	1 (.99)	The H_0 <u>can</u> be rejected
Salvation	14 (11.57)	9 (11.43)	
Self-Respect	11 (11.06)	11 (10.94)	
True Friendship	10 (11.57)	13 (11.43)	There are signifi- cant differences
Wisdom	26 (16.59)	7 (16.41)	

the Terminal Values which They Feel are Most Important) indicates that there is a significant difference in the terminal values of those students who are interested in cross-cultural educational programs and the students in the control group. Specifically, when the first and second choices were considered together, the experimental group, those who are interested in cross-cultural educational programs, had significantly more students who indicated "wisdom" was their first or second choice than did the control group. Conversely, significantly more members of the control group listed "a world at peace" as their first or second choice than did the experimental group.

As is indicated in Table XII (Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Instrumental Values which They Feel are Most Important), there is no significant difference between those students who are interested in cross-cultural educational programs and the control group on those instrumental values, as defined by the Rokeach Value Scale, Form D, which they feel are most important.

Students Who Only Inquired and

Students Who Actually Applied

The fifth hypothesis of the study states that there will be no significant differences among students who only inquire about the

TABLE XII Differences Between Students Who Show an Interest in Cross-Cultural Educational Programs and the Control Group on the Instrumental Values which They Feel are Most Important

N = 364 Observed frequency and expected frequency for each cell are listed with the expected frequency in parenthesis. This is a standard Chi-square analysis. Both the first and second choices were analyzed.

	Experimental	Control	
Ambitious	4 (3.89)	4 (4.11)	
Broadminded	21 (17.51)	15 (18.49)	
Capable	6 (5.84)	6 (6.16)	$H_0: O_{ij} = E_{ij}$ for all i, j where
Cheerful	2 (3.89)	6 (4.11)	O_{ij} is the observed frequency and
Clean	0 (.97)	2 (1.03)	E_{ij} is the expected frequency
Courageous	4 (4.38)	5 (4.62)	
Forgiving	9 (10.70)	13 (11.30)	
Helpful	5 (5.84)	7 (6.16)	$\chi^2_{16} = 13.06$
Honest	55 (46.20)	40 (48.80)	
Imaginative	6 (6.32)	7 (6.68)	Since $13.06 < \chi^2_{.05} = 26.30$
Independent	12 (14.59)	18 (15.41)	
Intellectual	8 (8.27)	9 (8.73)	The H_0 is <u>not</u> rejected
Logical	1 (1.95)	3 (2.05)	
Loving	24 (22.85)	23 (24.15)	
Polite	2 (1.93)	2 (2.05)	There are no significant differences
Responsible	14 (15.56)	18 (16.44)	
Self-Controlled	4 (6.32)	9 (6.88)	

various cross-cultural educational programs and those who actually apply on the same criteria that were used in the matched sample: the four Clark-Trow student typologies, the support factors, the demographic patterns, and the values as measured by the Rokeach Value Scale-Form D. The only difference in the statistical analysis of the data is that for this set of data a Chi-square test of independence for nonpaired data is used.

Clark-Trow Typologies

Table XIII (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Four Clark-Trow Student Typologies) indicates that there is no significant difference between those students who only inquired about cross-cultural educational programs and those who applied on the four Clark-Trow student typologies. The lack of significant differences shows that the students in these two groups do not perceive themselves as being in different student groupings as measured by the four Clark-Trow typologies.

Support Factors

In those questions dealing with how parents and friends felt about cross-cultural educational programs two adjustments had to be made in order to satisfy the conditions for the Chi-square test of

TABLE XIII Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Four Clark-Trow Student Typologies

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Vocational	4 (4.43)	6 (5.57)
Intellectual	4 (7.98)	14 (10.02)
Collegiate	24 (19.06)	19 (23.94)
Nonconformist	7 (7.53)	10 (9.47)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = 6.01$$

Since $6.01 < \chi^2_{.05} = 7.81$

The H_0 is not rejected

There are no significant differences

independence. In both cases, there were no cases of "strongly disagree," so the categories of "disagree" and "strongly disagree" were combined, resulting in a contingency table with four rather than five categories.

Table XIV A (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Perceived Opinion of Parents about the Programs) indicates that there is no significant difference between those students who only inquired about cross-cultural educational programs and those who applied in the perceived support that they received from parents as shown in the way that parents felt about the programs.

As is indicated in Table XIV B (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on the Importance that They Place on Their Parents' Feelings toward Such Programs) there was also no significant difference between those students who only inquired about cross-cultural educational programs and those who applied for the programs in the importance which they gave to this parental support.

Table XV A (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Perceived Opinion of Friends about the Programs) indicates that there is no significant difference between those students who only inquired about cross-cultural educational programs and

TABLE XIV A Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Perceived Opinion of Parents about the Programs

N = 89 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Never Discussed It	3 (1.71)	1 (2.29)
Strongly Agree	12 (16.65)	27 (22.35)
Agree	22 (19.21)	23 (25.79)
Disagree	1 (.43)	0 (.57)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_3 = 6.02$$

Since $6.02 < \chi^2_{.05} = 7.81$

The H_0 is not rejected

There are no significant differences

TABLE XIV B Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on the Importance that They Place on Their Parents' Feelings toward Such Programs

N = 79 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Very Important	7 (10.37)	14 (10.63)
Important	22 (20.73)	20 (21.27)
Not Very Important	9 (6.91)	5 (7.09)
Not at all Important	1 (.99)	1 (1.01)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_3 = 3.56$$

$$\text{Since } 3.56 < \chi^2_{.05} = 7.81$$

The H_0 is not rejected

There are no significant differences

TABLE XV A Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Perceived Opinion of Friends about the Programs

N = 87 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Never Discussed It	3 (4.14)	6 (4.86)
Strongly Agree	15 (12.41)	12 (14.59)
Agree	20 (22.53)	29 (26.47)
Disagree	2 (.92)	0 (1.08)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_3 = 4.45$$

$$\text{Since } 4.45 < \chi^2_{.05} = 7.81$$

The H_0 is not rejected

There are no significant differences

those who applied in the perceived support that they received from parents as shown in the way that friends feel about the programs.

Table XV B (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Importance that They Place on Their Friends' Feelings toward Such Programs) further indicates that there is no significant difference between those students who only inquired about cross-cultural educational programs and those who applied in the way that they view the importance of the opinions of their friends on the issue of their acceptance of these programs.

Table XVI A (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Perceived Opinion of Faculty Members about Such Programs) indicates that there is no significant difference between those students who only inquired about cross-cultural educational programs and those who applied in the perceived support that they received from faculty members as shown in the way that faculty members feel about the programs.

As Table XVI B (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Importance that They Place on Their Faculty Members' Feelings toward Such Programs) indicates there is also no difference in the way which the two groups view the importance of the

TABLE XV B Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Importance that They Place on Their Friends' Feelings toward Such Programs

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Very Important	0 (.45)	1 (.55)
Important	9 (12.27)	18 (14.73)
Not Very Important	28 (23.64)	24 (28.36)
Not at all Important	3 (3.64)	5 (4.36)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_3 = 4.11$$

Since $4.11 < \chi^2_{.05} = 7.81$

The H_0 is not rejected

There are no significant differences

TABLE XVI A Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Perceived Opinion of Faculty Members about Such Programs

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Never Discussed It	11 (6.82)	4 (8.18)
Strongly Agree	16 (18.64)	25 (22.36)
Agree	11 (12.64)	19 (16.36)
Disagree	1 (.45)	0 (.55)
Strongly Disagree	1 (.45)	0 (.55)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_4 = 8.72$$

$$\text{Since } 8.72 < \chi^2_{.05} = 9.49$$

The H_0 is not rejected

There are no significant differences

TABLE XVI B Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on the Importance that They Place on Their Faculty Members' Feelings toward Such Programs

N = 89 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Very Important	2 (2.63)	4 (3.37)
Important	19 (17.53)	21 (22.47)
Not Very Important	13 (15.34)	22 (19.66)
Not at all Important	5 (3.51)	3 (4.49)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_3 = 2.26$$

Since $2.26 < \chi^2_{.05} = 7.81$

The H_0 is not rejected

There are no significant differences

opinions of faculty members.

Demographic Data

As was the case with the paired data, demographic data was measured by six separate criteria: father's occupation, father's education, mother's education, total family income for the past year, size of home community, and home state. In the case of father's occupation, several categories had to be combined in order to meet the requirements for the Chi-square test. Since there were no entries in either the farm laborers and semi-skilled employees or the unskilled employees categories, the test for this section of demographic data was run on the first six categories.

As is shown in Table XVII (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on Father's Occupation) there is a significant difference between students who only inquired about cross-cultural educational programs and those who applied on their fathers' occupations. More students who applied had fathers in professions and as owners of medium sized businesses than did the group who only inquired.

TABLE XVII Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on Father's Occupation

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Higher Executives, Major Professionals, Owners-Large Concerns	14 (12.98)	14 (15.59)
Other Professionals, Owners-Medium sized Concerns	11 (14.63)	22 (18.38)
Semi-professionals, Small Business Owners	3 (3.10)	4 (3.99)
Farm Owners and Operators	4 (1.77)	0 (2.23)
Clerks, Technicians, Sales	7 (3.99)	2 (5.01)
Skilled and Manual Employees	0 (3.10)	7 (3.99)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_5 = 16.33$$

$$\text{Since } 16.33 > \chi^2_{.05} = 12.59$$

The H_0 can be rejected

There are significant differences

Table XVIII (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on Father's Education) indicates that there is a significant difference between those students who only inquired about cross-cultural educational programs and those who applied when analyzing the educational background of the fathers. Specifically, those students who only inquired have a significantly larger number of fathers who are college graduates while those who applied have a significantly larger number of fathers who have earned post baccalaureate degrees.

Mothers' educational level is also significantly different between the two groups as shown in Table XIX (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on Mother's Education). A majority of mothers of students who actually applied for programs were either college graduates or had post baccalaureate degrees.

