AN EXPLORATORY EVALUATION OF EDUCATION ABROAD.
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TO CLARIFY ISSUES INVOLVED IN THE RAPID AND CONTINUING EXPANSION OF OVERSEAS STUDY PROGRAMS FOR AMERICAN COLLEGE STUDENTS, A STATISTICAL ANALYSIS WAS MADE OF DATA OBTAINED FROM A BATTERY OF TESTS AND INTERVIEWS WITH 85 JUNIORS ACCEPTED FOR STUDY ABROAD IN THE SPRING OF 1965. FINDINGS WERE COMPARED WITH SIMILAR DATA FOR NON-APPLICANTS AND REJECTED APPLICANTS. TEST CATEGORIES INCLUDED INTELLECTUAL AND COGNITIVE FUNCTIONING, PERSONALITY TRAITS AND DISPOSITIONS, POLITICAL AND SOCIAL ATTITUDES, AND CREATIVITY AND AESTHETIC PREFERENCES. ITEMS MOST STRONGLY DIFFERENTIATED IN FAVOR OF THE STUDENT WHO WENT ABROAD INCLUDED--(1) STRONG SENSE OF PURPOSE IN LIFE, (2) COMPLEX AND DEEPLY RESPONSIVE INDIVIDUAL, (3) DEDICATION TO HUMANITARIAN AND EGALITARIAN IDEALS, AND (4) SELF-RELIANCE. THREE CRITERIA OF OVERSEAS PERFORMANCE WERE SIGNIFICANTLY INTERCORRELATED AND MAY BE VIEWED AS DIFFERENT FACETS OF AN OVERALL ASSESSMENT OF PERFORMANCE--(1) PEER NOMINATIONS OF OUTSTANDING PERFORMANCE, (2) RATINGS OF STUDENT PERFORMANCE BY OVERSEAS CENTER DIRECTORS, AND (3) ACADEMIC ATTAINMENT. A FOURTH CRITERION, STUDENT'S PERSONAL EVALUATION OF HIS YEAR ABROAD, PROVED INDEPENDENT AND REQUIRES FURTHER STUDY. CORRELATION PATTERNS WERE DETERMINED FOR THE PREDICTIVE VALIDITY OF VARIOUS SELECTION TECHNIQUES AND PROCEDURES EMPLOYED IN THE APPRAISAL OF OVERSEAS STUDY APPLICANTS. (JK)
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(Cooperative Research Project No. S - 440)

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University of California
Berkeley, California

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Chapter I

THE UNIVERSITY'S INCREASING INTERNATIONAL RESPONSIBILITIES

Preface

Study Abroad is one of the university's oldest traditions. Foreign study has been common in this country since the New England settlements. What is new and unprecedented is the startling increase in American programs abroad in recent years. This increase raises important questions: Is the Study Abroad movement significant? Is Study Abroad likely to be a part of the experience of every college student someday? What are the origins of this movement and more importantly, where is it going?

These questions are discussed in this chapter which attempts to assess the trend toward Study Abroad by placing it in its cultural perspective.

Students Abroad: An Historical Overview

The significance of the present trend to send students abroad can be assessed in some measure by reviewing the past. Although history may not repeat itself, the relationships of history do. This is particularly true in higher education where the force of tradition is considerable and where our basic methods and ideals are Greek in origin and have remained fairly constant for centuries.1

During antiquity, students journeyed to Athens for philosophy and letters, to Rhodes for rhetoric, and to Alexandria for medicine and science. The list of distinguished Romans who studied at Rhodes or Athens or both of these places is a long one and illustrates the extent to which study abroad was common. Quintus, Metulus, Antonius, and Horace studied in Athens; whereas, Rhodes saw Mark Anthony, Julius Caesar, and Cassius. Brutus and Cicero studied in both places. With the barbarian invasions and fall of the Roman Empire it became dangerous for scholars to wander abroad. The great cosmopolitan centers of education declined and education retreated to monasteries. In the centuries that followed, while Europe floundered in political insecurity, the Moslem empire dominated the Mediterranean and Northern Asia, Africa and present-day Spain. Under Islam, talented students who aspired for an advanced education were expected to travel to Damascus, Alexandria and Baghdad to hear the great teachers. Just as the international language of educated men in the Mediterranean had once been Greek, so Arabic was the common language of the scholars who roamed from the Indus to the Atlantic in the pursuit of knowledge.2

1

2
The level of educational attainment under Islam was exceptionally high and eventually made itself felt in Europe by way of Spain, laying the foundations for a rebirth of education in the north so that during the Middle Ages high education flourished again. There were practically no limits to the migration of teachers and students. The development of centers of learning -- "studia generalia" in such cities as Salerno, Bologna, and Paris eventually led to the rise of the University as we know it today. The early universities were international communities supported by the Church and bound together by a common language. Before the Reformation every educated man in Western and Central Europe spoke Latin.

It is interesting to note that the international complexion of these communities led to the development of the university as a formal institution. At Bologna students banded together into societies called "universitas" to protect themselves against price gouging from local townspeople and poor teaching by indifferent masters. Fair prices were set and the length of lectures established. The students even went so far as to require professors to post bonds before leaving the city. The professors for their part, reacted by organizing themselves into "colllegios" or colleges to protect their economic rights and set academic standards.

The extent to which the University of Paris was essentially an international center for learning is revealed by the fact that the faculty of arts was organized into "nations" which represented the various regions of Europe. The nations governed the University and elected its rector. The foreign character of the University resulted in serious problems some of which are relevant today. Living and studying together did not automatically result in international goodwill on the part of students -- a much hoped for outcome in the present study abroad movement. Jacques de Vitry has left behind a colorful description:

They wrangled and disputed not merely about the various sects or about some discussions; but the differences between the countries also caused dissensions, hatreds, and virulent animosities among them, and they impudently uttered all kinds of affronts and insults against one another. They affirmed that the English were drunkards and had tails; the sons of France proud, effeminate, and carefully adorned like women. They said that the Germans were furious and obscene at their feasts; the Normans, vain and boastful...the Romans, seditious, turbulent, and slanderous; the Sicilians, tyrannical and cruel...the Flemish, fickle, prodigal, gluttonous.3

At the height of its fame not one great teacher of French origin was to be found on the faculties of the University of Paris. When Louis XI ordered that the rector of the University should be French
he abolished one of the finest prerogatives of medieval learning.\textsuperscript{4}

The wandering scholar was a pattern of social life in Europe. Many students' songs still popular today depict the life of needy young scholars who travelled the "via latina" of monasteries, churches, and parishes to reach a distant university to hear a famous teacher profess. Of the earliest universities, Salerno is remembered for its excellence in medicine. Bologna was famed for its faculty of law and Paris was the home of theology.

The emergence of national states and the religious divisions created by the Reformation destroyed the university's international character. Parochialism triumphed. Enrollments declined as monarchs, anxious to establish local sovereignty, forbade their subjects to study abroad. The consequences of restricting the pool of talent from which universities could draw included the fragmentation of the intellectual community which Erasmus had hoped would develop into a commonwealth of the mind. These consequences are also relevant today; for the major intellectual advances which followed in the seventeenth and eighteenth centuries are seldom associated with the universities. Many great men of science and letters placed virtually no value on teaching in the universities which lagged behind the rationalistic and empirical spirit of the times. Instead, the intellectuals preferred the new academies where they could discuss poetry, politics, philosophy and science freely.\textsuperscript{5}

Eventually the universities recovered and during the 19th century some achieved that degree of independence necessary for greatness. This was particularly true in the newer German institutions such as Georg August University at Göttingen, where professors were free from supervision by the faculty of Theology, and where high standards of research were established.

To some extent study abroad was replaced by travel abroad. Rather than temporarily participate as citizens in another society, it became fashionable for young aristocrats and intellectuals who could afford it to travel abroad as observers stopping for brief sojourns at universities to pick up a smattering of languages, polite manners, the arts, and a ribald education. Although many of the great minds of the 17th and 18th centuries studied abroad in this fashion, the movement was in many respects anti-intellectual.\textsuperscript{6}

Before the Reformation talented students and scholars were supported by the Church regardless of their family background. As a consequence, universities were centers of learning and the levels of scholarship quite high. The English virtually institutionalized foreign travel into the "Grand Tour" which became one of the liberal arts for the aristocratic and middle classes.
Americans have always studied abroad. In the early days of the colonies students were sent to England to study the ministry. Sons of wealthy merchants and planters were often sent to Europe for serious study, or more commonly, the Grand Tour. During the 19th Century Americans were attracted to the German universities because of their reputations for excellence. Americans avoided Oxford and Cambridge where a loyalty oath to the Church of England was required, and stayed away from France with its Latin culture and what Americans considered to be its immoral atmosphere.7

From 1815 to 1915 it is estimated that 10,000 Americans studied in German universities. This group included young men who were later to direct the course of American education or achieve a permanent place in American letters. Historian George Bancroft, Henry Wadsworth Longfellow, and philosophers John Dewey and George Santayana studied in Germany. American students in Germany included men who were later to become college presidents such as Henry Tappen of Michigan, Charles Eliot of Harvard, Daniel Gilman of John Hopkins, Andrew White of Cornell, G. Stanley Hall of Clark, and Nicholas Murray Butler of Columbia.8

The practice of sending students abroad has not been without its critics, particularly in the United States. Thomas Jefferson railed against study abroad in a letter to his friend John Banister, Jr. in 1785:

> Why send an American youth to Europe for education? Let us view the disadvantages...to enumerate them all would require a volume. I will select a few. If he goes to England he learns drinking, horse racing and boxing. These are the peculiarities of English education.

> The following circumstances are common to education in that and other countries of Europe. He acquires a fondness for European luxury and dissipation and contempt for the simplicity of his own country....He contracts a partiality for aristocracy or monarchy, he forms foreign friendships which will never be useful to him, and loses the season of life for forming in his own country those friendships which of all others are the most faithful and permanent; he is led by the strongest of human passions into a spirit for female intrigue, destructive of his own and others' happiness...and learns to consider fidelity to the marriage bed as an ungentlemanly practice and inconsistent with happiness....It appears to me then that an American coming to Europe for education loses in his knowledge, in his morals, in his habits, and in his happiness.

A century later in 1873 the Reverend Birdsey Grant Northrop, secretary of the Connecticut State Board of Education launched a crusade against Americans studying abroad. He asked scholars and educators across the country for their views on study abroad, and of their replies, historian Henry Steele Commager notes that they reveal the "prejudices vanities and obsessions of intelligent Americans" during the Victorian era. Ironically, among the foes of foreign study was Harvard's president Eliot, who took
his Ph.D. at Göttingen, which is one of the quietest of university towns in Europe.9

Current Trends

The earliest American programs organized for study abroad were initiated by women's colleges in the East. Marymount and Delaware established the first programs in Paris in 1923 followed by Smith in Paris and Rosary College in Fribourg two years later. Although Mount Holyoke joined the Paris group in 1926 and Marymount opened a branch in Rome in 1930, it is interesting to note that no other American college joined the movement until nearly twenty years later. The isolationism and economic hardship of the Thirties, followed by a world war, militated against new programs. It was not until Sweet Briar College began sending its juniors to Paris, followed by Fordham University in 1950, that the present trend of college programs began.10

Sending students abroad, therefore, is nothing new. What is new and without precedent, is the speed with which American colleges and universities have recently plunged into this field, both in the number of institutions involved and the variety of programs they offer. Prior to 1950, six American colleges maintained programs abroad. By 1956 the number had risen to 22, by 1963 to 102, and by 1966 to 208, with "scores of institutions" indicating in response to a survey by the Institute of International Education, that they are seriously considering establishing programs abroad within "the next year or two." 11

Expansion has also been accompanied by innovation. Summer programs, the first of which were tried in the late Thirties, have become common. The actual number of these programs is difficult to determine; they change from year to year, and many vacation trips are disguised as academic tours of study. In its survey of colleges and universities in 1961, the Institute of International Education reported that the number of summer programs abroad by accredited institutions increased from 54 programs in 1960 to 100 in 1962. The Institute estimated the number of summer programs to be 200 for 1966.12

In addition to undergraduate study abroad, many universities are developing graduate programs of foreign study. American graduate students have, of course, always gone abroad on an individual basis, and fellowship committees have generally recognized work abroad as an integral and desirable step towards an advanced degree. It is the scale on which graduate study is occurring that is unprecedented. The passage of the U.S.G.I. Bill and the Fulbright-Hays Act (P.L. 480) resulted in tens of thousands of American veterans, professors and graduate students being able to study in all parts of the world.