Table XX (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on Total Family Income for the Past Year) indicates that there is no significant difference in the income levels of the families of those

TABLE XVIII Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on Father's Education

N = 86 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Elementary or Less	0 (.88)	2 (1.12)
Some High School	4 (2.21)	1 (2.79)
High School Graduate	3 (3.53)	5 (4.47)
Some College	7 (9.28)	14 (11.72)
College Graduate	18 (11.93)	9 (15.07)
Post Graduate	6 (10.16)	17 (12.84)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_5 = 13.92$$

Since $13.92 > \chi^2_{.05} = 11.10$

The H_0 can be rejected

There are significant differences

TABLE XIX Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on Mother's Education

N = 74 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Elementary School or Less	0 (.53)	1 (.47)
Some High School	2 (2.11)	2 (1.89)
High School Graduate	11 (11.59)	11 (10.41)
Some College	13 (6.85)	0 (6.15)
College Graduate	12 (11.59)	10 (10.41)
Post Graduate	1 (6.32)	11 (5.68)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_5 = 22.36$$

$$\text{Since } 22.36 > \chi^2_{.05} = 11.10$$

The H_0 can be rejected

There are significant differences

TABLE XX Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on Total Family Income for the Past Year

N = 82 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
More than \$20,000	15 (13.44)	14 (15.66)
\$15,000-19,999	12 (9.73)	9 (11.27)
\$13,000-14,999	2 (1.85)	2 (2.15)
\$11,000-12,999	4 (5.10)	7 (5.90)
\$9,000-10,999	3 (2.78)	3 (3.22)
\$7,000-8,999	1 (2.78)	5 (3.22)
\$5,000-6,999	0 (.46)	1 (.54)
Under \$5,000	1 (1.85)	3 (2.15)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_7 = 5.54$$

$$\text{Since } 5.54 < \chi^2_{.05} = 14.10$$

The H_0 is not rejected

There are no significant differences

students who only inquired about programs and those who applied.

As is indicated in Table XXI (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on the Size of Their Home Community), there is no significant difference in the size of the home communities of the group of students who inquired about cross-cultural educational programs and those who applied for the programs.

Table XXII (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on Their Home State) shows that there is no significant difference between the students who only inquired about cross-cultural educational programs and those who applied on the states from which they came. That is, neither of the groups had a larger number of in-state or out-of-state members than the other.

Values

The same procedure was used with the Rokeach Value Scale, Form D, in the analysis of this data as was used with the paired data in the earlier section. In addition to the values that were omitted in the matched sample, "clean" and "polite" were eliminated in the Instrumental Values of this group because they were not mentioned.

Table XXIII (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied

TABLE XXI Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on the Size of Their Home Community

N = 87 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Live in the Country	3 (1.79)	1 (2.21)
Under 2,000	2 (1.79)	2 (2.21)
2,000-10,000	7 (7.62)	10 (9.38)
10,000-50,000	11 (12.55)	17 (15.45)
50,000-200,000	5 (4.48)	5 (5.52)
200,000-1,000,000	8 (7.62)	9 (9.38)
Over 1,000,000	3 (3.14)	4 (3.86)

$H_0: O_{ij} = E_{ij}$ for all i, j where

O_{ij} is the observed frequency and

E_{ij} is the expected frequency

$$\chi^2_6 = 2.11$$

$$\text{Since } 2.11 < \chi^2_{.05} = 12.60$$

The H_0 is not rejected

There are no significant differences

TABLE XXII Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Students Who Applied on Their Home State

N = 88 Observed frequency and expected frequency for each cell are both listed with the expected frequency in parenthesis

	Only Inquired	Applied
Oregon	30 (29.69)	37 (37.31)
Washington	2 (.89)	0 (1.11)
California	1 (3.10)	6 (3.90)
Other	6 (5.32)	6 (6.68)

$H_0: O_{ij} = E_{ij}$ for all i, j where
 O_{ij} is the observed frequency and
 E_{ij} is the expected frequency

$$\chi^2_3 = 5.32$$

Since $5.32 < \chi^2_{.05} = 7.81$

The H_0 is not rejected

There are no significant differences

TABLE XXIII Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on the Terminal Values of the Rokeach Value Scale, Form D

N = 181 Observed frequency and expected frequency for each cell are listed with the expected frequency in parenthesis. Both the first and second choices were analyzed.

	Only Inquired	Applied	
Comfortable Life	0 (.91)	2 (1.09)	
Exciting Life	3 (3.62)	5 (4.38)	
Sense of Accomplishment	3 (3.62)	5 (4.38)	$H_0: O_{ij} = E_{ij}$ for all i, j where
World at Peace	7 (5.44)	5 (6.56)	
World of Beauty	1 (1.36)	2 (1.64)	O_{ij} is the observed frequency and
Equality	3 (2.72)	3 (3.28)	E_{ij} is the expected frequency
Family Security	2 (1.36)	1 (1.64)	
Freedom	13 (10.42)	10 (12.58)	
Happiness	10 (8.61)	9 (10.39)	$\chi^2_{16} = 13.41$
Inner Harmony	10 (9.06)	10 (10.94)	Since $13.41 < \chi^2_{.05} = 26.30$
Mature Love	8 (5.89)	5 (7.11)	
National Security	0 (0)	0 (0)	
Pleasure	0 (.45)	1 (.55)	The H_0 is <u>not</u> rejected
Salvation	7 (6.34)	7 (7.66)	
Self-Respect	2 (5.44)	10 (6.56)	There are no significant differences
True Friendship	3 (4.53)	7 (5.47)	
Wisdom	10 (12.23)	17 (14.77)	

on the Terminal Values of the Rokeach Value Scale, Form D) indicates that there are no significant differences in the top two terminal values chosen by those students who only inquired about cross-cultural educational programs and those who applied for the same programs.

As was the case with the terminal values, Table XXIV (Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on the Instrumental Values of the Rokeach Value Scale, Form D) shows that the top two instrumental values chosen by those students who only inquired about cross-cultural educational programs are not significantly different than those chosen by the students who applied for the programs.

Summary

In the paired data which compared those students who showed an interest in cross-cultural educational programs and a disinterested control group, there were significant differences in three areas. The first area was that of the "support factors." In all cases, parents, friends, and faculty members, the group who showed an interest in cross-cultural educational programs had discussed programs with these groups and felt that they had varying degrees of interest while a significant number of the control group had not discussed the programs with persons in any of the three

TABLE XXIV Differences Between Students Who Only Inquired about Cross-Cultural Educational Programs and Those Who Applied on the Instrumental Values of the Rokeach Value Scale, Form D

N = 177 Observed frequency and expected frequency for each cell are listed with the expected frequency in parenthesis. Both the first and second choices were analyzed.

	Only Inquired	Applied	
Ambitious	2 (1.27)	1 (1.73)	
Broadminded	13 (11.44)	14 (15.56)	
Capable	4 (2.12)	1 (2.88)	$H_0: O_{ij} = E_{ij}$ for all i, j where
Cheerful	3 (2.12)	2 (2.88)	O_{ij} is the observed frequency and
Courageous	0 (.85)	2 (1.15)	E_{ij} is the expected frequency
Forgiving	4 (4.66)	7 (6.34)	
Helpful	6 (3.81)	3 (5.19)	
Honest	16 (16.53)	23 (22.47)	$\chi^2_{14} = 17.26$
Imaginative	2 (2.97)	5 (4.03)	
Independent	3 (4.66)	8 (6.34)	Since $17.26 < \chi^2_{.05} = 23.70$
Intellectual	4 (5.08)	8 (6.92)	
Logical	0 (1.69)	4 (2.31)	The H_0 is <u>not</u> rejected
Loving	12 (9.75)	11 (13.25)	
Responsible	6 (6.36)	9 (8.64)	There are no significant differences
Self-Controlled	0 (1.69)	4 (2.31)	

groups. On the other hand, there was no significant difference in the way that the two groups viewed the importance of these three groups' responses to such programs.

There was also a significant difference between the experimental and the control group in the educational level attained by the father. A significantly higher number of fathers had attained post baccalaureate degrees among those students who were interested in cross-cultural educational programs than those who were disinterested.

Finally, there was a significant difference in the terminal values, as measured by Rokeach's Value Scale, Form D, between the two groups. The experimental group more often chose "wisdom" as one of their top two choices, while the control group chose "a world at peace." There were no other significant differences between those students who were interested in a cross-cultural educational program and the students in the disinterested control group.

In analyzing the data for those students who only inquired about cross-cultural educational programs against those who applied for the programs, there were only three significant differences: educational background of both fathers and mothers, and in the fathers' occupations. There were again significant differences in the educational backgrounds of the fathers of the two groups. In this case, those students who applied had a significantly larger number of fathers who

had post baccalaureate degrees, while those who inquired had a larger number of fathers with a college degree.

Mother's educational level was also significantly different between the group of those students who only inquired and those who applied for cross-cultural educational programs. Among those students who only inquired about the programs, there were more mothers who had "some college," while in the group of those who applied, there was a significantly larger number of mothers who were college graduates or who had an advanced degree.

The father's occupation was also significant between the group of students who only inquired and those who applied for cross-cultural educational programs. Of those in the group of students who inquired, more of the fathers were farm owners and operators or skilled employees, while the fathers of those students who applied were more heavily concentrated in the areas of "professionals" or "semi-professionals."

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter consists of four sections. In the first section, the purpose, problem and procedures are reviewed; the second section lists the findings that were based on the data analyzed in Chapter IV; the third section gives the conclusions which were formulated on the basis of these findings; and the last section gives the recommendations based on these conclusions.

Summary

The problem of this study was to ascertain if there are differences between students who are interested in cross-cultural educational programs (those who inquire and apply) and a matched disinterested control group on certain selected characteristics. In addition, comparisons were made on the same characteristics between those students who only inquired about the programs and those who applied. The instrument used in the investigation of the various characteristics was a questionnaire, the component parts of which are described in detail in Chapter II. Basically the instrument was designed to differentiate student typologies, demographic data, support factors, and values among the groups. In order to complete the objectives of the

study, a paired sampling technique was used to ascertain differences between the interested students and the control group in the various areas. A similar procedure was used in a comparison of those students who only inquired about the programs and those who applied.

Summary of Procedures

The procedures followed to meet the objectives of the study were:

1. Selection of those students who inquired about or applied for cross-cultural educational programs: The total population of the ninety-eight students who inquired about or applied for cross-cultural educational programs through the Office of International Education during the 1970-1971 school year and were on the Oregon State University campus during the spring semester of 1971 were asked to complete a questionnaire. Of the ninety-eight students who were invited to participate, ninety-seven completed the questionnaires.
2. Selection of students in the control group: From the official records located in the Dean of Students Office the following characteristics of students were identified:
 - a) Age
 - b) Sex
 - c) Class

- d) School of Enrollment
- e) Major
- f) Cumulative grade point average
- g) Marital status

With these characteristics as a base, a control group was selected in the following manner: Using alphabetized lists, the student who had the closest characteristics which were mentioned above to an individual in the experimental group, and was next on the alphabetical listing, was paired with that student. All students in the control group who were asked to participate completed the questionnaire.

Summary of Analysis of Data

In order to statistically test the hypotheses, the following comparisons were made:

1. Differences among students who showed an interest in cross-cultural educational programs (those who inquired and applied) and the control group on the four Clark-Trow student typologies.
2. Differences among students who show an interest in cross-cultural educational programs and the control group in the amount of perceived support which they receive from parents, peers, and faculty members.

3. Differences among students who show an interest in cross-cultural educational programs and the control group on demographic patterns.
4. Differences among students who show an interest in cross-cultural educational programs and the control group on values as measured by the Rokeach Value Scale, Form D.
5. Differences among students who only inquired about cross-cultural educational programs and those who actually applied on the four Clark-Trow student typologies.
6. Differences among students who only inquired about cross-cultural educational programs and those who actually applied on the amount of perceived support which they receive from parents, peers, and faculty members.
7. Differences among students who only inquired about cross-cultural educational programs and those who actually applied on demographic patterns.
8. Differences among students who only inquired about cross-cultural educational programs and those who actually applied on values as measured by the Rokeach Value Scale, Form D.

Findings

The following findings were based upon the analysis of the statistical data gathered:

Hypothesis 1: There are no significant differences between the group of students who showed an interest in cross-cultural educational programs and the control group in the proportions which select the various categories of the Clark-Trow typologies as being self-descriptive.

There were no significant differences observed between students who were interested in cross-cultural educational programs and the control group on the four Clark-Trow typologies. Therefore, the first null hypothesis was accepted.

Hypothesis 2: There are no significant differences in distinctions of ratings of perceived support from parents, peers and faculty members between the group of students who show an interest in cross-cultural educational programs and the control group.

Significant differences between those students who were interested in cross-cultural educational programs and the control group on amount of perceived support they received were observed at the .05 level of confidence. Therefore, the second null hypothesis was rejected.

In the case of parents, peers, and faculty members, those students who inquired about or applied for cross-cultural educational programs had discussed the programs with these groups and felt that they were in agreement with them. The control group had not discussed programs with parents, peers, or faculty, and could not discuss how these groups felt about programs.

There was, however, no significant difference at the .05 level of confidence between the interested and control group in the importance which they placed on the opinions of parents, peers, and faculty members concerning their feelings toward the programs. That is to say, that even though interested students felt that the three above-mentioned groups agreed with cross-cultural programs, they did not place more weight on the opinions than did the control group.

Hypothesis 3: There are no significant differences among students who show an interest in cross-cultural educational programs and the control group on demographic patterns.

Demographic patterns for this particular study were measured by: father's occupation, father's education, mother's education, total family income for the past year, size of home community, and home state. A significant difference was observed at the .05 level of confidence between those students who showed an interest in cross-cultural educational programs and the control on one of the criteria.

Therefore, the third null hypothesis was rejected.

There was a significant difference between the experimental and the control group in the educational level attained by the father. A significantly higher number of fathers had attained post baccalaureate degrees among those students who were interested in cross-cultural educational programs than those who were disinterested.

Hypothesis 4: There are no significant differences among those students who show an interest in cross-cultural educational programs and the control group in values as measured by the Rokeach Value Scale, Form D.

The Rokeach Value Scale, Form D, is divided into two sections, instrumental and terminal values. Significant differences between those students who showed an interest in cross-cultural educational programs and the control group were observed at the .05 level of confidence on the terminal values. There were no significant differences at the .05 level of confidence on the instrumental values. The fourth null hypothesis was rejected.

Specifically, in the terminal values those students who were interested in cross-cultural educational programs listed "wisdom" as their first or second choice than did the control group. Conversely, significantly more members of the control group listed "a world at peace" as their first or second choice than did the experimental group.

A comparison was also made between those students who only inquired about the possibility of cross-cultural educational programs and those who actually applied on the same four areas that were used in a comparison of the interested students and the control group.

The Chi-square test of independence was used for the statistical comparison and all differences were tested at the .05 level of confidence.

The last finding was based on the data gathered from this group.

Hypothesis 5: There is no significant difference in the student types, support factors, demographic patterns, or values between those students who only inquire about the various programs and those who actually apply.

Significant differences between students who only inquired about cross-cultural educational programs and those who actually applied were observed at the .05 level of confidence in several sections of the demographic data. Therefore, the fifth null hypothesis is rejected. There were no significant differences in student types, support factors, or values.

Specifically, there were significant differences between the two groups in father's occupation, father's education, and mother's education. More students who applied for programs had fathers in professions and as owners of medium sized businesses than did the group who only inquired. In the area of father's education, students

who only inquired had a significantly larger number of fathers who are college graduates while those students who actually applied have a significantly larger number of fathers who have earned post baccalaureate degrees.

The same pattern emerges in mother's educational background. Among those students who only inquired about cross-cultural educational programs, there were more mothers who had "some college." On the other hand, all of the mothers of students who applied were either college graduates or had received some post graduate work.

Conclusions

From the findings of this study the following conclusions were drawn about the experimental (those who inquired about or applied for programs) and control groups.

1. It can be concluded that there are no significant differences between those students who are interested in cross-cultural educational programs and the control group in the student typology in which they place themselves. This lends support to Astin's studies (1961, 1963) which suggested that students become more like one another after they become a part of the same academic setting. In the case of Oregon State students the majority of both the interested students and the control group classified themselves

as "collegiate" according to the Clark-Trow typologies

This finding also suggests that those students who are interested in cross-cultural educational programs see them as a part of the whole "collegiate milieu."

2. It can be concluded that students who are interested (those who have inquired about or applied for cross-cultural programs) do evaluate opinions and values by the opinions and values of others. This supports Festinger's basic paradigm. On the other hand, the results of this study do not show that students differentiate, or rank in order of importance, the opinions of parents, peers and faculty members. This supports the findings of Berdie (1966) in his suggestion that students do not realize the amount or type of influence that various groups have on them. It does not appear to give support to Festinger's research corollary that persons will differentiate groups and individuals who are most important to them and be more likely to conform to their opinions. This may, of course, be a function of the fact that those students who were interested in such programs felt that parents, peers, and faculty members were all in agreement with the programs. Since there were no significant differences in student typologies among the interested group, it was impossible to ascertain whether students who placed

themselves in the different typologies would have been more strongly influenced by one group, over and above the others, than another student type would have been. This finding also supports the research of Birney, Coplin and Grosse (1960) and Harp and Taietz (1964) which showed that a certain percentage of students on a campus discuss matters with faculty members, particularly if the concern is an academic one.

3. It can be concluded that there is a significant difference in the demographic patterns of those students who are interested in cross-cultural educational programs and the control group as shown in the educational level attained by the father. This finding lends support to the earlier studies of Astin (1961), Baird and Holland (1968), and Trent and Medsker (1968) on the general educational level of the family as it pertains to educational motivations for the child.
4. It can be concluded that there are significant differences in terminal values as measured by the Rokeach Value Scale, Form D, between those students who are interested in cross-cultural educational programs and the control group. This lends support to Rokeach's earlier studies (1969, 1971a). It also suggests that even though those students who inquired about or applied for cross-cultural educational

programs consider themselves as part of the "collegiate milieu," they may view their educational experiences and the importance of them in a slightly different way than the control group, since "wisdom" was more often at the top of their list of values.

5. It can be concluded that there are significant differences between those students who only inquire about cross-cultural educational programs and those who actually apply in demographic background as shown by differences in father's occupation, father's educational level and mother's educational level. These findings substantiate the earlier work of Wolfle (1954) and Cole (1956) in the area of income and occupation; Kahl (1953) in the influence of the mother on educational expectations; and Wise (1958), Baird and Holland (1968), Trent and Medsker (1968) on the general educational level of family members as it pertains to educational motivations for the child.

Recommendations

On the basis of the results of this study, it is recommended that:

1. To investigate in greater depth the factors in the value systems of the family which foster involvement in cross-

- cultural educational programs.
2. Studies similar to this need to be undertaken in other United States colleges of substantially different nature to determine whether the major findings of this study indicate a consistent pattern for all students.
 3. The finding that the collegiate sub-culture dominates in all Oregon State schools, which is not typical for universities of this type, needs to be investigated further to determine the bases for the differences.
 4. Experiments should be conducted with students not normally interested in cross-cultural educational programs, but who have a constellation of abilities, needs and educational interests to profit particularly from such programs in order to determine whether their values can be modified and interest thus aroused in appropriate programs.
 5. Experiments should be conducted in which selected faculty members would make special efforts to influence promising students who are insufficiently motivated to incorporate an experience in cross-cultural education in their academic programs. This would provide evidence as to whether the influence of faculty can be of greater importance.
 6. The possibilities of participating in types of cross-cultural programs which are different from the currently available ones, but which might attract a different type of student should be fully explored.
 7. The data which was gathered as a part of this survey, but which was not fully analyzed should be utilized as the basis for other studies.

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APPENDICES

APPENDIX A

Letter of InvitationStudents Who Inquired or Applied

May 10, 1971

Dear _____

You have indicated your interest in Study Abroad Programs by talking with a staff member in the Office of International Education at Oregon State. As a part of the research for my doctoral thesis in education, I would like to ask your further co-operation.

In order to determine those factors which influence American students who want to participate in study abroad programs, I would like for you to complete a short questionnaire. The time involved should be no longer than ten or fifteen minutes.

The questionnaire will be available in MU 214 from noon until 5:00 P. M. and 6:00 until 9:00 P. M. on Thursday, May 13th or from 3:00 until 5:00 P. M. on Friday, May 14th. The validity of the study is dependent upon all of the students who have shown an interest in these programs completing a questionnaire, so your support is extremely important and most appreciated.

Sincerely yours,

Redacted for privacy

Mary-Kaye Heisler
Graduate Student
School of Education
Oregon State University

APPENDIX B

Letter of InvitationDisinterested Control Group

May 23, 1971

Dear _____

As a part of the research for my doctoral thesis in education, I am asking your co-operation. You have been chosen to participate in the study because you are closely matched on various factors with an Oregon State student who has inquired about the possibility of studying abroad next year.

In order to determine those factors which influence American students who want to participate in such programs, I would like you to complete a short questionnaire. The time involved should be no longer than ten or fifteen minutes.

The questionnaire will be available in MU 214 on Tuesday, May 25th, from 2-5 p.m., Wednesday, May 26th, from 9 a.m. - 3 p.m., and Thursday, May 27th, from 6-9 p.m. You are the only person who has been matched with a particular individual who has inquired about study abroad programs. The validity of the study is dependent upon all students completing the questionnaire, so your support is extremely important and most appreciated.