This movement towards foreign study has also reached the nation's
professional schools, where crowded curricula, legal requirements, and a lack of interest have traditionally kept students at home. In a survey by McCormack of forty prestigious professional schools across the country in the fields of education, engineering, public health and law, nearly all the schools replied that they were anxious to develop opportunities for their students to study or gain field experiences abroad. Presently the numbers of students involved is small, but judging from these replies, and from the enthusiastic reports circulating about the few programs that presently exist in these fields, it seems likely that this movement will gain momentum in the near future.13

As a consequence of all this activity the opportunity to study abroad has now been extended to virtually every undergraduate in America. If a student's college does not operate a program he can transfer to a school that does. Programs operated by many reputable institutions welcome transfer students. At the graduate level, study abroad has become a normal part of the Ph.D. degree in many fields such as anthropology, history, and international relations.

Organized programs are only part of the total picture. Many American students go abroad on their own. Usually their stay is restricted to a summer, but in all the major capitols of the world from Delhi to Paris, one encounters large numbers of bona fide American students, engaged in independent study, or enrolled in foreign universities. The statistics issued by the State Department reveal the magnitude of the exodus.

The Passport Office reported that during 1966 it issued passports to 266,990 students, a figure which had increased 16% over the year before. Of this group approximately 50,000 stated they wanted passports in order to go abroad to study. The figures may not be precise, but the increases are on such a scale that gross estimates present the general picture.14

On the following page, Figure A graphs the "growth curve" in logarithmic terms of the number of American programs.
Figure A. Logarithmic graph of the number of American collegiate overseas programs, 1930 - 1966. (Source: Institute of International Education, Undergraduate Study Abroad, New York: The Institute, 1966)

The direction of this trend is clear. The numbers of students going abroad increases as the rate at which programs are being established is accelerating. And yet the evidence suggests that this is only the beginning, that if present trends continue, overseas study is likely to be a normal part of both the undergraduate and graduate curriculum. We may in fact be witnessing the beginning of the greatest exchange of students the world has ever known. If these predictions are accurate, they hold important implications for the future of higher education. Study abroad will be conducted on a scale never known before. To assess the movement's importance and to detect its direction, some of the forces which gave rise to it are examined in the next section.
Factors Leading to Increased Study Abroad

The basic reasons for the sudden surge of interest in study abroad are to be found in the accelerating changes on the world scene which have occurred since World War II. An educational system reflects the society that sustains it; and if American higher education has become international in outlook, it is because the United States itself has become a nation deeply involved in world affairs.

We live in a world rapidly moving towards a global society. Most of the changes that have occurred are the results of the twentieth century revolution in technology. The English historian Christopher Dawson notes that the world has changed more in the last one hundred years than it had in the thousand years preceding; "we are further from the world of our great grandfathers than they were from the world of Charlemagne." One consequence of this technological revolution has been a prosperity, which has brought higher education and travel abroad within the reach of a new generation of Americans.

Youth has always experienced wanderlust. College students today have been reared in an age when events on the other side of the globe can be seen on television as they occur. Through improved communication and the internationalization of the movie industry, students have a more extensive visual impression of cities like Paris than they do of Peoria. It is only natural that students should want to see these famous places and study in them. But few generations could afford, as this American one can, to travel. Family income has increased (in constant dollars) 50 per cent over the last twenty years in the United States. Since the Depression, income has more than doubled. Families can afford to send their sons and daughters to college more than ever before. A shrinking job market in unskilled and semi-skilled occupations leaves many graduating high school seniors with little choice but to go on for some form of further education. The result is a burgeoning college population. Among the upper and middle classes a higher education is the norm rather than the exception. Most students and their families agree on the desirability of higher education.

Concomitant with the efforts to extend the number of places for students has been public legislation which provides financial assistance to those who need it. Long-term, low-interest state and Federal loans -- such as the National Defense Education Act loans (NDEA) -- enable most students who qualify for a program to go abroad. The terms of these government programs are such that they include assistance to the middle classes. Undergraduates may borrow up to $1000 per year from the NDEA funds and are allowed ten years to repay upon completion of their schooling at an interest rate of 3 per cent. Students who go into teaching, as a large segment of students who go abroad do, are allowed to discount 10 per cent of what they owe for each year they teach up to five years.

States such as California and New York have supplemented the NDEA
aid with loan programs aimed also to assist the middle classes. In California, students from families with gross adjusted incomes up to $15,000 are eligible. In effect, this includes families whose income may be $20,000 per year. All of this means that financial considerations are secondary for the majority of students in deciding whether to study abroad, and that almost every student who enjoys the opportunity can take advantage of it. As a people, Americans are committed to giving each individual as much education as he is capable of receiving.

The United States is a wealthy nation and has been able to afford to extend higher education, a process which has resulted in a vast educational establishment. We have pioneered in this field of mass higher education and discovered that the average individual is capable of benefiting from more formal training than had previously been considered feasible. As a consequence, the United States has the highest percentage of students pursuing formal education in the early adult years of any country in the world.

Studies show interest in international travel increases with education. Thus, growing enrollments in colleges and universities means larger numbers of American students anxious to go abroad. It also means that when foreign study becomes a popular trend, as it has in recent years, the trend will involve large numbers of students simply because the United States College population itself is so enormous.

Related to the growth of mass higher education in the United States has been the democratization of travel. Declining costs of trans-oceanic transportation, plus lower costs of living abroad, enable colleges to operate programs in which the cost of the year abroad is not much more than at home.

An important factor has been the declining costs of air transportation. Airline fares from New York to London have dropped from $675 in 1939 to $522 today. With the introduction in 1969 of the "jumbo jets" which will seat 500 persons, the costs will drop further. These figures do not take into account inflation so that the 1939 fare would be twice that amount in today's dollars. These costs are no more than the equivalent of what they were a century ago on the early steamships, which means that foreign travel is cheaper than any other phase of modern living.

The airline fare declines are modest compared to the break-throughs in rates which occurred with the advent of charter flights. Students now fly the Atlantic for as little as $100 each way. Or, from the West Coast they can fly to Europe for nearly the same price as the scheduled airlines charge to New York. During the summer of 1966 over 1000 Berkeley students flew to Europe aboard planes chartered from scheduled airlines.

Air transportation is not only cheaper but faster than before, and now accounts for 97% of American traffic across the Atlantic. Few students could have afforded to fly to Europe on Pan American's Yankee Clipper in 1939. New York to Lisbon took twenty-six hours then. In the 1950's, the
flight aboard the Douglas DC-6's or Lockheed Constellations was reduced to eleven hours. Today, on a student jet charter it takes seven hours at a price which, in constant dollars, is one-fifteenth that of nearly thirty years ago. The price is further diminished if the doubling of American disposable income is taken into account. How many students could have afforded $675 in 1939?

Thus, moving a group of students from the United States to Europe is inexpensive and furthermore can be done in a day. By surface transportation it would require two or three weeks of faculty supervision. Colleges are thus able to squeeze in summer tours which previously would not have been feasible and operate year-long programs in which transportation poses few serious problems. The jet age also makes it possible for students to finish a quarter of work abroad midyear and return to the U.S. with sufficient time to enroll in the following term.

Prosperity and progress in transportation are but two effects of a technical revolution leading to the increase of American students abroad. These explanations may explain the feasibility of sending students overseas, but neither accounts for the basic motives involved. The education abroad is seen as highly desirable for a number of reasons.

During World War II, millions of American servicemen travelled overseas for the first time; whereas, during the First World War, the stay of the American Doughboys had been brief and confined to relatively small areas of France and the low countries. America's total involvement in World War I had lasted only eighteen months. World War II was different, Servicemen spent months, even several years, living in foreign countries. The American geographic perspective changed. Places which Americans had never heard of, or at best were names on maps, became part of our national experience. Novelist Joseph Heller recalls an episode on a bombing mission over France which illustrates this experience:

Most of us in Corsica had never heard of Avignon before the day we were sent there to bomb the bridge spanning the River Rhone. One exception was a lead navigator from New England who had been a history teacher before the war and was overjoyed in combat whenever he found himself in proximity to places that had figured importantly in his studies. As our planes drew abreast of Orange and started to turn south to the target, he announced on the intercom:

On our right is the city of Orange, ancestral home of the kings of Holland and of William III, who ruled England from 1688 to 1702.

And on our left, came back the disgusted voice of a worried radio gunner from Chicago, is flak.19

One of the more powerful and latent factors leading to the establishment of international studies in the schools and in the development of programs abroad has been the threat of nuclear war. World War II
resulted in the dissolution of European colonial empires. The years since have witnessed a struggle between Communist and Western Nations as to the types of societies that should fill the vacuum. This struggle has occurred in an era of thermonuclear weaponry. Foreign studies have become more important because it has become apparent that history must no longer be a succession of bloody conflicts if man is to maintain and improve his life.20

Out of these crises and their ensuing searches for resolution have arisen new emphases on education, and particularly on worldwide education and an appreciation of what is happening everywhere. Oceanographers wish and need to know what is being done all over the world, not just in one nation's offshore waters. Astrophysicists in the United States are just as interested in what radio telescopes in other countries are finding as in what their own observatories are reporting. And of course, missile scientists in one country feel compelled to follow what their counterparts are doing elsewhere. Thus, weaponry as well as all other aspects of pure and applied science exerts its own influence on international exchange and information.

America's own war colleges, it might be noted, have long accepted students from abroad and a number of well-known military leaders in other countries have studied at Fort Leavenworth and elsewhere. No major Embassy abroad is without its military attaches.

It is education's responsibility to prepare students and citizens for this country's role in international affairs, be they peaceful or warlike. Programs for study abroad represent one aspect of the educational community's attempt to meet that responsibility. The task extends into many fields of endeavor, from the military, to business, to the professions to simply training citizens for tomorrow. In his undelivered speech at Dallas, President Kennedy intended to say:

The link between leadership and learning is not only essential at the community level. It is even more indispensable in world affairs. Ignorance and misinformation can handicap the progress of a city or a company, but they also, if allowed to prevail in foreign policy, handicap this country's security. In a world of complex and continuing problems, in a world full of frustrations and irritations, America's leadership must be guided by the lights of learning and reason, or else those who confuse rhetoric with reality and the plausible with the possible will gain the popular ascendences with their seemingly swift and simple solutions to every world problem.21

With these problems in mind the Congress passed The Fulbright-Hays Act in 1947, The National Defense Education Act in 1958, and The International Education Act in 1966. Essentially this has represented a bi-partisan policy based upon the belief that in the words of Lyndon Johnson, "Ideas not armaments will shape our last prospects for peace:
foreign policy will advance no faster than the curriculum of the classroom."

Aside from the fears of war, and competition with communism, Americans have shown a readiness to assist developing nations in their battles against overpopulation, poverty, and disease. The Peace Corps and Alliance for Progress are examples of this commitment. We have also been anxious, Cold War strategy aside, to communicate the values of our society to others. Americans believe that they have discovered -- perhaps naively -- some successful economic and political approaches to a well-ordered society. Few American colleges have established a program abroad solely to promote world peace. The educator who struggles against national fanaticisms and attempts to spread the awareness of man’s common humanity accomplishes a labor of good in itself. But if he "imagines that a reform in education or the millions of dollars spent by UNESCO will assure peace," states Raymond Aron, "he is too naive to be taken seriously." And although there is enthusiastic belief in some quarters that the exchange of students will lead to amicable relations, most knowledgeable observers know this to be an oversimplification of complex problems. There are too many historical examples of nations which have enjoyed close contacts and yet lived contentiously with one another.

The nations of Europe have experienced this. During the First World War, for example, the Royal families of England and Germany were closely related. Or, to cite another example, during the decade of the Thirties, Japanese-American cultural relations reached new heights while the diplomatic situation deteriorated. But in the long run, most observers agree that ultimately, the chances for world peace will improve if we teach students, in the words of Lyndon Johnson again, to learn about and "care about other nations.""

One of the first steps in learning about other nations is learning to speak their language. During the late 1950’s it became apparent that the United States was not prepared linguistically to meet its global responsibilities. Too few Americans spoke a foreign language. It was discovered that most American diplomats abroad did not speak the language of the countries to which they were assigned. Although the United States had spent billions of dollars on foreign aid, it had captured neither the affection nor esteem of the rest of the world. Of course some of this lack of affection stems from America’s dominant role in the world. But much of it, too much of it, sprang from an American ignorance in international relations.