Sincerely yours,

Redacted for privacy

Mary-Kaye Heisler
Graduate Student
School of Education
Oregon State University

APPENDIX C

Questionnaire for Students Who Inquired or Applied

INTERNATIONAL EDUCATION QUESTIONNAIRE

Please mark your answers by circling the appropriate number in each question.

1. In what school are you enrolled?
 1. Agriculture
 2. Business and Technology
 3. Education
 4. Engineering
 5. Forestry
 6. Home Economics
 7. Humanities and Social Science
 8. Pharmacy
 9. Science

2. Which of the following categories comes closest to your father's occupation? If your father is retired, deceased or unemployed, please indicate his former occupation.
 1. Higher executive, major professional with college degrees (doctors, lawyers, engineers, foresters), and owners of large concerns.
 2. Other professionals (teachers, accountants, civil service, pharmacists, optometrists) owners of medium-sized businesses and managers of large concerns
 3. Semi-professionals (photographers, morticians, surveyors, reporters) and small business owners
 4. Farm owners and operators
 5. Clerks, technicians and sales workers
 6. Skilled and manual employees, foremen and machine operators
 7. Farm laborers and semi-skilled employees
 8. Unskilled employees

3. The last year of school that your father completed?
 1. Elementary school or less
 2. Some high school
 3. High school graduate
 4. Some college
 5. College graduate
 6. Post graduate

4. The last year of school that your mother completed?
 1. Elementary school or less
 2. Some high school
 3. High school graduate
 4. Some college
 5. College graduate
 6. Post graduate

5. Total family income last year
 1. \$20,000 +
 2. \$15,000 - 19,999
 3. \$13,000 - 14,999
 4. \$11,000 - 12,999
 5. \$ 9,000 - 10,999
 6. \$ 7,000 - 8,999
 7. \$ 5,000 - 6,999
 8. Under \$5,000

6. Size of home community
 1. Live in the country
 2. Under 2,000
 3. 2,000 - 10,000
 4. 10,000 - 50,000
 5. 50,000 - 200,000
 6. 200,000-1,000,000
 7. Over 1,000,000

7. Home state
 1. Oregon
 2. Washington
 3. California
 4. Other (Please Specify) _____

8. Personal information

1. Age _____
2. Class next year _____
3. Cumulative GPA _____
4. Major _____

CROSS-CULTURAL STUDY REFERS TO THE PROGRAMS THAT ARE AVAILABLE TO AMERICAN STUDENTS WHEREBY THEY MAY STUDY AND BECOME INVOLVED IN A CULTURE OTHER THAN THEIR OWN IN VARYING DEGREES WHILE PURSUING A SET PROGRAM OF ACADEMIC INTERESTS.

9. Generally speaking, cross-cultural study programs are beneficial to the educational objectives of students.

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

10. Are you aware of the various cross-cultural study programs that are available to Oregon State students?

1. Yes
2. No

11. Where did you first learn about these programs?

1. Office of International Education staff
2. Bulletin boards or other campus publicity
3. Barometer
4. Friends
5. Other (Please Specify) _____
6. I have not heard of them

12. How do you think your parents feel about cross-cultural study programs?

1. I have never discussed it with them
2. Strongly agree
3. Agree
4. Disagree
5. Strongly disagree

13. How important is your parents' opinion concerning such a program to you?
1. Very important
 2. Important
 3. Not very important
 4. Not at all important
14. How do you think your friends feel about cross-cultural study programs?
1. Have never discussed it with them
 2. Strongly agree
 3. Agree
 4. Disagree
 5. Strongly disagree
15. How important are your friends' opinions concerning such a program to you?
1. Very important
 2. Important
 3. Not very important
 4. Not at all important
16. How do you think a faculty member (or members) whom you know well feel about cross-cultural study programs?
1. Have never discussed it with them
 2. Strongly agree
 3. Agree
 4. Disagree
 5. Strongly disagree
17. How important are faculty members' opinions concerning such a program to you?
1. Very important
 2. Important
 3. Not very important
 4. Not at all important

18. How long have you been interested in a cross-cultural study program?
1. Less than a month
 2. One to six months
 3. Six months to a year
 4. More than a year
19. Are you aware of loans and scholarships that are available to help finance cross-cultural study programs?
1. Yes
 2. No
20. If you participate in a cross-cultural study program, who will be responsible for financing the program?
1. I will pay for everything myself.
 2. I will have loans and/or scholarships that are applicable to the programs.
 3. I will take care of most of the expenses, but my parents will help.
 4. My parents and I will equally share the expenses of the program.
 5. My parents are paying for most of the expenses, but I am contributing a small amount.
 6. My parents are totally financing the program.
21. Which one of the people or the groups listed below do you feel have influenced you the most in your interest in or decision to apply for a cross-cultural study program?
1. Parents
 2. Friends on campus
 3. Other friends
 4. Faculty member(s)
 5. Member(s) of the staff of the Office of International Education

22. WHEN YOU FIRST INQUIRED about the possibilities of cross-cultural study opportunities at the Office of International Education, did you
1. Have a specific program in which you were interested
 2. Have a general area in which you were interested, but have no specific program in mind
 3. Have a specific program in mind, but later find that there were other programs which better suited your needs
 4. Have only a general interest in cross-cultural study opportunities
 5. I have not inquired about the possibilities through the Office of International Education
23. How much language study of the country to which you are applying to go or are interested in have you had?
1. No foreign language education
 2. 1 year of high school
 3. 2 years of high school
 4. 3 or more years in high school
 5. Some high school and some college
 6. Some courses in college
 7. I am a foreign language major
 8. I have not studied the language of the country in which I am interested, but I have studied another foreign language (excluding Latin)

If you answer question 24, please mark "not applicable" on questions 25 and 26.

24. What is your primary reason for applying, or considering applying to study in a cross-cultural study program?
1. Language improvement
 2. Benefits I can gain in the area of general understanding by living in another culture
 3. Such programs will help me in future career plans
 4. Benefits that I will receive in areas outside of my general educational interests, such as music, art and theatre
 5. Change of pace from college experiences in the United States
 6. Travel
 7. Chance to be more independent
 8. Other (Please Specify) _____

25. My primary reason for not applying to the program at this time is:
1. Financial
 2. Programs which are offered do not suit my needs
 3. I do not have the necessary language requirements
 4. I do not feel that my grades are high enough
 5. I do not have the class standing
 6. My parents are opposed to my applying for a cross-cultural study program.
 7. Personal concerns at this time are such that I cannot participate
 8. Other (Please Specify) _____
 9. Not applicable
26. Do you plan to apply for a cross-cultural study program at a later date?
1. Yes
 2. No
 3. Uncertain
 4. Not applicable
27. Of the four paragraphs on the next page, which one do you feel describes you the best?
1. A
 2. B
 3. C
 4. D
28. Please rank order the items on the Rokeach Value Scale according to the printed instructions.

PHILOSOPHY A: This philosophy emphasizes education primarily as preparation for an occupational future. Social or purely intellectual phases of campus life are relatively less important, although certainly not ignored. Concern with extracurricular activities and other college traditions is relatively small. Persons holding this philosophy are usually quite committed to particular fields of study and are in college primarily to obtain training for careers in their chosen fields.

PHILOSOPHY B: This philosophy, while it does not ignore career preparation, assigns even greater importance to scholarly pursuit of knowledge and understanding, wherever that pursuit may lead. This philosophy entails a serious involvement in course work and independent study beyond the minimum required. Social life or organized extracurricular activities are relatively unimportant. Thus while other areas of college life are not to be forsaken, this philosophy attaches great importance to interest in ideas, pursuit of knowledge and the cultivation of the intellect.

PHILOSOPHY C: This philosophy holds that besides occupational training and/or scholarly endeavor an important part of college life exists outside of the classroom, laboratory and library. Extra curricular activities, living group functions, athletics, social life, rewarding friendships, and loyalty to college traditions are important elements in one's college experiences and necessary to the cultivation of the well-rounded person. Thus, while not excluding academic activities, this philosophy emphasizes the extra-curricular side of college life.

PHILOSOPHY D: This philosophy is held by the student who either consciously rejects commonly held value orientations in favor of his own, or who has not really decided what is to be valued and is in a sense searching for a meaning in life. There is often deep involvement with ideas and art forms both in the classroom and in sources (often highly original and individualistic) in the wider society. There is little interest in business or professional careers, in fact, there may be a definite rejection of this kind of aspiration. Many facets of the college-organized extra-curricular activities, athletic traditions, and college administration are ignored or viewed with disdain. In short, this philosophy may emphasize the individualistic interests and styles, concern for personal identity, and often contempt for many aspects of organized society.

VALUE SURVEY

BIRTH DATE _____ SEX: MALE _____ FEMALE _____

CITY and STATE OF BIRTH _____

NAME (Fill in Only if Requested) _____

INSTR UCTIONS

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the left-hand side of the page.

Study the list carefully and pick out the one value which is the most important for you. Peel it off and paste it in Box 1 on the left.

Then pick out the value which is second most important for you. Peel it off and paste it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18.

Work slowly and think carefully. If you change your mind, feel free to change your answers. The labels peel off easily and can be moved from place to place. The end result should truly show how you really feel.

FOR THE PURPOSES OF THIS QUESTIONNAIRE, IT IS ONLY NECESSARY FOR YOU TO LIST THE TOP FOUR VALUES ON EACH PAGE.

1	A COMFORTABLE LIFE (a prosperous life)
2	AN EXCITING LIFE (a stimulating, active life)
3	A SENSE OF ACCOMPLISHMENT (lasting contribution)
4	A WORLD AT PEACE (free of war and conflict)
5	A WORLD OF BEAUTY (beauty of nature and the arts)
6	EQUALITY (brotherhood, equal opportunity for all)
7	FAMILY SECURITY (taking care of loved ones)
8	FREEDOM (independence, free choice)
9	HAPPINESS (contentedness)
10	INNER HARMONY (freedom from inner conflict)
11	MATURE LOVE (sexual and spiritual intimacy)
12	NATIONAL SECURITY (protection from attack)
13	PLEASURE (an enjoyable, leisurely life)
14	SALVATION (saved, eternal life)
15	SELF-RESPECT (self-esteem)
16	SOCIAL RECOGNITION (respect, admiration)
17	TRUE FRIENDSHIP (close companionship)
18	WISDOM (a mature understanding of life)

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.

Below is another list of 18 values. Arrange them in order of importance, the same as before.

1		AMBITIOUS (hard-working, aspiring)
2		BROADMINDED (open-minded)
3		CAPABLE (competent, effective)
4		CHEERFUL (lighthearted, joyful)
5		CLEAN (neat, tidy)
6		COURAGEOUS (standing up for your beliefs)
7		FOR GIVING (willing to pardon others)
8		HELPFUL (working for the welfare of others)
9		HONEST (sincere, truthful)
10		IMAGINATIVE (daring, creative)
11		INDEPENDENT (self-reliant, self-sufficient)
12		INTELLECTUAL (intelligent, reflective)
13		LOGICAL (consistent, rational)
14		LOVING (affectionate, tender)
15		OBEDIENT (dutiful, respectful)
16		POLITE (courteous, well-mannered)
17		RESPONSIBLE (dependable, reliable)
18		SELF-CONTROLLED (restrained, self-disciplined)

APPENDIX D

Questionnaire for Control Group

INTERNATIONAL EDUCATION QUESTIONNAIRE

Please mark your answers by circling the appropriate number in each question.

1. In what school are you enrolled?
 1. Agriculture
 2. Business and Technology
 3. Education
 4. Engineering
 5. Forestry
 6. Home Economics
 7. Humanities and Social Science
 8. Pharmacy
 9. Science

2. Which of the following categories comes closest to your father's occupation? If your father is retired, deceased or unemployed, please indicate his former occupation.
 1. Higher executive, major professional with college degrees (doctors, lawyers, engineers, foresters), and owners of large concerns
 2. Other professionals (teachers, accountants, civil service, pharmacists, optometrists) owners of medium-sized businesses and managers of large concerns
 3. Semi-professionals (photographers, morticians, surveyors, reporters) and small business owners
 4. Farm owners and operators
 5. Clerks, technicians and sales workers
 6. Skilled and manual employees, foremen and machine operators
 7. Farm laborers and semi-skilled employees
 8. Unskilled employees

3. The last year of school that your father completed?
 1. Elementary school or less
 2. Some high school
 3. High school graduate
 4. Some college
 5. College graduate
 6. Post graduate

4. The last year of school that your mother completed?
 1. Elementary school or less
 2. Some high school
 3. High school graduate
 4. Some college
 5. College graduate
 6. Post graduate

5. Total family income last year
 1. \$20,000 +
 2. \$15,000 - 19,999
 3. \$13,000 - 14,999
 4. \$11,000 - 12,999
 5. \$ 9,000 - 10,999
 6. \$ 7,000 - 8,999
 7. \$ 5,000 - 6,999
 8. Under \$5,000

6. Size of home community
 1. Live in the country
 2. Under 2,000
 3. 2,000 - 10,000
 4. 10,000 - 50,000
 5. 50,000 - 200,000
 6. 200,000-1,000,000
 7. Over 1,000,000

7. Home state
 1. Oregon
 2. Washington
 3. California
 4. Other (Please Specify) _____

8. Personal information

1. Age _____
2. Class next year _____
3. Cumulative GPA _____
4. Major _____

CROSS-CULTURAL STUDY REFERS TO THE PROGRAMS THAT ARE AVAILABLE TO AMERICAN STUDENTS WHEREBY THEY MAY STUDY AND BECOME INVOLVED IN A CULTURE OTHER THAN THEIR OWN IN VARYING DEGREES WHILE PURSUING A SET PROGRAM OF ACADEMIC INTERESTS.

9. Generally speaking, cross-cultural study programs are beneficial to the educational objectives of students.

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

10. Are you aware of the various cross-cultural study programs that are available to Oregon State students?

1. Yes
2. No

11. Where did you first learn about these programs?

1. Office of International Education staff
2. Bulletin boards or other campus publicity
3. Barometer
4. Friends
5. Other (Please Specify) _____
6. I have not heard of them

12. How do you think your parents feel about cross-cultural study programs?

1. I have never discussed it with them
2. Strongly agree
3. Agree
4. Disagree
5. Strongly disagree

13. How important is your parents' opinion concerning such a program to you?
1. Very important
 2. Important
 3. Not very important
 4. Not at all important
14. How do you think your friends feel about cross-cultural study programs?
1. Have never discussed it with them
 2. Strongly agree
 3. Agree
 4. Disagree
 5. Strongly disagree
15. How important are your friends' opinions concerning such a program to you?
1. Very important
 2. Important
 3. Not very important
 4. Not at all important
16. How do you think a faculty member (or members) whom you know well feel about cross-cultural study programs?
1. Have never discussed it with them
 2. Strongly agree
 3. Agree
 4. Disagree
 5. Strongly disagree
17. How important are faculty members' opinions concerning such a program to you?
1. Very important
 2. Important
 3. Not very important
 4. Not at all important

18. Do you know anyone who has participated in a cross-cultural study experience? (excluding the Peace Corps)
1. Yes
 2. No
19. My primary reason for having no interest in cross-cultural study programs is:
1. Have no interest in other countries
 2. Such experience would benefit neither my education nor my future vocational goals
 3. Specific programs do not fit my needs
 4. I have never really considered the possibilities
 5. I never knew that the possibilities existed
 6. Financial
 7. Other (Please Specify) _____
20. Of the four paragraphs on the next page, which do you feel describes you the best?
1. A
 2. B
 3. C
 4. D
21. Please rank order the items on the Rokeach Value Scale according to the printed instructions.

PHILOSOPHY A: This philosophy emphasizes education primarily as preparation for an occupational future. Social or purely intellectual phases of campus life are relatively less important, although certainly not ignored. Concern with extracurricular activities and other college traditions is relatively small. Persons holding this philosophy are usually quite committed to particular fields of study and are in college primarily to obtain training for careers in their chosen fields.

PHILOSOPHY B: This philosophy, while it does not ignore career preparation, assigns even greater importance to scholarly pursuit of knowledge and understanding, wherever that pursuit may lead. This philosophy entails a serious involvement in course work and independent study beyond the minimum required. Social life or organized extracurricular activities are relatively unimportant. Thus while other areas of college life are not to be forsaken, this philosophy attaches great importance to interest in ideas, pursuit of knowledge and the cultivation of the intellect.

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PHILOSOPHY D: This philosophy is held by the student who either consciously rejects commonly held value orientations in favor of his own, or who has not really decided what is to be valued and is in a sense searching for a meaning in life. There is often deep involvement with ideas and art forms both in the classroom and in sources (often highly original and individualistic) in the wider society. There is little interest in business or professional careers, in fact, there may be a definite rejection of this kind of aspiration. Many facets of the college-organized extra-curricular activities, athletic traditions, and college administration are ignored or viewed with disdain. In short, this philosophy may emphasize the individualistic interests and styles, concern for personal identity, and often contempt for many aspects of organized society.

VALUE SURVEY

BIRTH DATE _____ SEX: MALE _____ FEMALE _____

CITY and STATE OF BIRTH _____

NAME (Fill in Only if Requested) _____

INSTR UCTIONS

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the left-hand side of the page.

Study the list carefully and pick out the one value which is the most important for you. Peel it off and paste it in Box 1 on the left.

Then pick out the value which is second most important for you. Peel it off and paste it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18.

Work slowly and think carefully. If you change your mind, feel free to change your answers. The labels peel off easily and can be moved from place to place. The end result should truly show how you really feel.

FOR THE PURPOSES OF THIS QUESTIONNAIRE, IT IS ONLY NECESSARY FOR YOU TO LIST THE TOP FOUR VALUES ON EACH PAGE.

1	A COMFORTABLE LIFE (a prosperous life)
2	AN EXCITING LIFE (a stimulating, active life)
3	A SENSE OF ACCOMPLISHMENT (lasting contribution)
4	A WORLD AT PEACE (free of war and conflict)
5	A WORLD OF BEAUTY (beauty of nature and the arts)
6	EQUALITY (brotherhood, equal opportunity for all)
7	FAMILY SECURITY (taking care of loved ones)
8	FREEDOM (independence, free choice)
9	HAPPINESS (contentedness)
10	INNER HARMONY (freedom from inner conflict)
11	MATURE LOVE (sexual and spiritual intimacy)
12	NATIONAL SECURITY (protection from attack)
13	PLEASURE (an enjoyable, leisurely life)
14	SALVATION (saved, eternal life)
15	SELF-RESPECT (self-esteem)
16	SOCIAL RECOGNITION (respect, admiration)
17	TRUE FRIENDSHIP (close companionship)
18	WISDOM (a mature understanding of life)

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.

Below is another list of 18 values. Arrange them in order of importance, the same as before.

1		AMBITIOUS (hard-working, aspiring)
2		BROADMINDED (open-minded)
3		CAPABLE (competent, effective)
4		CHEERFUL (lighthearted, joyful)
5		CLEAN (neat, tidy)
6		COURAGEOUS (standing up for your beliefs)
7		FORGIVING (willing to pardon others)
8		HELPFUL (working for the welfare of others)
9		HONEST (sincere, truthful)
10		IMAGINATIVE (daring, creative)
11		INDEPENDENT (self-reliant, self-sufficient)
12		INTELLECTUAL (intelligent, reflective)
13		LOGICAL (consistent, rational)
14		LOVING (affectionate, tender)
15		OBEDIENT (dutiful, respectful)
16		POLITE (courteous, well-mannered)
17		RESPONSIBLE (dependable, reliable)
18		SELF-CONTROLLED (restrained, self-disciplined)

APPENDIX E

Chi-Square Tests

Two types of Chi-square tests were used in the statistical analysis, one for the nonpaired data of hypothesis 5, and one for the paired data of hypotheses 1-4. Each will be discussed below.

A. Nonpaired Data - Chi-square test of independence

When data is tabulated according to two variables of classification, say the rows and columns of a table, one can test for an association between these variables by the Chi-square procedure. Such tables are called contingency tables, and the appropriate null hypothesis to be tested is that the two classifications are independent; that is, the probability that an observation falls in a particular row (column) is not affected by the particular column (row) to which it belongs. Rejecting the null hypothesis means that one can be confident that the two variables are dependent or correlated.

In analysis of the data the variables of classification will be groups of people (Inquired and Applied) and characteristic categories such as demographic background, student typologies, etc. This type of contingency table can be illustrated by Table I.

The null hypothesis for such a table can be phrased as follows:

STUDENT TYPOLOGY

Category Group	A	B	C	D
Inquired	Observed Frequency	. . .		
Applied	Observed Frequency	. . .		

Table I

"There is no difference between groups A and B in relation to the characteristic in which one is interested," or "The characteristic is independent of the group from which an individual comes."

Mathematically,

$$H_0: p_{ij} = p_{i\cdot} \cdot p_{\cdot j} \quad (i = 1, 2: j = 1, 2, \dots, c)$$

where, p_{ij} = probability of a random object falling in the cell of the i -th row and j -th column.

$$p_{i\cdot} = \sum_{j=1}^c p_{ij}$$

$$p_{\cdot j} = p_{1j} + p_{2j}$$

c = number of columns in the table.