The lag in foreign language instruction in the American schools and colleges became a source of alarm in the late 1950’s. Americans realized that they had failed to appreciate the sense of cultural empathy created when men speak the same language. The epithet "Ugly American" (originally coined by Bardick and Lederer with almost directly opposite intention) has come into everyday usage as a summary of the frustrations, misadventures, and contretemps to be expected when the linguistically and emotionally provincial American goes abroad.
Geographic isolation and a search for an indigenous identification were two important factors, then, which militated against a bilingual tradition. Another reason for our lingual retardation stems from the way foreign languages were taught in the United States. Emphasis had been upon grammar and literal translation. Latin and Greek were still popular languages, and seen as effective in enriching the student's use of English as well as an important means of achieving mental discipline. The result of all these factors was a tradition in which students were indifferent if not openly hostile to learning a foreign language.

The best way to learn another language is to place the student in the culture itself. He then enjoys the opportunity of using the language all his waking day. Not only does he derive much greater opportunity to learn the language, but in the country itself his motivation is likely to be greater as he attempts to purchase a meal, wend his way through a foreign town, or impress a girl. Living in the culture also gives the student the opportunity to learn what Hall calls the "Silent Language" -- the non-verbal gestures, use of space, time, and accents by which people communicate. The need for foreign language instruction as a means of learning cultural empathy has been an important factor in the rapid expansion of programs abroad.

Programs were also established for purposes of general education. The world in which students will live is one which will include extensive relations with peoples abroad -- professionally, economically, militarily, and recreationally. Economic forces have dramatized the need for the inclusion of international studies in the college curriculum. While foreign radios and cameras and automobiles dominate certain domestic markets, American firms have been rapidly expanding overseas. United States investments abroad more than doubled in the period from 1958 through 1965. Our exports which amounted to $7.9 billion in 1943, rose to $37 billion in 1950 and climbed again to well in excess of $100 billion in the mid-Sixties. United States companies sell three quarters of the computers in Europe, 40 per cent of the automobiles, and 40 per cent of the oil. U.S. economic dominance in Europe has reached the point that when France decided to sell its Caravelle jetliners to China, it was prevented from doing so because the airplanes contain so much American electronics equipment as to fall under the United States Battle Act against trading with the enemy.

In recent years, the nature of international business has also changed considerably. Prior to 1945, the foreign business of many United States firms was restricted largely to export and import activities. Today, due to changing socioeconomic conditions it has been necessary to establish manufacturing facilities within foreign countries. Many nations such as India, for example, either forbid outright the importation of certain foreign goods, or place import duties which are so high as to exert the same effect. To develop untapped and potentially rich markets, United States firms have therefore built manufacturing plants within the countries. During the period of 1960-1965 some 2161 firms initiated new foreign activities. In a recent survey of United States corporations
with heavy investments abroad revealed that nearly three quarters of those queried by the Treasury Department planned further expansion abroad, not to bring profits back to the United States, but because they enjoy operating as supranational corporations.30

Finding competent Americans for positions abroad poses a serious challenge to the American corporation, because the American abroad needs to possess many social skills along with the usual professional or technical ones of the job. The work may be the same as at home, but the conditions under which it is performed are different. One doesn't conduct business in Calcutta or Dar-es-Salaam in the same way as in Chicago or Des Moines.

In addition to changing local economic conditions recent advances in technology have resulted in the emergence of world markets. The expense of development of some items such as jet aircraft have soared to a point where corporations must sell their products in many countries for long periods of time before they can earn a profit. The cost of developing the American supersonic transport "SST," for example, is being subsidized by the American government because to do so with private capital would probably have required all the profits of all the major American airlines for over a decade. As it is, with government financing, the stakes are high, and the need to sell the transport to foreign airlines imperative.31 In this context it can be seen that the training of professional leaders in government and industry for positions dealing with international responsibilities will play a role of growing importance. And thus one more pressure is created for the establishment of United States programs abroad.

Finally, among the reasons for the growth of programs abroad, one of the student motives has been a search for values. Most students today have been raised in a world in which their food, clothing, shelter and education are provided completely by their parents. Students have so much disposable income of their own, that large sums of money are spent on advertising directed at the young adult market.32 College students have the income to go abroad, and an education which has cultivated their interest to do so. There is much that can be improved on in American life and today's college students to a considerable degree may be going abroad to test the values by which they have been raised. They want to see other societies and compare. Many of the students seem aware of Thomas Wolfe's dictum that to find your own country you must leave it and go abroad.

Summary

A number of factors account for the dramatic increase in American programs of study abroad. Some of the major reasons for this development are:

1) The force of tradition. Higher education has always been
international in character, and students have always studied abroad.

2) Prosperity. Americans can afford to study abroad.

3) The sheer size of American higher education and its decentralized character which makes proliferation possible.

4) Advances in transportation which reduce the time required to travel abroad from weeks to a matter of hours.

5) Fear of war and the recognition of interdependence in a thermonuclear age.

6) The need to upgrade foreign language education in the United States.

7) Increased United States economic and professional activity abroad.

8) Eagerness on the part of students to test their American values and discover new ones.

Study abroad will be permanent. International studies represent one of the most important responsibilities in higher education today,
Notes

Chapter I

1 Marrou's (1956) *A history of education in antiquity* is the best book available covering the period from the rise of Greece to the fall of Rome. Dodge's (1962) *Muslim education in medieval times* is authoritative. The classic work for the rise of the European university is still Rashdall's (1936) *The universities of Europe in the Middle Ages*. The nations of the University of Paris are described by Kibre (1948) in *The nations in the mediaeval universities*. The decline of the universities is discussed by Ogg (1955) in *England in the reign of Charles II*, and by Cobban (1960) in *In search of humanity: The role of the Enlightenment in modern history*. The number of American students abroad during the 19th century is documented by Brickman in his chapter, "International relations in higher education 1862-1962," in *A century of higher education* (Brickman & Lehrer, 1962).

2 Students also traveled abroad in ancient Asia. The course of Japanese history changed after students were sent to the Chinese court beginning in the eighth century (Reischauer, 1964). Students also journeyed thousands of miles to study at the University of Nalanda in ancient India (Sankalia, 1934).

3 Jacques de Vitry, quoted from Haskins (1957).


5 Ulich (1965, p. 59). See also Hexter (1950).

6 Trease (1967), and Martin & Martin (1967).

7 Fraser (1966).

8 Brickman's chapter in *Brickman & Lehrer*, vol. 1. See footnote 1.

9 Fraser (1966).

10 Freeman (1966, pp. 7-8). The exchange of students during the 1930's is discussed in Schwantes (1955).

12 Freeman (1966).

13 McCormack (1966).


15 Selltiz, Christ, Havel & Cook (1963, p. 28).

16 Dawson (1956, p. 22).


18 Dulles (1966, p. 18). Figures for air fares were supplied by A. Toledo, Manager of Tariffs, Pan American World Airways, letter to the authors, May 23, 1967. See also Rubin (1966, p. 4).


20 Aron (1967, p. 703), and Gavin (1966, pp. 18-22).


23 Aron (1967, p. 703).


26 Hall (1959, p. 1).

27 These figures are in a state of flux. See Boner (1965, p. 93). Also Davy (1967, p. 10).


29 Negandhi (1966, p. 57).


31 Ruppenthal (1967).

Chapter II

ORGANIZED PROGRAMS

Preface

In this chapter the University of California Program is described. Inasmuch as 90 per cent of students in the Program are in Europe, and since one of the authors has already described elsewhere programs in non-Western societies, the discussion that follows will center on the difficulties which arise when American undergraduates attempt to study independently in European universities and the extent to which the University of California's Program avoids or minimizes these problems.

The Need for Programs

The problems begin with differences in University systems. As a rule, it is very difficult for an American undergraduate to register as an independent student in a European university because of the substantial differences between the Continental and American systems. The American's first handicap is likely to be language. Unless he is a language major -- and a talented one at that -- he will be unable to follow lectures, complete suggested readings, and write papers or examinations in the other language. Those Americans who try find themselves attempting to follow lectures on complex subjects aimed at sophisticated audiences. Unprepared American undergraduates would encounter a difficult enough time if the talks were delivered under such conditions in English; but in French, German, or Italian it is even more arduous.

The independent student may also find himself isolated socially. Although his Spanish or Italian may have earned A's in Minnesota or California, and may be adequate for an exchange of morning greetings with the local shopkeeper, his facility in the language may still not be sufficient to engage in a meaningful dialogue with local students.

The student also discovers sometimes that he is often seen, for what in truth he really is: a transient. In older societies relationships are more carefully formed, take more time to mature, and endure longer than in the United States. Many students look upon their university days as a time to establish friendships which will last a lifetime. Thus, whereas people may be courteous with an American student, he is unlikely to be on the same social footing as the natives. In the French technical universities, for example -- the Grandes Ecoles -- the use of the intimate form of personal address "tu" begins during the school years and is continued throughout the student's lifetime. If a young graduate of one of these schools is seeking employment,
he will look up the names of alumni working in the corporation or agency
in which he plans to apply. He will even address the letter -- whether it
be to the president or simply the personnel director -- "Dear Comrade."
If the two men are within six years of each other he will use "tu."

It is not surprising then that the American undergraduate who arrives
planning to stay for a school year that lasts only from November through
May, and whose command of the local language is incomplete, has more
difficulty making friends than he would at home. The boys often find it
difficult obtaining dates with the local girls who are frequently older and
who are looking for prospective husbands. American girls, on the other hand,
often find themselves the center of attention but for the wrong reasons:
they may be seen as easy marks sexually. For both sexes these problems
intensify the feelings of loneliness the American attempting to study abroad
independently is likely to experience.

Not all of the Americans experience these social problems, of course. As
visitors they are of special interest and treated with extra hospitality.
Isolation can, however, be distressing for many of the American students.

Aside from the difficulties which arise out of the typical undergraduate's
problems in speaking a second language, there are others which relate to his
maturity. It is too often the case that the typical American undergraduate
with his "honest C average" lacks the intellectual power and maturity of his
European cousin, not because Europeans are inherently more intelligent, but
because they generally regard a university education as a privilege reserved
for an elite minority. Consequently, universities are more like graduate
schools and accept a very much smaller percentage of the secondary population
than is common in the United States. The six Common Market Countries, with
a combined population equal to the United States, graduate only one fifth the
students we do. In America, approximately one person in three in the late
teens attends an institution of higher learning, while in England the ratio
is one in seventeen, and in Italy one in thirty. In California, the ratio is
one in eight for students in attendance at the University. Of course allowances
should be made for the fact that general education as taught in the first
two years of college in the United States is taught in the academic high school
abroad, so that statistical comparisons are only partially valid. What is
important to remember is that the "typical" second-year student is not the
peer of his second-year counterpart in Europe.

The problems of language and intellectual maturity are compounded by
differences in methods of instruction between systems. The American under-
graduate curriculum is largely devoted to general studies. For example,
American students majoring in English traditionally take a survey of
English literature from Beowulf to the present in their sophomore year. Most
of their courses during their junior and senior years are only slightly less
broad in scope, though there is a trend towards increased undergraduate
specialization. As a rule, the student's work is carefully supervised. Reading
lists are assigned, term papers set, attendance taken, and time provided
for class discussion. Professors maintain office hours, and most attempt to
give individual attention to their students.
These practices are in distinct contrast to modal patterns of instruction in universities abroad. On the Continent, emphasis is placed on the lecture method, with less attention given to seminar studies. Most of the students in the German universities, for example, are working towards the Ph.D. degree. A professor has enormous latitude in deciding what courses he will offer. He may offer a course in the 20th century novel, lecturing on a single work of Thomas Mann. Thus, whereas the lectures may be centered on a single novel like Buddenbrooks, it is assumed the students have probably read many of Mann's books before; and whether they have or not, they will certainly familiarize themselves with all his novels while the course is in progress. If a student fails to assimilate the material in his course, it is assumed that it will be discovered at the end of the year in his examinations.

American students are also in for a surprise when they discover that the professor is not accessible outside of class. On the Continent, a student seldom sees his professor to discuss problems or seek advice.

There are exceptions which must be noted in these observations. To some extent, academic standards are lower in Southern Europe, so that the number of institutions in which Americans can compete more easily increases as one moves south. Second, American undergraduates who are fluent in a European language and who do come from the first rank American institutions are not likely to find standards any higher abroad.

Third, there are qualitative differences among universities which reflect differing values and goals. The American undergraduate may have a broader background in the natural and social sciences. He is likely to have acquired some mechanical skills at home or in school seldom found in educated Europeans. But it is less likely the American knows much about Hellenistic Athens or is ready to defend a thesis against his professors' criticisms.

Universities in Great Britain

There are exceptions of course to these generalizations about two large and diverse university systems, (i.e., the Continental and American). Instruction in the English and Scottish universities, as an example, differs considerably from the American and Continental models. Normally, Americans could be expected to make an easier adjustment in Scotland or England because we speak the same language. However, university instruction in the United Kingdom is such that it militates against the acceptance of American undergraduates in substantial numbers.

The English universities (and the remarks that follow also apply to the Scottish universities) are largely tutorial. The undergraduate's work is closely supervised by his tutors with whom he meets once a week. The tutors assign the student essays which are then discussed at the next weekly meeting. In the past, these meetings between tutors and students were conducted
on an individual basis. This still is common at Oxford and Cambridge, but it is an expensive mode of instruction. More prevalent are meetings of tutors with small groups of students.

Lectures are conducted in the university and students attend as they see fit. There is no formal connection between the subject matter covered by lectures and the work undertaken for the tutor. The emphasis in the English university is not so much upon learning a body of knowledge as acquiring the proper approach to a subject and training the mind. In a good tutorial, an undergraduate is expected to develop a sound argument on a given topic and often is expected to defend it against a systematic and sustained attack from his tutor. The tutor does not grade the student. All of this is in preparation for the day when the student will take his final examinations at the end of the year.

The major drawback of the British system, from the hopeful American student's point of view, is that it is too expensive for the United Kingdom to accept hordes of Americans. Out of approximately seventy-five qualified applicants at Berkeley only ten or twelve are placed in English and Scottish universities each year. Many of the problems students encounter studying on the Continent occur with varying degrees of intensity in the United Kingdom. Students have a big advantage in the similarity of language and culture. However, adjusting to a different system of education and making new friends still entails some adjustment. Much here will depend upon the individual. Some of our students claimed they had no problems adjusting in the United Kingdom, while others left the program.

University of California Education Abroad Program

The Universitywide Education Abroad Program was established in 1962 when the Regents approved a junior year abroad at the University of Bordeaux. Education Abroad, which now includes provisions for graduate study, has since been initiated in ten countries around the world, and is today one of the most ambitious programs for overseas study in American higher education.

Presently over 350 students, 40 per cent of whom are from Berkeley, are studying in the following Education Abroad centers: the University of Bordeaux, France; Center for Dramatic Art in Delphi, Greece; Georg August University, Göttingen, Germany; Chinese University of Hong Kong; the University of Lund, Sweden; the University of Madrid, Spain; the International Christian University, Mitaka, Japan; the University of Padua, Italy; and the Universities of Edinburgh, Birmingham, and Sussex in the United Kingdom.

Most of the students go abroad during their junior year. Each group is accompanied by one or two faculty members who serve as directors. The students take regular classes in the foreign universities and are housed with families or in dormitories. They receive a full year of academic credit. The cost of their year abroad is only slightly more than a year of college in California -- for most of the programs.
Selection Procedures

The students are selected carefully. They are required to have at least a "B" average in their overall work, with a straight "B" (3.0) in the language of the country in which they wish to study. Four semesters of the foreign language are required. Since many of the students began to learn the language in high school, a sizable segment of each group has more than the two-year minimum requirement. Students are selected on the following criteria: One, intellectual curiosity and commitment as evidenced by their record in college; two, facility in the language of the country in which they plan to study; three, knowledge of and interest in the country for which they are applying; four, emotional stability as indicated by psychological testing, faculty recommendations, and selection committee observations; and five, extra-curricular achievement as evidenced by a creative use of their leisure time.

The process of selection is as follows. In the fall the program is publicized, and lectures in which slides of the overseas centers are shown are arranged for the fourth semester or quarter language classes. Experience has shown that the success of the program depends upon developing sufficient student interest so that there is a reasonable pool of applicants from which to draw.

Students who apply are asked to prepare a curriculum vitae and to write an essay on their reasons for wanting to study abroad. These papers are read by the faculty selection teams composed of one member within and one member outside the language departments. The students' transcripts are studied carefully. Most applicants are then interviewed by the faculty teams, ranked, and accepted. The results of the psychological testing are kept confidential, of course, and only the expert's interpretation is used, in conjunction with other criteria. Students are not eliminated by test results alone.

Thus far, selection over the past five years has proceeded smoothly. The mean grade point of a random sample of participants in the program from Berkeley in 1966 was 3.2.

One criterion, often emphasized in selection, has not been stressed at Berkeley: the extent to which the student will "represent" the United States and the University. Usually, of course, students who would be poor representatives have many other problems which lower their ranking as candidates. The point here is that the primary criteria are intellectual. Although the students are expected to behave in an appropriate manner during their stay abroad, students are not made to feel that the success of American Foreign Policy and the prestige of the University of California rests upon their shoulders. Thus far, discipline has not been a serious problem; and those cases which have occurred were instances in which the student's misbehavior could not have been accurately predicted. Dropout among those students selected has been small -- between two and five per cent -- and is equal or less than that for all juniors at Berkeley.

The Committees for Education Abroad believe that high standards are essential if the California students are to succeed in the foreign universities.
The two-year language requirement enables the student to take an intensive course and later become integrated in the foreign university. The "B" average requirement means that the students will be on a par with the students in the European universities, and are capable of adapting to individual study.

The students depart in August or early September. During September and October they take an intensive language course (forty hours a week) equivalent to two semesters back home. Thus, when the Continental university opens in November the California students have all had at least three years of French, German, Italian or Spanish. In Sweden they take their first term courses in English. Some members of the group began their language studies in high school and have attained the equivalent of four years of college work with the intensive course.

Thus, they have a reasonable proficiency in the language when their lectures begin. Nevertheless they are not fluent, and to compensate for their lack of proficiency tutorial classes are established for each of the courses in which the University of California students are allowed to enroll. The tutorials are conducted in the language of the country. The tutors are often young pre-doctoral fellows. The tutorials have several advantages. One, they provide further opportunity to practice the language. Two, they give the students a chance to cover material related to their lectures which the native university students already know, and which probably was taught in the academic secondary school. The third advantage of the tutorial is that it results in supervised study for the undergraduates. Papers are assigned and quizzes administered. At the end of the term or year, where standard examinations are not administered for a regular university course, special tests can be given in the tutorials so that grades and unit credit, which the students need for graduation, can be assigned.

The intensive language instruction is effective in breaking down barriers to social interaction. The University of California undergraduates can converse with the native students. Attendance at regular lectures and classes results in shared experiences leading to natural friendships. Living with students in dormitories or with families also integrates the students into the culture.

There are limitations to the contact of course. The students are often assigned one to a room in university housing; householders sometimes prefer a formal, businesslike relationship with their American boarder. It is a short period of time from November to June to make many friends, despite the fluency in the local language. American men students have a difficult time finding dates with local girls who feel they should be dating prospective husbands, and the girls complain that too many Latin males have unduly optimistic sexual expectations in dating American women. Nevertheless, on the whole, the California students do enjoy opportunities to become somewhat integrated in the life of the university community.

Very few students have reported to us that they found the work abroad more difficult than at Berkeley. Nor has the social distance between the professor
and student been reported as a problem. Some professors go out of their way to be hospitable to the visitors; and in their close contact with their tutors and directors, they may receive as much individualized attention in the academic sense as in California.

Value of Study Abroad

Authorities in this field generally agree that there is a dearth of empirical evidence on the effects of study abroad. Until there are reliable research data upon which to base generalizations, we will be forced to speculate. Students mature while abroad, but it should be remembered that in one sense they are simply a year older and that they would also have matured back home. The discussion that follows is based upon what is commonly believed to be the value of foreign study, recognizing that as yet there is no conclusive evidence which proves foreign study broadens a student's horizons, changes attitudes, or much less, that it leads to international goodwill and understanding.

The primary purpose of the year abroad is general education. In most of the California programs, students learn to speak a foreign language fluently -- a second goal of Education Abroad. Students enjoy studying in a foreign university system and the year away from the United States provides an opportunity to become more independent and mature.

Unlike the tourist who merely visits the country as a spectator, the student becomes a participant in the life of the other society. He reads the daily newspaper of another people, he eats their food, attends their university, speaks their language, and often forms lasting friendships. For a year, the student tries to see the world not as an American, but as a German, or an Italian, or a Japanese. In this way the special status of the students contributes to international understanding.

Daily contact makes this possible. After awhile, the student becomes familiar with his roommate and the hall porter and no longer sees them as Frenchmen, or Spaniards, or Swedes. He sees them simply as people. The effect is liberating and deeply satisfying and, from the student's personal view, one of the most important aspects of the year abroad. Hopefully, this cultural contact will make students more tolerant of diversity, more willing to listen to the other person's point of view. It also leads to a broader sense of identification. In recent years growing numbers of German students have been sent to study in other countries in Europe, and some conservative Germans are alleged to grumble, "They leave as Germans and return as Europeans."

Studying about the achievements or problems of another country while living there is one of the most attractive features of study abroad. Taking a class in Renaissance history while living in a sixteenth century dormitory has a stimulating effect. One student explained how living abroad enhanced her appreciation of art: "Back home I would visit the De Young Museum in San Francisco,
stand before a painting by Hans Memling, and appreciate it as a beautiful work of art. But over here, I do more; I look at the painting; I look around and say to myself, "This is his country. This is his town, and these are the people with whom he lived."

Of course, there are problems in study abroad. Some of the affiliations of the statewide program are with universities whose reputations perhaps do not equal that of the University of California at Berkeley. Some of the centers are located in sectarian institutions lacking the pluralistic characteristic of the University of California community. Some Berkeley students have complained that standards are not demanding in all of the foreign institutions. Frequently, students object to an excessive reliance on memorizing of material in some of their classes. In discussing these complaints, there are two important aspects of programs abroad which must be remembered. First, it is difficult to find universities not already overcrowded with their own as well as foreign students, with adequate living facilities, adhering to high academic standards, and willing to accept a large group of American students. Compromises must be made somewhere along the line.

Second, academic standards are a reflection of cultural values. Generally, American universities do not place great emphasis upon memorizing; emphasis in the American system is on developing skills for locating information, and on teaching students to think critically. Implied in this approach is the assumption that because society is changing, information is quickly outdated; and every man must therefore learn to think for himself.

Students studying abroad become aware that these educational practices are based on American values. Some overseas centers are located in traditional societies where change has been opposed, and in which only a small group of people in authority have been expected to engage in innovative thinking. Moreover, in the older societies, knowledge and traditions were preserved through memorizing. The Spanish, for example, are offended by "modern" attempts to assess progress in terms of Nobel Laureates, scholarship as evidenced by number of publications, and empirical research. They feel that Americans and Northern Europeans have become unduly mesmerized by the written word. They point out that the New York Times Sunday edition contains more words than the Bible. Similarly, an Italian once asked of an American professor the purpose of Berkeley's Department of Public Administration's program at Bologna. The University of California professor replied that the purpose of public administration is to teach efficiency, to which the Italian responded, "Efficiency, who wants to learn efficiency?"

Living abroad, free from some of the pressures to conform exerted at home, students are able to examine consciously the values by which they have been raised. Students can decide the way they wish to live. Parents and friends are far away, and their lives in the United States can be examined with a sense of detachment: Do they support the premises of American foreign policy? Do they believe in God? Will they attend church services? How does the American economic system compare with the one under which they are living? These and other issues can be weighed and debated in a fresh environment by the American student abroad.
Summary

A number of problems arise when American students study in European universities. The first problem is academic and social isolation due to the American's frequent inability to speak the local language fluently. A second difficulty arises out of differing systems of education. Universities in Europe are more like graduate schools, and many American undergraduates cannot meet the high standards set.

The University of California attempts to minimize these problems by selecting students with sound academic records and adequate language backgrounds. The organization of tutorials for each course in which the students enroll enables them to discuss the material covered in lectures with their tutors. This compensates for the American student's unfamiliarity with the material, much of which may already have been introduced to the native students in secondary school.