It can be shown that (Wine, 1965, p. 583-585)

$$Y = \sum_{i=1}^2 \sum_{j=1}^c (n_{ij} - \hat{e}_{ij})^2 / \hat{e}_{ij}$$

is approximately X^2 distributed with $c-1$ degrees of freedom where

n_{ij} = observed frequency in cell ij

\hat{e}_{ij} = estimates of the expected frequency in the i -th row

and j -th column using Maximum Likelihood estimates

for p_{ij}

$$\hat{e}_{ij} = n_{i.} \cdot n_{.j} / n$$

where $n_{i.}$ = the observed total for row i

$n_{.j}$ = the observed total for column j

n = total number of cases in a given contingency table

B. Paired Data - Chi-Square Test

The test used for hypotheses 1 through 4 was specifically designed to answer the same questions of independence (discussed in Section A) for all of the material dealing with the paired or matched samples. It was believed that a paired sample would remove considerable variation due to the pairing characteristics of sex, chronological age, marital status, class, major, and GPA, and yield an even more powerful test than the Chi-square discussed in Section A.

Consider the slightly different contingency table of Table II that classifies the pairs of the sample rather than the individual objects. Let X_{ij} = the number of pairs in cell $_{ij}$: that is, the number such that Group A member of the pair had characteristic i and the Group B member of the cell had characteristic j .

The analysis is similar to that discussed in Section A above except that now one is interested in the underlying population probabilities, q_{ij} , that a random pair will belong to cell ij . Because of this, the null hypothesis is in slightly different form. Specifically,

		GROUP A						
		1	2	3	. . .	c		
1		X ₁₁	X ₁₂	X ₁₃	. . .	X _{1c}		
2		X ₂₁	X ₂₂	X ₂₃	. . .	X _{2c}		
3		X ₃₁	X ₃₂	X ₃₃	. . .	X _{3c}		
.		.						
.		.						
.		.						
c		X _{c1}	X _{c2}	X _{c3}	. . .	X _{cc}		

Table II

one would say that the marginal probabilities for Group A are equal to those for Group B. That is, that the total probability of a Group A person having characteristic j is equal to that for a Group B person having the same characteristic.

Mathematically, the null hypothesis would be stated in the following form:

$$H_0: \sum_{j=1}^c q_{ij} = \sum_{j=1}^c q_{ji} \quad \text{for } i = 1, 2, \dots, c,$$

Again we may use the Chi-square test for this hypothesis, but we must first calculate Maximum Likelihood estimates for the q_{ij} 's. This is done through a nonlinear program on the computer which maximizes the likelihood function subject to the constraints of H_0 above. Then the statistic,

$$Z = \sum_{i=1}^c \sum_{j=1}^c (X_{ij} - E_{ij})^2 / E_{ij}$$

is approximately X^2 distributed with $c - 1$ degrees of freedom where,

$$E_{ij} = \hat{q}_{ij} T$$

T = total pairs observed in random sample

\hat{q}_{ij} = maximum likelihood estimate of q_{ij}

C. Maximum Likelihood Estimates

The Maximum Likelihood Estimates, \hat{q}_{ij} , are just estimates of the population probabilities, p_{ij} , just as the product of the Maximum Likelihood Estimates, $(\hat{p}_{i.})(\hat{p}_{.j})$, estimate p_{ij} in the examples of the nonpaired data. Although the formula for the nonpaired data may be more intuitively clear than the \hat{q}_{ij} which comes from a non-linear program, they are both based on the same principle. That is to say, in both the case of the nonpaired data and the paired data, the procedure used in estimating the true population cell probabilities, p_{ij} , gives estimates that maximize the probability of getting the data that was actually observed if the null hypothesis is true.

D. Degrees of Freedom in Paired Data

In determining the Degrees of Freedom for Paired Data, the same general rules are in operation as are applicable for Nonpaired Data. Namely, one degree of freedom is subtracted from the base

of cr (categories or groups times the number of types of responses) for each independent parameter that is estimated and each constraint on the solution.

$$\text{Degrees of Freedom} = cr - (c - 1) - (r - 1) - 1 = (c-1)(r-1)$$

As was stated above, the null hypothesis on the paired test says that the marginal probability of a random Group A (say "Experimental -- students who inquired or applied) person answering in category i equals the marginal probability of a random Group B (say "Control") person also answering in category i

Mathematically this is stated as:

$$\sum_{i=1}^c q_{ij} = \sum_{i=1}^c q_{ji} \quad \text{for } j = 1, 2, \dots, c$$

where c = number of categories available for answers.

Using the example of a 4 x 4 contingency table and the above equation, one now has the following set of null hypotheses where q_{ij} now equals the probability that the random matched pair answers response (i, j)

MARGINAL ROW PROBABILITIES

Rows Probability = Column Probability

$$(1) q_{11} + q_{12} + q_{13} + q_{14} = q_{11} + q_{21} + q_{31} + q_{41}$$

$$(2) q_{21} + q_{22} + q_{23} + q_{24} = q_{12} + q_{22} + q_{32} + q_{42}$$

$$(3) q_{31} + q_{32} + q_{33} + q_{34} = q_{13} + q_{23} + q_{33} + q_{43}$$

$q_{1.}$	q_{11}	q_{12}	q_{13}	q_{14}
$q_{2.}$	q_{21}	q_{22}	q_{23}	q_{24}
$q_{3.}$	q_{31}	q_{32}	q_{33}	q_{34}
$q_{4.}$	q_{41}	q_{42}	q_{43}	q_{44}
	$q_{.1}$	$q_{.2}$	$q_{.3}$	$q_{.4}$

MARGINAL COLUMN PROBABILITIES

Now let's see how many independent estimates, \hat{q}_{ij} , would have to be made before all the q_{ij} would be estimated. Assume the estimates, \hat{q}_{ij} , are made by some external procedure, like the Maximum Likelihood procedure,

1. Equation (1): Suppose we estimated \hat{q}_{11} , \hat{q}_{12} , \hat{q}_{13} , \hat{q}_{14} , \hat{q}_{21} , \hat{q}_{31} , then we could solve for \hat{q}_{41} .
2. Equation (2): \hat{q}_{21} and \hat{q}_{12} are already estimated from Step 1. Estimate \hat{q}_{22} , \hat{q}_{23} , \hat{q}_{24} , and \hat{q}_{32} . Then we can solve for \hat{q}_{42} in terms of the others.
3. Equation (3): \hat{q}_{31} and \hat{q}_{13} are already estimated from Step 1. \hat{q}_{32} and \hat{q}_{23} are already estimated from Step 2. Estimate \hat{q}_{33} and \hat{q}_{34} . Now \hat{q}_{43} can be solved for in terms of others.
4. The only remaining probability to be estimated is \hat{q}_{44} . This can be done from constraint, $\sum_{i=1}^c \sum_{j=1}^c q_{ij} = 1$ as before.
5. In Summary, we made 12 independent parameter estimates (\hat{q}_{ij}); (6) in Step 1, (4) in Step 2, and (2) in Step 3. Degrees of Freedom = column x rows = (columns)² = c^2 - no. of independent parameter estimates - 1 (for constraint $\sum \sum q_{ij} = 1$). For our example: Degrees of Freedom = $16 - 12 - 1 = 3 = (c - 1)$

APPENDIX F

Computer Program for Matched Data Chi-Square Test

```

OSU  FORTRAN  VERSION 2.1
      PROGRAM CHISQUAR
C     PROGRAM CALCULATES CHI-SQUARE TEST WITH DATA
      FROM CARDS OR FILE
      DIMENSION X(20, 20), P(20, 20), E(20, 20), C(20, 20),
      KDF(50), CS(50)
      DIMENSION TITLE (7), Y(400), ROW(20), COL(20)
      DIMENSION W(400)
DEFINITION OF VARIABLES USED
C     CHISQ = CHI-SQUARE CALCULATED STATISTIC FOR
      THIS SAMPLE
C     FMAX = MAXIMUM OF MAX. LIKELIHOOD FUNCTION
C     INPUT = INDICATES INPUT FROM CARDS(1), OR FILE
      FROM NON-LINEAR PROGRAM(2)
C     KDOF = DEGREES OF FREEDOM FOR THIS SAMPLE
C     NCATY = NO. OF CATEGORIES
C     NROW = NO. OF ROWS IN CONTINGENCY TABLE
C     TOTAL = TOTAL COUNT OF OBSERVATIONS FOR THIS
      SAMPLE (SUM OF X MATRIX)
C     COL(K) = MARGINAL TOTAL OF X(J, K) MATRIX FOR
      COLUMN K
C     CS(K) = CHI-SQUARE VALUE FOR KTH ENTRY OF
      TABLE AT .35 SIGNIFICANCE LEVEL
C     KOF(K) = DEGREES OF FREEDOM FOR KTH ENTRY OF
      CHI-SQUARE DIST. TABLE
C     ROW(J) = MARGINAL TOTAL OF X(J, K) MATRIX FOR
      ROW J
C     Y(K) = ARRAY EQUIVALENT OF R
C     C(J, K) = CHI-SQUARE CONTRIBUTION IN KTH
      CATEGORY FOR GROUP J
C     E(J, K) = EXPECTED NO. OF OBS.      IN KTH
      CATEGORY FOR GROUP J
C     P(J, K) = ESTIMATED FRACTION      IN KTH
      CATEGORY FOR GROUP J
C     X(J, K) = NUMBER OF OBSERVATIONS IN KTH
      CATEGORY FOR GROUP J
      READ(20, 1) (KDF(K), K=1, 32)
      READ(20, 2) (CS(K) , K=1, 32)
1     FORMAT(33I2)
2     FORMAT(16 E5. 1)