The value of study abroad is yet to be established empirically. Programs are established in the belief that the year abroad broadens the student's general education, develops a fluency in a foreign language, gives the student a chance to mature, and contributes to international understanding.
Notes

Chapter II

1 For a discussion of programs in non-Western societies, see McCormack (1967).

2 The problems of placing American students in foreign universities is discussed in Weidner (1962) and in Garraty and Adams (1959); also Stephen A. Freeman's (1966) essay in Undergraduate study abroad; Bronfenbrenner (1961); Cleveland, Mangone & Adams (1966); Education and World Affairs (1965) report, The university looks abroad. A candid if at times subjective view of European education is to be found in Anthony Kerr's (1962) The universities of Europe.

Chapter III

SURVEY OF STUDIES OF EDUCATION ABROAD

Although programs of education abroad are rapidly increasing among American institutions of higher education, this increase has not been accompanied by a proportionate growth of research inquiry. In fact, one of the greatest needs in this entire field, to judge from recent commentary, is for empirical study.¹ Do students who go abroad actually profit more from such a year than they would from an equivalent period at home? What is the optimum length of a college program? Do all students profit equally from the experience? By what criteria should students be chosen for participation in overseas programs? Do students' grades show any improvement after study abroad? Should selection attend to personality traits and dispositions as well as to prior academic achievement and a presumed potentiality for superior scholastic attainment? These and many other questions can be asked, and for most of them there are no answers to be found.

Stephen A. Freeman, a leading authority on the subject of education abroad, states:

Little has been done as yet in scientific evaluation of the results of undergraduate study abroad, even by institutions which have had a program for several years. It is generally assumed that study abroad is a 'good thing'; faculty and students state that they are enthusiastic about the results, without knowing exactly what the results are...We do not know the scientific answers to these fundamental questions, and we need to know them.²

Similarly, at the annual meetings of the Council on Student Travel, the delegates have consistently issued calls for research study of education abroad.

In order to present a synoptic picture of major efforts, both discursive and empirical, we have decided to present an annotated bibliography. Not every publication on the subject will be or could be mentioned, but an effort has been made to report and comment on major sources, and to include a sufficient number so that an idea of the current level of inquiry can be derived.

The most salient impression which emerges from reading in this field is that, in spite of very penetrating insights and shrewd deduction in many publications, there is exceedingly little empirically established data. There are, of course, reasons for this other than inertia and unwillingness to undertake inquiry.

One explanation is that the present magnitude of study abroad is the result of rapid and recent expansion. Five years ago an interested researcher would
have found it difficult to find a sufficient number of students to study. Even today, with hundreds of students participating in overseas programs, tactics and procedures for identifying and working with these students have not been evolved. And in spite of the growth in the number of programs, student enrollments in any one may still be small.

Some universities such as Stanford do send large groups abroad, but these institutions are few in number. Some programs tend to be short in duration (six months or less overseas) or taught by American faculty. They are, therefore, not typical and also pose difficult problems in evaluating the foreign aspects of their character. Intercollegiate studies offer interesting possibilities for the future, but require considerable sums of time and money to plan and carry out. Initial research can hardly begin in so ambitious a manner.

Another difficulty, and one which was encountered in this project, lies in persuading the objects of study to participate. By the time students have been selected, their thoughts and energies are devoted almost entirely to preparing for the year overseas and to completing what needs to be finished at home; the majority of the participants in Berkeley's group were humanities majors. And few of these students were keen about spending six to ten hours in psychological assessment -- the validity of which they seriously questioned anyway.

A third problem lies in the turmoil and confusion which is typically attendant upon any program involving long distance movement. Gathering of criteria, and progress data, must usually be done by mail; and students overseas tend to be centered on current experience, not on requests for time and attention from researchers back home. Directors of overseas centers must also be approached by mail, and many other activities must be carried out by inefficient and indirect means.

A fourth problem lies in the span of time which must be covered by any study of the topic. If differential performance while overseas is to be a focus of inquiry -- as was the case here -- then students must be appraised prior to departure; effectively, in nearly all colleges, this means the gathering of data in the spring term. Then, criterion information cannot be obtained until the next year has elapsed, which means that the first round of requests can hardly be initiated before May or even June of the second year. And if academic performance overseas is to be considered -- as it should be -- further delay is necessary while awaiting the return of grades from the foreign university.

It was our experience that planning for the assessments in the spring term had to be completed by January or February of the first year, and that the overseas grades and directors' ratings were not finally available until October or November of the second. An 18-month project is therefore the minimum, just for a pilot study; and a comprehensive program including, say, two initial samples and one cross-validating sample would require four years. Few grant-giving agencies are willing to invest in a study this time-consuming, and few researchers can afford to invest their time in a project from which the first return might lie four or five years ahead.

The annotated bibliography, including a very brief comment on studies in progress, follows:
Annotated Bibliography

Allen, G. European tour. New York: Dodd, Mead & Co., 1908. This book is of historical interest. It is quaint and biased, but offers insights into the evaluation of American attitudes towards travel and study abroad.

Aron, R. Peace and war. New York: Doubleday, 1967. This is a definitive work by one of France's most distinguished scholars. Aron doubts whether present power balances and stalemates will maintain the peace indefinitely, and sees the danger of an eventual nuclear war as very great.


Cleveland, H., Mangone, G. J., & Adams, J. C. The overseas Americans. New York: McGraw-Hill, 1960. One per cent of the United States population now lives abroad. Based on earlier research begun in 1956, the study was initiated to find "a general theory of overseas service." It relies primarily upon a biographical questionnaire and unstructured, extended interviews. The authors list their conclusions in the final chapter; the first is that overseas training "should be an important part of higher education in the United States." The authors found that most mistakes by Americans are made on their first tour.

Coombs, P. H. The fourth dimension of foreign policy: Educational and cultural affairs. New York: Harper and Row, 1964. The author shows that the cultural and educational efforts of the United States are not as great as is commonly assumed. These efforts are in fact diminutive in comparison with military investments. Yet, in the long view, education is the nation's primary line of defense, and the shape of the world will depend on how well it communicates society's values.
Education and World Affairs. The university looks abroad. New York: Walker, 1966. This volume describes the approach to international studies of six universities: Cornell, Indiana, Michigan State, Stanford, Tulane, and Wisconsin. In the introduction, William Marvell, President of the Council, writes: "There are no quick answers, no general formulas, no easy solutions to the problems that institutions face as they move toward progressively wider involvement in the area of world affairs."

Fraser, S. (Ed.) Governmental policy and international education. New York: Wiley, 1965. This book is a collection of papers with an extensive annotated bibliography dealing with governmental policy and educational exchange. The contributors are from different fields, which gives the volume a strengthened multidisciplinary approach.

Fraser, S. (Ed.) The evils of a foreign education: Or Birdsey Northrop on education abroad, 1873. Nashville: George Peabody College for Teachers, 1966. The hostility of educated and supposedly sophisticated Americans towards education abroad is well to remember in view of present enthusiastic opinion in the opposite direction. The book offers an excellent argument for international studies abroad.

Freeman, S. A. (Ed.) Undergraduate study abroad: U.S. college-sponsored programs. (Rev. ed.) New York: Institute of International Education, 1966. This is an annual review of education abroad. The Institute surveys the field and lists all the college programs in the United States. Freeman's analyses are up-to-date, informed, and candid.

Garraty, J. A. & Adams, W. From Main Street to the Left Bank. East Lansing: Michigan State University Press, 1959. "Based on the authors' observations during nine months spent on the Continent and on their extended conversations with four hundred persons," this study describes and evaluates the activities of American students and their undertakings in Europe. The authors offer a clear picture of the problems and pleasures of American student life in Europe and are frank in their criticisms of what they observed.


Gullahorn, J. E. & Gullahorn, J. T. American students abroad: Professional versus personal development. Annals of the American Academy of Political and Social Science, 1966, 368, 43-59. Interview, questionnaire, and evaluational data from 400 American students in France and from 5,000 Fulbright and Smith-Mundt grantees were analyzed. The data reveal prior professional development and prestige to be closely related to scholars' and teachers' satisfaction with their stay abroad. For some students, however, these factors are of less importance. For students, those reporting more extensive interaction with host nationals, greater personal development, and satisfaction, tend to be "less settled in their adult roles and less committed to academic goals."
Jacob, P. E. Changing values in college. New York: Harper, 1957. Jacob's findings were for the most part shocking but inescapably negative (p.ix). He concludes that changes in values brought about by college experience are rarely drastic or sudden, and that they tend to emerge on the periphery of the student's character. The importance of Jacob's theory here is that his observations, if valid, could apply to study abroad.


Martin, L. & Martin, S. Europe: The Grand Tour! New York: McGraw-Hill, 1967. The authors trace the rise and decline in popularity of the Grand Tour. Many of the reasons for travel in the 17th through 19th centuries still exist today. For most people, the Grand Tour was a recreational and social experience. Among the many travellers, there were some for whom the experience abroad was an important part of their education, and it subsequently affected their world view.

McCormack, W. A. A study of the junior year in Spain. University of California, Berkeley Committee for Education Abroad, 1965. 26 pp. Sending American undergraduates to study in a university under the control of a conservative branch of Catholicism and an authoritarian regime poses serious problems. The author believes that many American undergraduates in Spain do not have adequate opportunity to study both sides of the complex problems which beset modern Spain.

McCormack, W. A. New directions in study abroad. Journal of Higher Education, 1966, 37, 369-376. Most of the American programs abroad are designed for humanities majors. Yet it is important that opportunities be created in the professional fields, particularly at the graduate level.

McCormack, W. A. American juniors in Japan. Liberal Education, 1967, 43, 264-270. The author analyzes the undergraduate's experience in a non-Western culture such as Japan, and comments on establishing programs beyond the confines of Western Europe.

Morris, R. T. & Davidsen, O. M. The two-way mirror: National status in foreign students' adjustment. Minneapolis: University of Minnesota Press, 1960. Changes in status are often a shock to foreign students upon arrival in another country. Students find their status determined by value systems with which they are unfamiliar and by persons whose own status the students tend to doubt. Some of the evidence suggests that a student's evaluation of the host country depends upon the extent to which he finds it to resemble his own country. The greater the similarity to his own, the more likely that he will develop favorable attitudes towards the country visited.
Newcomb, T. M. *Personality and social change*. New York: Holt, 1957. This is one of the classic studies of the impact of college experiences upon students' basic values. Significant changes in political and social outlook may, and do occur. If Newcomb's theory is correct, it would tend to support current enthusiasm for study abroad.

Pace, C. R. *The junior year in France: An evaluation of the University of Delaware-Sweet Briar program*. Syracuse: Syracuse University Press, 1959. Pace notes, "...although study abroad programs have been in operation for almost thirty-five years, there has been no attempt to assess objectively their educational significance." Pace sent a questionnaire to a cross section of the alumni of the two colleges, including those who had studied abroad. In discussing the problems of obtaining comparable groups he wrote, "The importance of the comparison of groups is quite crucial if we have any desire to find out whether an academic year abroad is any better than just ordinary travel or just graduating from a good college..."

Pace, C. R. *Five college environments*. College Board Review, 1960, 41, 24-28. Pace seeks to identify the educational and psychological factors which account for college environments. Pace believes these factors constitute an "educational press" upon the awareness of students and hence affects their behavior. Pace's approach holds some interesting possibilities for future research. Traveling from one University of California Center to another, one of the present writers (WAMcC) was impressed by the differences in milieu and the effects of environmental forces upon students, directors, and the operations of the various offices.

Patterson, G. D. *Students on the move*. Saturday Review, 1965, 48 (8), 67-72, 94-95. "...despite all the materials available for the student considering overseas study, the net result is that it still remains largely a hit-or-miss proposition. Nothing in the complicated business of study abroad has yet made success even remotely predictable.... Clearly an enterprise of such magnitude would seem to deserve closer study than it has so far received. American educators still know very little about the results of overseas study."

Reigrotski, E., & Anderson, N. *National stereotypes and foreign countries*. Public Opinion Quarterly, 1959, 23, 515-528. The authors conducted a large-scale survey of European students in Belgium, France, Germany, and Holland using an index of acquaintance and contact based on travel in a country, knowledge of its language, and having friends or relations there. The authors found that increased foreign contact tends to make the individual more favorable in his attitudes toward the other country while at the same time more critical of his own.

Sanford, N. (Ed.) *The American college*. New York: Wiley, 1962. This book is the best single source of research and ideas on educational change, students' thinking and attitudes, and the current status of American collegiate education. It repeatedly stresses "...what in this volume has become a refrain, there has been too little research and there are great difficulties in the way of our finding out what we most want to know."
Selltiz, C., Christ, J. R., Havel, J., & Cook, S. W. *Attitudes and social relations of foreign students in the United States*. Minneapolis: University of Minnesota Press, 1963. This is the most comprehensive volume on this subject thus far written and includes a wealth of interesting data. The authors summarize the research conducted in the 1950's and early years of the sixties on foreign students in the United States. The authors attempt to identify environmental conditions which affect the social relations between foreign students and members of the host country and also the conditions and social relations which determine the image of the United States these students will evolve.