```

```

3   FORMAT(7A4,I2,2I1,(16F3,0))
10  READ(20,3) TITLE,INPUT,NROW,NCATY,((X(J,K),K=1,
    NCATY),J=1,NROW)
    LIM=NCATY**2
    TOTAL=0.
    GO TO(15,85,999,61)INPUT
    CALC. MARGINAL TOTALS OF X(J,K)
15  DO 19 K=1,NCATY
19  COL(K)=0.
    DO 21 J=1,NROW
    ROW(J)=0.
    DO 20 K=1,NCATY
    ROW(J)=      ROW(J)+X(J,K)
20  COL(K)=      COL(K)+X(J,K)
21  TOTAL=TOTAL+ROW(J)
C   CALC. EXPECTED FREQUENCY OF CLASS J,K
    DO 35 J=1,NROW
    DO 35 K=1,NCATY
35  E(J,K)=ROW(J)*COL(K)/TOTAL+.0000001
    KDOF=(NROW-1)*(NCATY-1)
    GO TO 100
61  LIMIT=NCATY*(NCATY-1)
    READ(2,4) (Y(L),L=1,LIMIT)
    GO TO 86
4   FORMAT(6E12.6)
    READ DATA FROM FILE SETUP BY NON-LINEAR
    PROGRAM
85  READ(1) NCATY, LIMIT, FMAX, (W(J),J=1,LIM), (Y(L),
    L=1,LIMIT)
    DO 83 K=1,NCATY
    DO 83 J=1,NCATY
    L=J+(K-1)*NCATY
83  X(J,K)=W(L)
86  KDOF=NCATY-1
    WRITE(61,810)
    NROW=NCATY
    DO 13 J=1,2
13  WRITE(61,2)(X(J,K),K=1,NCATY)
    TOTAL=0.
    DO 90 J=1,NCATY
    DO 90 K=1,NCATY
90  TOTAL=TOTAL+ X(J,K)
C   CALC. EXPECTED QUANTITIES FROM MAX. LIKELIHOOD
    EST. OF CLASS FRACTIONS, Y

```

```

C NOTE- Y ARRAY IS P MATRIX ORDERED BY COLUMNS
      WITH DIAGONAL ELEMENTS MISSING
C   DIAGONAL ELEMENTS OF P ARE=X(J, J)/TOTAL SAME
      AS UNCONSTRAINED VALUES
C   KOUNT = CURRENT ELEMENT FROM Y ARRAY TO BE
      PLACED IN P
      KOUNT=0
      SUMC=0
      SUMU=0
      DO 92 K=1, NCATY
      DO 92 J=1, NCATY
      IF (J-K)88, 89, 88
C   CALC. NON-DIAGONAL ELEMENT (NOTE THAT Y(KOUNT)
      IS A PROBABILITY OR FRACTION
88   KOUNT=KOUNT+1
      E(J, K)=Y(KOUNT)*TOTAL+.0000001
      SUMU=SUMU+X(J, K)*A LOG(X(J, K)/TOTAL+.0000001)
      SUMC=SUMC+X(J, K)*A LOG(Y(KOUNT)+.0000001)
      WRITE(61, 811)SUMC, SUMU,X(J, K), J, K, KOUNT,
      Y(KOUNT, TOTAL
      GO TO 92
C   CALC. DIAGONAL. ELEMENT
89   E(J, J)=X(J, J)+.00000001
92   CONTINUE
      RATIO=SUMC/SUMU
C   BEGIN CHI-SQUARE TEST AND CALC. DEGREES OF
      FREEDOM
100  CHISQ=0.
      DO 122 J=1, NROW
      DO 122 K=1, NCATY
      C(J, K)=(X(J, K)-E(J, K))**2/E(J, K)
122  CHISQ=CHISQ+C(J, K)
C   FIND CRITICAL VALUE IN TESTING FOR INDEPENDENCE
      DO 144 K=1, 32
      IF(KDE(K)-KDOF)144, 142, 142
142  CRITIC=CS(K)
      GO TO 152
144  CONTINUE
C   PRINT CHI-SQUARE TEST OUTPUT
152  WRITE(61, 801) TITLE
      WRITE(61, 802)
      WRITE(61, 803)
      KOUNT = 0
      DO 162 J=1, NROW
      DO 162 K=1, NCATY

```

```

      KOUNT=KOUNT+1
      IF(MODE(KOUNT, 5)-1)162, 161, 162
161  WRITE(61, 808)
808  FORMAT(/)
162  WRITE(61, 804) J, K, X(J, K), E(J, K), C(J, K)
      WRITE(61, 805) TOTAL, CHISQ
      WRITE(61, 806) KDOF
      WRITE(61, 807) CRITIC
      IF(INPUT-2) 10, 192, 10
192  WRITE(61, 809)          RATIO, SUMC, SUMU, FMAX
191  FORMAT(33H1CHI-SQUARE TEST OF INDEPENDENCE-,
      5X, 7A4///)
192  FORMAT(55H GROUP CATEGORY OBSERVED
803  FORMAT(55H                      FREQUENCY

                                EXPECTED          CHI-SQUARE )
                                FREQUENCY        CONTRIBUTION)
804  FORMAT(  I4, I10, F13.0, F11.2, F13.3)
805  FORMAT(/78  TOTALS, F20.0, F24.3///)
886  FORMAT(20H DEGREES OF FREEDOM=, I28/)
887  FORMAT(42H CRITICAL VALUE AT .85 SIGN FICANCE
      LEVEL=, F6.2)
889  FORMAT(/////////184 LIKELIHOOD RATIO=, F7.3, 50X,
      3F11.5)
810  FORMAT(1H1)
811  FORMAT(3F13.5, 3I5, 2F12.6/)
      GO TO 10
999  STOP
      END

```

APPENDIX G

Descriptive Statistics on Selected QuestionsIntroduction

Certain questions were included in the original questionnaires given to the experimental and control groups even though the answers were not to be used in the analysis of the main hypotheses of the thesis. They were added because the findings from these particular questions might be beneficial to staff members in the Office of International Education at Oregon State University. The only analysis done on the raw data derived from these questions was that of figuring simple percentages on each question.

Results of Questions for Students in the Control Group Who Said They Were "Not Interested" in Cross-Cultural Exchange Programs

9. Generally speaking, cross-cultural study programs are beneficial to the educational objectives of students.

N = 47

1.	Strongly Agree	43%
2.	Agree	51%
3.	Disagree	4%
4.	Strongly Disagree	2%

10. Are you aware of the various cross-cultural study programs that are available to Oregon State students?

N = 47

- | | |
|--------|-----|
| 1. Yes | 57% |
| 2. No | 43% |

11. Where did you first learn about these programs?

N = 44

- | | |
|--|-----|
| 1. Office of International Education Staff | 2% |
| 2. Bulletin boards or other campus publicity | 43% |
| 3. <u>Barometer</u> | 7% |
| 4. Friends | 30% |
| 5. Other (Please Specify) | 4% |
| a. Magazine article | |
| b. Father who is a professor | |
| 6. I have not heard of them | 43% |

18. Do you know anyone who has participated in a cross-cultural program(excluding Peace Corps)?

N = 46

- | | |
|--------|-----|
| 1. Yes | 70% |
| 2. No | 30% |

19. My primary reason for having no interest in cross-cultural study programs is:

N = 45

- | | |
|--|-----|
| 1. Have no interest in other countries | 0% |
| 2. Such experience would benefit neither my education nor my future vocational goals | 9% |
| 3. Specific programs do not fit my needs | 11% |
| 4. I have never really considered the possibilities | 38% |
| 5. I never knew that the possibilities existed | 4% |
| 6. Financial | 38% |
| 7. Other (Please Specify) | 4% |
| a. Marriage | |
| b. Can't get out of ROTC | |

Results of Questions for Students in the Control Group Who Said They Were Interested in Cross-Cultural Educational Programs

9. Generally speaking, cross-cultural study programs are beneficial to the educational objectives of students.

N = 45

- | | |
|----------------------|-----|
| 1. Strongly Agree | 58% |
| 2. Agree | 42% |
| 3. Disagree | 0% |
| 4. Strongly disagree | 0% |

10. Are you aware of the various cross-cultural study programs that are available to Oregon State students?

N = 46

- | | |
|--------|-----|
| 1. Yes | 78% |
| 2. No | 22% |

11. Where did you first learn about these programs?

N = 44

- | | |
|--|-----|
| 1. Office of International Education staff | 2% |
| 2. Bulletin boards or other campus publicity | 43% |
| 3. <u>Barometer</u> | 7% |
| 4. <u>Friends</u> | 30% |
| 5. Other (Please Specify) | 11% |
| a. Professors (3) | |
| b. Magazine articles | |
| c. Parents | |
| 6. I have not heard of them | 7% |

18. How long have you been interested in a cross-cultural study program?

N = 46

- | | |
|-------------------------|-----|
| 1. Less than a month | 17% |
| 2. One to six months | 15% |
| 3. Six months to a year | 20% |
| 4. More than a year | 48% |

19. Are you aware of loans and scholarships that are available to help finance cross-cultural study programs?

N = 45

- | | |
|--------|-----|
| 1. Yes | 27% |
| 2. No | 73% |

20. If you participate in a cross-cultural study program, who will be responsible for financing the program?

N = 43

- | | |
|---|-----|
| 1. I will pay for everything myself | 9% |
| 2. I will have loans and/or scholarships that are applicable to the programs | 21% |
| 3. I will take care of most of the expenses, but my parents will help | 21% |
| 4. My parents and I will equally share the expenses of the program. | 5% |
| 5. My parents are paying for most of the expenses, but I am contributing a small amount | 30% |
| 6. My parents are totally financing the program | 14% |

21. Which one of the people or the groups listed below do you feel have influenced you the most in your interest in or decision to apply for a cross-cultural study program?

N = 42

- | | |
|--|-----|
| 1. Parents | 21% |
| 2. Friends on campus | 23% |
| 3. Other friends | 31% |
| 4. Faculty member(s) | 10% |
| 5. Member(s) of the staff of the Office of International Education | 5% |

22. WHEN YOU FIRST INQUIRED about the possibilities of cross-cultural study opportunities at the Office of International Education, did you

N = 39

- | | |
|--|-----|
| 1. Have a specific program in which you were interested | 8% |
| 2. Have a general area in which you were interested, but have no specific program in mind | 5% |
| 3. Have a specific program in mind, but later find that there were other programs which better suited your needs | 0% |
| 4. Have only a general interest in cross-cultural study programs | 10% |
| 5. I have not inquired about the possibilities through the Office of International Education | 77% |

23. How much language study of the country to which you are applying to go or are interested in have you had?

N = 42

- | | |
|---|-----|
| 1. No foreign language education | 17% |
| 2. 1 year of high school | 5% |
| 3. 2 years of high school | 24% |
| 4. 3 or more years of high school | 12% |
| 5. Some high school and some college | 17% |
| 6. Some courses in college | 10% |
| 7. I am a foreign language major | 7% |
| 8. I have not studied the language of the country in which I am interested, but I have studied another foreign language (excluding Latin) | 14% |

If you answer question 24, please mark "not applicable" on questions 25 and 26.

24. What is your primary reason for applying, or considering applying to study in a cross-cultural study program?

N = 23

(Question 24 continued)

- | | | |
|----|---|-----|
| 1. | Language improvement | 2% |
| 2. | Benefits I can gain in the area of general understanding by living in another culture | 52% |
| 3. | Such programs will help me in future career plans | 17% |
| 4. | Benefits that I will receive in areas outside of my general educational interests, such as music, art and theatre | 0% |
| 5. | Change of pace from college experiences in the United States | 9% |
| 6. | Travel | 13% |
| 7. | Chance to be more independent | 0% |
| 8. | Other (Please Specify) | 0% |

25. My primary reason for not applying to the program at this time is:

N = 28

- | | | |
|----|--|-----|
| 1. | Financial | 18% |
| 2. | Programs which are offered do not suit my needs | 18% |
| 3. | I do not have the necessary language requirements | 0% |
| 4. | I do not feel that my grades are high enough | 4% |
| 5. | I do not have the class standing | 4% |
| 6. | My parents are opposed to my applying for a cross-cultural study program | 4% |
| 7. | Personal concerns at this time are such that I cannot participate | 18% |
| 8. | Other (Please Specify) | 21% |
| | a. Marriage (4) | |
| | b. Want to graduate with my class (2) | |
| | c. Would rather go as graduate student (2) | |
| 9. | Not Applicable | 18% |

26. Do you plan to apply for a cross-cultural study program at a later date?

N = 28

- | | | |
|----|----------------|-----|
| 1. | Yes | 7% |
| 2. | No | 39% |
| 3. | Uncertain | 39% |
| 4. | Not applicable | 18% |

Results of Questions for Students in the Experimental Group Who
Inquired about Programs Through the Office of International
Education

9. Generally speaking, cross-cultural study programs are beneficial to the educational objectives of students.

N = 44

1. Strongly Agree	59%
2. Agree	39%
3. Disagree	2%
4. Strongly Disagree	0%

10. Are you aware of the various cross-cultural study programs that are available to Oregon State students?

N = 45

1. Yes	78%
2. No	22%

11. Where did you first learn about these programs?

N = 43

1. Office of International Education staff	2%
2. Bulletin boards or other campus publicity	47%
3. <u>Barometer</u>	7%
4. <u>Friends</u>	30%
5. Other (Please Specify)	12%
a. High school counselor	
b. Oregon State U. catalog	
c. Spanish professor	
d. Parents	
6. I have not heard of them	7%

18. How long have you been interested in a cross-cultural study program?

N = 45

1. Less than a month	13%
2. One to six months	18%
3. Six months to a year	20%
4. More than a year	49%

19. Are you aware of loans and scholarships that are available to help finance cross-cultural study programs?

N = 46

- | | |
|--------|-----|
| 1. Yes | 28% |
| 2. No | 72% |

20. If you participate in a cross-cultural study program, who will be responsible for financing the program?

N = 44

- | | |
|---|-----|
| 1. I will pay for everything myself | 11% |
| 2. I will have loans and/or scholarships that are applicable to the programs | 20% |
| 3. I will take care of most of the expenses, but my parents will help | 18% |
| 4. My parents and I will equally share the expenses of the program | |
| 5. My parents are paying for most of the expenses, but I am contributing a small amount | 32% |
| 6. My parents are totally financing the program | 14% |

21. Which one of the people or the groups listed below do you feel have influenced you the most in your interest in or decision to apply for a cross-cultural study program?

N = 42

- | | |
|--|-----|
| 1. Parents | 19% |
| 2. Friends on campus | 40% |
| 3. Other friends | 31% |
| 4. Faculty member(s) | 7% |
| 5. Member(s) of the staff of the Office of International Education | 2% |

22. WHEN YOU FIRST INQUIRED about the possibilities of cross-cultural study opportunities at the Office of International Education, did you

N = 39

(Question 22 continued)

- | | |
|--|-----|
| 1. Have a specific program in which you were interested | 8% |
| 2. Have a general area in which you were interested, but have no specific program in mind | 5% |
| 3. Have a specific program in mind, but later find that there were other programs which better suited your needs | 0% |
| 4. Have only a general interest in cross-cultural study opportunities | 10% |
| 5. I have not inquired about the possibilities through the Office of International Education | 77% |

23. How much language study of the country to which you are applying to go or are interested in have you had?

N = 43

- | | |
|--|-----|
| 1. No foreign language education | 16% |
| 2. 1 year of high school | 5% |
| 3. 2 years of high school | 21% |
| 4. 3 or more years in high school | 12% |
| 5. Some high school and some college | 16% |
| 6. Some courses in college | 12% |
| 7. I am a foreign language major | 5% |
| 8. I have not studied the language of the country in which I am interested but I have studied another foreign language (excluding Latin) | 14% |

If you answer question 24, please mark "not applicable" on questions 25 and 26.

24. What is your primary reason for applying, or considering applying to study in a cross-cultural study program?

N = 20

- | | |
|--|-----|
| 1. Language improvement | 10% |
| 2. Benefits I can gain in the area of general understanding by living in another culture | 45% |
| 3. Such programs will help me in future career plans | 20% |
| 4. Benefits that I will receive in areas outside of my general educational interests, such as music, art and theatre | 0% |
| 5. Change of pace from college experiences | |

(Question 24 continued)

in the United States	10%
6. Travel	15%
7. Chance to be more independent	0%
8. Other (Please Specify)	0%

25. My primary reason for not applying to the program at this time is:

N = 25

1. Financial	20%
2. Programs which are offered do not suit my needs	16%
3. I do not have the necessary language requirements	0%
4. I do not feel that my grades are high enough	4%
5. I do not have the class standing	4%
6. My parents are opposed to my applying for a cross-cultural study program	4%
7. Personal concerns at this time are such that I cannot participate	12%
8. Other (Please Specify)	16%
9. Not applicable	24%

26. Do you plan to apply for a cross-cultural study program at a later date?

N = 27

1. Yes	7%
2. No	37%
3. Uncertain	41%
4. Not applicable	22%

Results of Questions for Students in the Experimental Group Who Applied for Programs Through the Office of International Education

9. Generally speaking, cross-cultural study programs are beneficial to the educational objectives of students.

N = 50

1. Strongly Agree	72%
2. Agree	28%
3. Disagree	0%
4. Strongly Disagree	0%

10. Are you aware of the various cross-cultural study programs that are available to Oregon State students?

N = 49

- | | |
|--------|-----|
| 1. Yes | 96% |
| 2. No | 4% |

11. Where did you first learn about these programs?

N = 50

- | | |
|--|-----|
| 1. Office of International Education staff | 16% |
| 2. Bulletin boards or other campus publicity | 34% |
| 3. <u>Barometer</u> | 4% |
| 4. <u>Friends</u> | 24% |
| 5. Other (Please Specify) | 22% |
| a. Oregon State U. catalog | |
| b. Professors (2) | |
| c. Advisor (2) | |
| d. Sister | |
| e. Class | |
| 6. I have not heard of them | 0% |

18. How long have you been interested in a cross-cultural study program?

N = 50

- | | |
|-------------------------|-----|
| 1. Less than a month | 0% |
| 2. One to six months | 8% |
| 3. Six months to a year | 18% |
| 4. More than a year | 74% |

19. Are you aware of loans and scholarships that are available to help finance cross-cultural study programs?

N = 50

- | | |
|--------|-----|
| 1. Yes | 64% |
| 2. No | 36% |

20. If you participate in a cross-cultural study program, who will be responsible for financing the program?

N = 49

- | | |
|---|-----|
| 1. I will pay for everything myself | 6% |
| 2. I will have loans and/or scholarships that are applicable to the programs | 29% |
| 3. I will take care of most of the expenses, but my parents will help | 12% |
| 4. My parents and I will equally share the expense of the program | 14% |
| 5. My parents are paying for most of the expenses, but I am contributing a small amount | 33% |
| 6. My parents are totally financing the program | 6% |

21. Which one of the people or the groups listed below do you feel have influenced you the most in your interest in or decision to apply for a cross-cultural study program?

N = 50

- | | |
|--|-----|
| 1. Parents | 26% |
| 2. Friends on campus | 20% |
| 3. Other friends | 20% |
| 4. Faculty member(s) | 22% |
| 5. Member(s) of the staff of the Office of International Education | 12% |

22. WHEN YOU FIRST INQUIRED about the possibilities of cross-cultural study opportunities at the Office of International Education, did you

N = 50

- | | |
|---|-----|
| 1. Have a specific program in which you were interested | 46% |
| 2. Have a general area in which you were interested, but have no specific program in mind | 28% |
| 3. Have a specific program in mind, but later find that there were other programs which | |

(Question 22 continued)

- | | | |
|-----|--|-----|
| | better suited your needs | 12% |
| 4. | Have only a general interest in cross-cultural study opportunities | 14% |
| 5. | I have not inquired about the possibilities through the Office of International Education | 0% |
| 23. | <u>How much language study of the country to which you are applying to go or are interested in have you had?</u> | |

N = 50

- | | | |
|----|--|-----|
| 1. | No foreign language education | 10% |
| 2. | 1 year of high school | 0% |
| 3. | 2 years of high school | 4% |
| 4. | 3 or more years in high school | 8% |
| 5. | Some high school and some college | 26% |
| 6. | Some courses in college | 16% |
| 7. | I am a foreign language major | 14% |
| 8. | I have not studied the language of the country in which I am interested, but I have studied another foreign language (excluding Latin) | 22% |

If you answer question 24, please mark 'not applicable' on questions 25 and 26.

24. What is your primary reason for applying, or considering applying to study in a cross-cultural study program?

N = 51

- | | | |
|----|---|-----|
| 1. | Language improvement | 16% |
| 2. | Benefits I can gain in the area of general understanding by living in another culture | 47% |
| 3. | Such programs will help me in future career plans | 8% |
| 4. | Benefits that I will receive in areas outside of my general educational interests, such as music, art and theatre | 4% |
| 5. | Change of pace from college experiences in the United States | 4% |
| 6. | Travel | 4% |
| 7. | Chance to be more independent | 2% |
| 8. | Other (Please Specify) <u>All of the above</u> | 12% |

25. My primary reason for not applying to the program at this time is:

N = 0

1. Financial
2. Programs which are offered do not suit my needs
3. I do not have the necessary language requirements
4. I do not feel that my grades are high enough
5. I do not have the class standing
6. My parents are opposed to my applying for a cross-cultural study program
7. Personal concerns at this time are such that I cannot participate
8. Other (Please Specify)
9. Not applicable

26. Do you plan to apply for a cross-cultural study program at a later date?

N = 0

1. Yes
2. No
3. Uncertain
4. Not applicable