Sewell, W. H., & Davidsen, O. M. *Scandinavian students on an American campus*. Minneapolis: University of Minnesota Press, 1961. The authors found a positive correlation between social participation and academic achievement. Increasing of guidance also seemed to result in greater satisfaction.

Trease, G. *The Grand Tour*. London: Heinemann, 1967. The most inveterate travellers were the English. The Elizabethans discovered that culturally they had much to learn from the Continent, and the result was an exodus of travellers in search of culture. Included among the travellers were some of the great men of English letters. The "Grand Tour" is significant because of its important supplementing of university education. The present trend towards study abroad parallels these earlier phenomena.

Watson, J., & Lippitt, R. *Learning across cultures: A study of Germans visiting America*. Ann Arbor: University of Michigan, Institute for Social Research, Research Center for Group Dynamics, 1955. The authors found that those students who show the most marked changes in attitudes during their stay in the United States experience more problems of adjustment upon returning home. The authors found that students tend to revert back to original attitudes after several months in Germany. Watson and Lippitt believe that the most productive stay may be one just long enough to challenge long-held assumptions and provoke new thinking, but not so long a stay as to allow the new ideas to displace the old ones. Re-evaluation, in other words, is best carried out at home where the results are to be applied.

Weidner, E. W. *The world role of universities*. New York: McGraw-Hill, 1962. This is an important book which will be worth reading for some time to come. Weidner is primarily interested in the purpose of university programs of exchange including study abroad. He notes that too many programs have been established in haste without the benefit of long-range planning. Many programs are poorly administered, and he claims that "changes in attitude and cognition are seldom clearly documented."
Studies in Progress.

Undoubtedly, a number of the colleges with overseas programs have initiated studies similar to that being reported in this monograph. In 1965 we wrote to a number of institutions with programs, inquiring about methods of selection and about research projects on the prediction of performance overseas. Most of the programs were sending small numbers of students (10 to 20) abroad, so that selection was based on intensive interviewing and personal acquaintance. Perhaps because of the great care in selection, the general experience was that nearly all students performed very well overseas.

As in the University of California program, selection in the other colleges stressed command of the overseas language, prior scholastic attainment, and a general potentiality for study abroad as revealed in interviews with faculty panels. Several schools were using scholastic aptitude and/or language aptitude tests. Interest was expressed in research on personality testing, but no program at the time of our inquiry was paying major attention to such evidence.

The study at Antioch College, under the direction of Esther A. Oldt, can be cited as a good example of a research effort parallel to ours (see Antioch College Reports, January, 1962, no. 3 "Undergraduate experience abroad," 1957-1). In addition to grades of applicants and interviews with Education Abroad staff, scores from the Scholastic Aptitude Test, the Yale Aptitude Battery, the Kuder Preference Record, and various achievement tests are to be analyzed. All of these data are to be related to criteria of performance abroad, and it is hoped that a report will be forthcoming in the next few years.

Notes

1 Stone (1958, p. 380); Weidner (1962, pp. 10, 346); Patterson (1956, p. 70); and Gallahorn and Gullahorn (1966, p. 44).

2 Freeman (1966, p. 29).
Chapter IV

THE EMPIRICAL STUDY AND ITS DESCRIPTIVE FINDINGS

Preface

In this chapter of the report the empirical analyses undertaken during the period of the contract will be presented. This period covers the time from October, 1965 to April 1967, with a two-month no cost extension to June 1967. The sample studied consists of the students from the University of California, Berkeley, who went abroad in August, 1965, and who returned for the fall term in 1966.

An experimental battery of tests was administered to these students in the spring of 1965, and a small subsample was interviewed. Following the year abroad, personal evaluations were secured from each student, and ratings of performance overseas were obtained from the directors of the overseas centers and from the students themselves. Academic performance in the year abroad was likewise registered.

Data collection was completed near the end of the fall term, 1966. The period from January 1967 to the completion date of the project was devoted to scoring, tabulating and verifying of criteria, and analysis. The project proposal did not call for cross-validation, as the 18-month period of support was too brief to permit testing and evaluation of a second sample. However, a small pre-study was conducted on some of the Berkeley students going overseas in 1964-65, and for some of the findings to be presented below a cross-validation can be offered on this preliminary sample.

The purpose of the project, it should be emphasized, was purely exploratory -- to investigate different domains of testing and forecasting, and to see whether any promising leads could be uncovered which could then provide the starting point for a larger, longer, and more definitive study. The research concept of the "pilot study" is quite appropriate as a description of the work done under this contract.

Description of the Sample

In the spring of 1965, 163 students made formal application to the selection committee for the education abroad program. As part of the required procedure, each of these students was administered the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1943). 1 Eighty-seven of the applicants were selected by the committee, and 76 were rejected. The selected group included 30 males and 57 females, and the rejected group contained 30 males and 46 females.

1. The MMPI is a statewide requirement in the program, and is used to identify serious or disqualifying problems of maladjustment or psychiatric distress. No disqualifications were either recommended or made on the basis of the 163 profile analyses.
Of these 87 students, 85 accepted the invitation to participate in the overseas program. At this time each student was asked, on a voluntary basis, to take part in the research testing and interviewing. Twenty males consented to do this, and eight did not; among the females, there were 38 who agreed to take the testing battery and 19 who refused.

The analyses to be reported below will take account of these contrasts and categories, and will also provide descriptive information for the total sample of participating students.

Testing Battery

As indicated in the project application, the testing battery was assembled so as to touch on a wide range of functions, and information on academic performance during the pre-application period was also obtained. The instruments utilized can be conveniently listed under the headings indicated below:

A. Intellectual and cognitive functioning.
   1. Chapin Social Insight Test (Chapin, 1942; Gough, 1965b).
   2. College Vocabulary Test, Form A (Gough & Sampson, 1954).
   4. Gestalt Transformation Test (Guilford et al., 1951, 1952).

B. Personality traits and dispositions.
   1. The Adjective Check List (Gough & Heilbrun, 1965).
   2. California Psychological Inventory (Gough, 1957).
   3. Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1943).

C. Political and social attitudes.
   4. Rokeach's scales for dogmatism and opinionation (Rokeach, 1960).

D. Creativity and aesthetic preference.
   3. Unusual uses test (Guilford et al., 1951, 1952).

Total testing time for this battery was approximately 10 hours; four hours of this was completed under supervision at the Institute of Personality Assessment and Research, and six hours was allocated for instruments taken home and returned when completed. For the 85 students who went overseas, protocols were available for all on the Minnesota Multiphasic Personality Inventory (MMPI). Because of the large number of MMPI items used in the California Psychological Inventory (CPI), it was possible to derive CPI scores from the MMPI for the 27 students who did not take the experimental battery; therefore, complete data
were also available for the CPI. For the other tests listed above, the N was 58 (20 males, 38 females) in most instances, dropping occasionally to 57 or 56. In the analyses to be presented later, an N of 58 may be assumed unless otherwise indicated.

Selected versus Rejected Applicants

The first analysis to be reported is that pitting accepted versus rejected applicants. Table 1 gives means and standard deviations, by sex, for accepted and rejected students, and t-tests of the differences on the MMPI.

(see Table 1 on following page)

The MMPI was scored for the 13 standard scales, plus Welsh's A and R scales (Welsh & Dahlstrom, 1956), and Barron's measure of ego strength (Barron, 1953). There was only one significant difference among the 32 comparisons made: the rejected female applicants scored slightly higher on the Pd (psychopathic deviate) scale than did those accepted. Any fears that the selection committee, in these instances, was paying too great attention to such factors as conventional stability, psychiatric normality, denial of anxiety, etc., may to some extent be allayed by these findings. With respect to factors assessed by the MMPI little if any difference was demonstrated between accepted and rejected students.

Figures 1 and 2 present the MMPI data in profile form, and indicate again how similar the subsamples are to each other on the variables scaled in this inventory.

(see Figures 1 and 2 on the following pages)

The method of operation of the selection committee should be reviewed at this point, as most readers will wish to know how selection was determined. Each applicant was asked to appear before an interviewing panel, composed of one member of the language department teaching the language of the center for which he was applying, and one other faculty member. The interviewers had available the applicant's grade point average in all subjects, and in courses in the designated language.

The interviews typically inquired into motivations for studying abroad, expectations about the host country, perusal of intellectual interests, background, sensitivity to intellectual and humanistic ideas, and then a brief discussion in the non-English language to determine current fluency. The time for these interviews was ordinarily from 15 to 20 minutes. Following the interview, impressionistic evaluations were made as to academic potential, linguistic competence, and general promise for overseas work. The interviewing panels (one, or two, for each overseas center) then met, ranked, and selected the best candidates for the quotas established for each center.

The listing below gives the distribution of the 85 students included in
Table 1

Comparison of Selected and Rejected Applicants on Scales of the Minnesota Multiphasic Personality Inventory

<table>
<thead>
<tr>
<th>Scale</th>
<th>Selected</th>
<th>Rejected</th>
<th>t</th>
<th>Selected</th>
<th>Rejected</th>
</tr>
</thead>
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<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>L</td>
<td>4.07</td>
<td>2.42</td>
<td>3.73</td>
<td>2.39</td>
<td>0.54</td>
</tr>
<tr>
<td>F</td>
<td>3.90</td>
<td>2.45</td>
<td>4.63</td>
<td>3.23</td>
<td>0.99</td>
</tr>
<tr>
<td>K</td>
<td>18.40</td>
<td>5.16</td>
<td>18.30</td>
<td>3.64</td>
<td>0.09</td>
</tr>
<tr>
<td>Hs</td>
<td>11.67</td>
<td>2.29</td>
<td>11.70</td>
<td>2.26</td>
<td>0.06</td>
</tr>
<tr>
<td>D</td>
<td>18.63</td>
<td>3.11</td>
<td>18.77</td>
<td>4.69</td>
<td>0.13</td>
</tr>
<tr>
<td>Hy</td>
<td>22.17</td>
<td>3.22</td>
<td>21.43</td>
<td>3.63</td>
<td>0.83</td>
</tr>
<tr>
<td>Pd</td>
<td>22.43</td>
<td>3.40</td>
<td>23.00</td>
<td>4.15</td>
<td>0.58</td>
</tr>
<tr>
<td>MF</td>
<td>30.30</td>
<td>4.32</td>
<td>30.10</td>
<td>5.89</td>
<td>0.15</td>
</tr>
<tr>
<td>Pa</td>
<td>10.10</td>
<td>1.86</td>
<td>10.67</td>
<td>2.48</td>
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<td>Pt</td>
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<td>3.32</td>
<td>27.70</td>
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</tr>
<tr>
<td>Sc</td>
<td>25.97</td>
<td>3.72</td>
<td>27.03</td>
<td>5.10</td>
<td>0.93</td>
</tr>
<tr>
<td>Ma</td>
<td>18.87</td>
<td>2.73</td>
<td>20.43</td>
<td>3.78</td>
<td>1.84</td>
</tr>
<tr>
<td>Si</td>
<td>21.70</td>
<td>8.13</td>
<td>19.90</td>
<td>8.60</td>
<td>0.83</td>
</tr>
<tr>
<td>A</td>
<td>5.97</td>
<td>5.99</td>
<td>7.73</td>
<td>6.78</td>
<td>1.07</td>
</tr>
<tr>
<td>R</td>
<td>18.73</td>
<td>4.61</td>
<td>17.30</td>
<td>4.43</td>
<td>1.23</td>
</tr>
<tr>
<td>Es</td>
<td>53.03</td>
<td>3.22</td>
<td>53.03</td>
<td>3.97</td>
<td>0.00</td>
</tr>
</tbody>
</table>

a N=30  
b N=30  
c N=57  
d N=46  
e All scores are raw scores, with appropriate K-corrections.
Figure 1. Mean profiles on the Minnesota Multiphasic Personality Inventory for accepted (---) and rejected (----) males.
The Minnesota Multiphasic Personality Inventory

Figure 2. Mean profiles on the Minnesota Multiphasic Personality Inventory for accepted (-----) and rejected (----) females.
Unfortunately, full protocols from the interviewing panels for the rejected and accepted applicants were not available, so a statistical check of factors entering into their decisions is not possible. Presumably, academic performance as indicated by grade point average was weighted positively, and also linguistic fluency. In any future study it would be very useful to obtain precise information on these points, and also to attempt to secure test data on both accepted and rejected applicants (beyond the MMPI, which appears not to differentiate).

There are two problems to be faced in trying to gather such data, beyond the obvious ones of logistics and financing. It was our experience that students were skeptical about the worth of any testing project, and hence hesitant about contributing time and energy to such endeavor; a small number, perhaps 2 or 3 of the 85 who went overseas, felt that any kind of "research" on their potentialities and achievements was ethically objectionable. It required careful presentation of the project to win the cooperation of the 58 students who eventually did participate. One would expect that as the scope of the research broadened, particularly to include testing at the stressful pre-selection period, objections would both increase and stiffen.

A second and parallel problem arose with the interviewing panels. Most members came from departments of language and/or the humanities, and tended to be even more dubious and skeptical about the validity of "psychological research" than the students. An extension of the project to study differences between accepted and rejected applicants would have to be painstakingly negotiated and scrupulously conducted -- if indeed approval could be secured.

Some odd paradoxes, of course, may easily be detected here by the research-minded reader. An interviewer might be perfectly willing to decide on acceptance or rejection of applicants, or even to grade applicants as "A" (accepted without question), "B" (alternates), and "C" (disqualified or rejected), but resistant to having the numbers 3, 2, and 1 attached to this 3-step rating scale. Research in this domain, it is clear, has much more to deal with than the obvious and technical problems of design, cross-validation, and choice of appropriate statistical models.

Although protocols from the selection interviews were not available, we did gather another kind of interview data. A seminar in the graduate program
in clinical psychology was studying the personal interview at about the time we were arranging for the testing, and in discussions with the instructor it appeared feasible to ask each member of the seminar to interview one or two students who had applied for the overseas program. We were also able to enlist the help of three doctoral students in clinical psychology, two of whom had just completed their training, who were interested in joining in this interviewing project.

Thirty of the students who later went overseas (21 females and 9 males) were willing to come for personal interviews. We then went to the language classes in which these 30 students were principally enrolled and sought additional volunteers who were not planning to apply for overseas study. From among these new volunteers we chose those whose backgrounds and previous scholastic achievement resembled as closely as possible the 30 applicants. Twenty-three nonapplicants agreed to be interviewed (19 females and 4 males).

The interview itself was scheduled as a one-hour semi-structured interview, with an emphasis on inquiry concerning intellectual and philosophical values. To register the impressions of the interviewers, a special Q-sort reporting schedule was created by the authors. This Q-deck contained 60 items, each addressed to some facet of belief or self-definition which we felt might be important in an appraisal of an applicant for overseas training. A forced distribution was used, with frequencies of 3-7-10-20-10-7-3; assignment of a statement to a category was according to judged salience.

This interviewer's Q-sort was introduced in a purely exploratory way in the project, but its yield (as will be seen both in this and a later section) was sufficiently impressive to recommend it for a central place in any later and larger-scale investigations which might be undertaken. The full set of 60 items is reproduced in Appendix A.

The interviewers were not told whether an interviewee was an applicant for overseas study or not, but from comments during the interview it appears that the identity of applicant or nonapplicant was surmised in about 40 of the 53 interviews. The results are therefore somewhat confounded, and cannot be taken as firm and verified findings. They are, nonetheless, interesting and worth considering as leads for future planning.

A t-test was computed for the mean placement of each of the 60 items in the two groups (applicants vs. nonapplicants); the number of items significant at each level (.01, .05, and .10) was about two to three times what would be expected by chance.

The four items which most strongly differentiated in favor of those students who later went abroad were these:

1. Has a strong sense of purpose in life, even if these purposes are as yet ill-defined.
2. A complex, deeply responsive individual.
3. Dedicated to humanitarian and egalitarian ideals.

1. We are indebted to Professor A. B. Heilbrun, Jr., for this generous assistance.
2. We wish to thank Drs. D. Peterman and A. Quenk, and Mrs. R. Mock for their invaluable help in conducting these interviews.
4. Is self-reliant; independent in judgment; able to think for himself.

The four items which most strongly differentiated in favor of those students who did not apply were these:

1. Has a narrow range of interests.
2. Has little interest in the new and/or different; is more comfortable with and prefers the old and well-known.
3. Basically conservative in political and social outlook.
4. Income and financial status are major life goals.

It should be noted that this analysis did not pit accepted versus rejected applicants, but rather accepted applicants versus nonapplicants of comparable background and academic achievement. The sequence of choice points is from the decision to apply, to surmounting of the acceptance hurdle, to successful completion of the year-long overseas program. From the initial time, therefore, it appears that identifiable factors are operative and can be assessed. These findings from the interviews, of course, need checking under controlled conditions, and they also need verification from testing instruments which are relevant to the trends they delineate.

Participation vs. Non-Participation in Testing

As stated earlier, 20 of the 28 selected males agreed to participate in the research project and 36 of the 57 females did likewise. Table 2 presents means, standard deviations, and t-tests of the differences on the MMPI for these subsamples.

(see Table 2 on the following page)

To the authors, the finding of no significant differences in this analysis was very interesting. We had expected that there would be clear contrasts between the "more cooperative" and "less cooperative" subjects. However, the results are not in accord with these anticipations. It may be that the MMPI does not measure the variables relevant to this distinction, or it might be that coincidental or psychologically unimportant factors prompted the 27 negative responses to our request for participation.

Our present interpretation is that all or nearly all of the 85 students had at least minor objections to participating: too much time required, skepticism about testing and psychological research, anxiety about self-revelation, etc. In spite of these doubts, about 68 per cent of the students did consent to take part. Our second interpretation is that the residue of stand-
Table 2

Comparison of Students Who Did and Did Not Agree to Participate in the Research Testing, on Scales of the Minnesota Multiphasic Personality Inventory

<table>
<thead>
<tr>
<th>Scales</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did Participate</td>
<td>Did Not</td>
<td>t</td>
</tr>
<tr>
<td>L</td>
<td>4.40</td>
<td>2.54</td>
</tr>
<tr>
<td>F</td>
<td>3.35</td>
<td>2.11</td>
</tr>
<tr>
<td>K</td>
<td>19.35</td>
<td>4.85</td>
</tr>
<tr>
<td>Hs</td>
<td>11.95</td>
<td>2.28</td>
</tr>
<tr>
<td>D</td>
<td>18.30</td>
<td>3.13</td>
</tr>
<tr>
<td>Hy</td>
<td>21.70</td>
<td>2.79</td>
</tr>
<tr>
<td>Pd</td>
<td>22.45</td>
<td>3.05</td>
</tr>
<tr>
<td>Mf</td>
<td>30.45</td>
<td>3.94</td>
</tr>
<tr>
<td>Pa</td>
<td>10.15</td>
<td>1.50</td>
</tr>
<tr>
<td>Pt</td>
<td>25.95</td>
<td>2.63</td>
</tr>
<tr>
<td>Sc</td>
<td>25.85</td>
<td>3.83</td>
</tr>
<tr>
<td>Ma</td>
<td>18.70</td>
<td>2.47</td>
</tr>
<tr>
<td>Si</td>
<td>20.95</td>
<td>8.34</td>
</tr>
<tr>
<td>A</td>
<td>5.00</td>
<td>5.21</td>
</tr>
<tr>
<td>R</td>
<td>18.90</td>
<td>4.33</td>
</tr>
<tr>
<td>Es</td>
<td>53.25</td>
<td>3.21</td>
</tr>
</tbody>
</table>

a N = 20  
b N = 8  
c N = 38  
d N = 19  
e All scores are raw scores, with appropriate K-corrections
fast opposition would shrink to about 5 per cent of the sample (4 students) if we approached each one on an individual basis (our appeal was via a letter -- see Appendix B); these refusals would derive from politico-ethical considerations and/or from personal concerns.

These comments about sampling and about winning the cooperation of potential subjects should not be taken to mean that the investigators believe that all students "ought" to participate, or that studies of this kind call for tricky or highly persuasive pressures. Quite the contrary -- in any such study it should be easy and acceptable for any student to decline to participate. As researchers, we would obviously like to maximize the size of the sample. This could be done, we think, by following the appeal by letter with a brief personal contact. The function of the contact would be as much to permit an evaluation of the judgment and integrity of the researchers as to provide further rationalization of the merit of the project.

Along this line, we should note that several participants came to the opening session with the explicit announcement that they were there to "look around," and not necessarily to take the tests. We spoke with each of these students, answered their questions, and commented candidly on the goals of the study (to relate test and other data gathered at the time of selection to performance during the year overseas). In all instances save one, the result was a decision to participate in the project.

Statistical Description of Selected Applicants

We wish now to turn to descriptive analyses of the applicants who were selected and who went overseas. For this purpose, attention is directed back to Figures 1 and 2 in which MMPI profiles appeared.

The profile for accepted males (solid line) shows a pattern very often found among college students of superior ability -- i.e., an elevation approaching 70 on Mf (feminine interests), plus moderate elevations on K, Hy (hysteria), and Pd (psychopathic deviate). The implications of this profile are more for breadth of interests, intellectual outlook, and emotional expressiveness than for pathology.

The profile for accepted female applicants is suggestive of unusually good adjustment. The elevation on K is in the "prudent to circumspect" range, short of what would betoken repression and denial. Interests are slightly in the feminine direction, and the highest clinical score is on the Ma (mania) scale which in the range shown is indicative of abundant energy, spontaneity, and verve. There is also a slight elevation on Pa (paranoia), but clinical evidence on the meaning of Pa scores of this magnitude stresses rationality and sensitiveness to others (which are components of the clinical syndrome) but is contra-indicative of ego-inflation and distrust. The pattern of scores, including the moderate rise on Pa, is therefore quite favorable.

Table 3 presents statistical data for the 18 scales of the California
Psychological Inventory, and Figures 3 and 4 contain the profiles for the male and female samples.

(see Table 3 and Figures 3 and 4 on the following pages)

The mean profile for males shows its highest points on the scales for flexibility, achievement via independence, self-acceptance, social presence, psychological-mindedness, and intellectual efficiency. Low points are found on the scales assessing self-control, communality (conventionality of response), and good impression (the wish to describe oneself in a socially desirable way). This combination of high and low points needs little clarification or interpretation. The modal picture of the accepted male is an attractive one, stressing qualities of independence, intellectual perceptiveness, self-confidence, and an adventurous interest in the new and different.

The score on the Fe (femininity) scale should also be noted, as it is only about half a standard deviation above the mean of 50 (whereas Mf on the MMPI was two standard deviations above). The difference lies in the "intellectuality" component which is prominent in Mf but almost non-existent in Fe. With intellectuality "partialed out," as it were, the male acceptees no longer appear inordinately feminine.

The mean CPI profile for females, as shown in Figure 4, is quite similar. Scores above 60 are observed on the scales for achievement via independence, flexibility, self-acceptance, social presence, and intellectual efficiency. Scores on tolerance and capacity for status fall just short of this mark. Scores below 50 are found on the scales for communality, good impression, self-control, and socialization. The combination, as with males, is attractive and would appear to identify a young woman of wit, vivacity, poise, ambition, and ability.

For both sexes, scores in the second category of the profile sheet are average or even below average. This cluster of scales assesses factors such as constraint, self-discipline, the desire to please and to do what is proper and expected, and to welcome and accept obligations and responsibilities. Our two samples of accepted applicants (males and females) have a number of superior qualities, but it cannot be claimed that patience, deference, and obedient adherence to rule and order are among them.

Descriptive findings on the Adjective Check List are given in Table 4, and the profiles for male and female samples are drawn in Figure 5.

(see Table 4 and Figure 5 on the following pages)

For females, the three highest points on the ACL profile are on the scales for change, counseling readiness, and autonomy, if we exclude the control variable of number of adjectives checked. From the Adjective Check List manual (Gough & Heilbrun, 1965), the common components in the characterizations of high-scorers on these three scales are these: this individual seeks and welcomes change and variety, is open to and desires modification of his
Table 3

Descriptive Statistics on the California Psychological Inventory for Students Participating in the Study Abroad Program

<table>
<thead>
<tr>
<th>Scale</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Do</td>
<td>30.18</td>
<td>5.46</td>
</tr>
<tr>
<td>Cs</td>
<td>22.89</td>
<td>2.90</td>
</tr>
<tr>
<td>Sy</td>
<td>26.86</td>
<td>5.30</td>
</tr>
<tr>
<td>Sp</td>
<td>41.46</td>
<td>5.96</td>
</tr>
<tr>
<td>Sa</td>
<td>24.07</td>
<td>2.43</td>
</tr>
<tr>
<td>Wb</td>
<td>37.54</td>
<td>6.35</td>
</tr>
<tr>
<td>Re</td>
<td>32.61</td>
<td>4.13</td>
</tr>
<tr>
<td>So</td>
<td>36.96</td>
<td>5.12</td>
</tr>
<tr>
<td>Sc</td>
<td>29.68</td>
<td>7.31</td>
</tr>
<tr>
<td>To</td>
<td>26.00</td>
<td>5.04</td>
</tr>
<tr>
<td>Gi</td>
<td>18.75</td>
<td>6.03</td>
</tr>
<tr>
<td>Cm</td>
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<td>1.99</td>
</tr>
<tr>
<td>Al</td>
<td>29.11</td>
<td>4.78</td>
</tr>
<tr>
<td>Al</td>
<td>24.79</td>
<td>3.96</td>
</tr>
<tr>
<td>Ie</td>
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<td>4.82</td>
</tr>
<tr>
<td>Py</td>
<td>13.96</td>
<td>2.87</td>
</tr>
<tr>
<td>Fx</td>
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<td>3.25</td>
</tr>
<tr>
<td>Fe</td>
<td>18.07</td>
<td>2.49</td>
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</table>

a N = 28
b N = 57
c all scores are raw scores
Figure 3. Mean profile on the California Psychological Inventory for males going abroad.
Figure 4. Mean profile on the California Psychological Inventory for females going abroad.
Table 4

Descriptive Statistics on the Adjective Check List for Students Participating in the Study Abroad Program

<table>
<thead>
<tr>
<th>Scale</th>
<th>Males</th>
<th></th>
<th></th>
<th>Females</th>
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<td></td>
<td>M</td>
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<td>M</td>
<td>SD</td>
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<td>No. Ckd.</td>
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<td></td>
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<tr>
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<td>9.13</td>
<td>49.53</td>
<td>11.42</td>
<td></td>
</tr>
<tr>
<td>Fav</td>
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<td>13.86</td>
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<td>8.97</td>
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<tr>
<td>Unfav</td>
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</tr>
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<td>49.00</td>
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<td></td>
</tr>
<tr>
<td>Lab</td>
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<td>10.07</td>
<td>53.22</td>
<td>9.44</td>
<td></td>
</tr>
<tr>
<td>Per Adj</td>
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<td>14.31</td>
<td>49.83</td>
<td>10.47</td>
<td></td>
</tr>
<tr>
<td>Ach</td>
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<td>8.35</td>
<td>54.11</td>
<td>10.09</td>
<td></td>
</tr>
<tr>
<td>Dom</td>
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<td>8.90</td>
<td>52.67</td>
<td>11.28</td>
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</tr>
<tr>
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<td>9.24</td>
<td>52.89</td>
<td>10.45</td>
<td></td>
</tr>
<tr>
<td>Ord</td>
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<td>11.51</td>
<td>50.14</td>
<td>10.60</td>
<td></td>
</tr>
<tr>
<td>Int</td>
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<td>9.63</td>
<td></td>
</tr>
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<td>47.11</td>
<td>12.41</td>
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<td>Aff</td>
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<tr>
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<td>12.10</td>
<td>49.81</td>
<td>9.46</td>
<td></td>
</tr>
<tr>
<td>Exh</td>
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<td>11.43</td>
<td>51.53</td>
<td>11.49</td>
<td></td>
</tr>
<tr>
<td>Aut</td>
<td>52.45</td>
<td>12.45</td>
<td>55.22</td>
<td>12.08</td>
<td></td>
</tr>
<tr>
<td>Agg</td>
<td>51.60</td>
<td>12.38</td>
<td>52.31</td>
<td>11.61</td>
<td></td>
</tr>
<tr>
<td>Cha</td>
<td>54.05</td>
<td>9.67</td>
<td>55.42</td>
<td>10.66</td>
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</tr>
<tr>
<td>Suc</td>
<td>49.75</td>
<td>11.76</td>
<td>46.50</td>
<td>8.67</td>
<td></td>
</tr>
<tr>
<td>Aba</td>
<td>52.00</td>
<td>7.14</td>
<td>45.44</td>
<td>10.90</td>
<td></td>
</tr>
<tr>
<td>Def</td>
<td>47.40</td>
<td>10.93</td>
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<td>11.33</td>
<td></td>
</tr>
<tr>
<td>Crs</td>
<td>52.70</td>
<td>8.40</td>
<td>55.28</td>
<td>10.15</td>
<td></td>
</tr>
</tbody>
</table>

a N = 20
b N = 38
c scores in standard score form
Figure 5. Mean profiles on the Adjective Check List for males (---) and females (----) going abroad.
current psychological status, and feels himself equal to the demands that inhere in such change and new experience.

The three lowest points on the profile for females are on the scales for deference, abasement, and succorance. Again, from the ACL manual we may extract the common core of meanings attached to such low scores: confidence in one's own ability, decisiveness in meeting the demands of interpersonal life, optimism, and the capacity to function in a resolute and independent manner.

Insofar as we are justified in drawing a brief character sketch from the ACL profile for the female students, it appears that those who participated in the project were highly effective individuals, vitally interested in adventure and new experience, and fully capable of deriving the maximum benefit from such experience.

For males, the three highest scores were on the scales for lability, intraception, and change. Change was also among the highest three for females, and the lability scale is similar in meaning to change, but places a bit greater emphasis on an intolerance of routine and a distaste for conventionality. The new element is intraception, which brings in qualities of intellectual perceptiveness, pleasure in the exercise of cognitive functions, and a preference for reflective endeavor.

The low points on the male profile occur on the scales for personal adjustment, affiliation, and heterosexuality. Whereas all high and low points on the female profile seemed indicative of positive qualities, these low points on the male profile presage problems of at least moderate severity. The meaning of the personal adjustment scale is more or less self-evident; low-scorers tend to be at odds with other people, somewhat dissatisfied, and given to worry. Low-scorers on affiliation are somewhat individualistic, strong-willed, and unwilling to trust fully what others say and do. Low-scorers on heterosexuality are not necessarily lacking in sex drive (cf. ACL manual, p. 8), but do tend to doubt others and to have difficulty in responding with vigor and warmth to interpersonal overtures.

The briefest of summaries of these comments on the male profile must draw attention to a combination of sensitive, insightful, differentiated intellectuality with a kind of emotional coolness and resistance to interpersonal affiliation.

In Table 5 and Figure 6 the descriptive findings on the Study of Values are presented.

(see Table 5 and Figure 6 on the following pages)

For males, the high points on this ipsative device are on the scales for aesthetic, political, and theoretical interests. Aesthetic and theoretical values have consistently been identified as diagnostic of creative potential

1. By ipsative is meant that only internal or relative standing on each scale is possible; if one variable increases, the other must decrease. No one, i.e., can score uniformly high or low; he must either emphasize no single value (attain a score of 40 on each scale), or else one or more at the expense of the others.
Table 5

Descriptive Statistics on the Study of Values for Students Participating in the Education Abroad Program

<table>
<thead>
<tr>
<th>Scale</th>
<th>Male</th>
<th>SD</th>
<th>Female</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Theoretical</td>
<td>43.24</td>
<td>6.99</td>
<td>39.34</td>
<td>7.57</td>
</tr>
<tr>
<td>2. Economic</td>
<td>28.05</td>
<td>8.09</td>
<td>30.13</td>
<td>7.94</td>
</tr>
<tr>
<td>3. Aesthetic</td>
<td>51.90</td>
<td>8.22</td>
<td>51.45</td>
<td>9.43</td>
</tr>
<tr>
<td>4. Social</td>
<td>38.76</td>
<td>7.53</td>
<td>42.58</td>
<td>6.95</td>
</tr>
<tr>
<td>5. Political</td>
<td>43.57</td>
<td>5.87</td>
<td>39.24</td>
<td>6.18</td>
</tr>
<tr>
<td>6. Religious</td>
<td>34.95</td>
<td>11.04</td>
<td>37.32</td>
<td>10.38</td>
</tr>
</tbody>
</table>

a N = 20
b N = 38
Figure 6. Mean profiles for males (---) and females (----) on the Study of Values.
in adult samples (cf. Barron, 1965); the political elevation does not carry these implications, but does point toward a cathexis of power and control.

For females, high points are on the scales for aesthetic and social values. The former has self-evident implications; the latter, as indicated in the test manual, stresses humanitarian and charitable impulse more than affiliative or interactional.

All of the tests and instruments so far cited in the descriptive presentation can be profiled on standard score grids which provide automatic standards of reference. The data to follow are from tests where such ready reference does not exist, and where normative data from the test manuals or from prior studies must be consulted in order to evaluate the degree of elevation. To cite such comparative or normative data fully would be an enormous task, and would lengthen this section of the report far beyond any reasonable limit. For this reason, we have selected in each instance some single baseline reference point, so that a judgment may quickly be reached as to whether our research samples are above, at, or below average. College norms will generally be utilized, but occasionally the statistics cited come from studies of adult samples where college norms are not available.

Data for 13 instruments are provided in Table 6 (presented on the following page). The first one cited is the anti-colonialism questionnaire (Gough & di Palma, 1965), on which the participants scored significantly higher than the sample of college students (N=107). Higher scores on this scale indicate stronger opposition to colonial ideas, and in general a more liberal political attitude on international issues.

The second measure is the Barron-Welsh Art Scale (Barron & Welsh, 1952; Welsh, 1959), an index of aesthetic preference and of the disposition toward originality. All three samples score significantly above the norms for adults-in-general, but the differences between the participants and non-participants are not significant.

The third measure listed is the 30-item University of California Public Opinion Survey F Scale (authoritarianism), first introduced over 17 years ago (Adorno et al., 1950), and used in hundreds of studies since that time. The purpose of the F scale is to assess dispositions toward categorical, judgmental, and prejudicial thinking. Weights of from +3 to -3 are assigned to the options on each item, so that by rejecting the authoritarian responses to each item it is possible to attain a negative total score. The mean of -21.60 in the comparison sample is in the negative (non-authoritarian) direction, but is nonetheless higher than the means for the male and female participants (P<.01 in both instances). This finding confirms the expectation that authoritarianism, as measured by the F scale, would be negatively related to participation in the program.

The fourth instrument cited is the Chapin Social Insight Test (see Gough, 1965b). Here there is very little difference between participants and non-participants. However, on the fifth measure, the College Vocabulary Test, Form A, there is a highly significant difference (P<.01) in favor of participants.
Table 6
Descriptive Statistics for Participants in the Education Abroad Program, and other College Students on the Variables Indicated

<table>
<thead>
<tr>
<th>Variables</th>
<th>Male Participants</th>
<th>Female Participants</th>
<th>College Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>1. Anti-Colonialism Questionnaire</td>
<td>10.81</td>
<td>3.40</td>
<td>10.79</td>
</tr>
<tr>
<td>2. Barron-Welsh Art Scale</td>
<td>29.90</td>
<td>12.77</td>
<td>32.68</td>
</tr>
<tr>
<td>4. Chapin Social Insight Test</td>
<td>24.57</td>
<td>4.39</td>
<td>25.34</td>
</tr>
<tr>
<td>5. College Vocabulary Test, Form A</td>
<td>46.88</td>
<td>8.37</td>
<td>45.59</td>
</tr>
<tr>
<td>6. General Information Survey, Form A</td>
<td>38.54</td>
<td>4.75</td>
<td>32.48</td>
</tr>
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<td>7. Gestalt Transformation Test</td>
<td>12.50</td>
<td>3.77</td>
<td>12.00</td>
</tr>
<tr>
<td>8. McClosky's scales for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Anomie</td>
<td>2.05</td>
<td>1.91</td>
<td>2.45</td>
</tr>
<tr>
<td>b. Conservatism</td>
<td>1.10</td>
<td>1.11</td>
<td>1.45</td>
</tr>
<tr>
<td>9. Modern Language Aptitude Test, Short Form</td>
<td>73.86</td>
<td>11.22</td>
<td>79.76</td>
</tr>
<tr>
<td>10. Perceptual Acuity Test</td>
<td>18.22</td>
<td>7.93</td>
<td>19.74</td>
</tr>
<tr>
<td>11. Rokeash's scales for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Dogmatism</td>
<td>-39.00</td>
<td>20.64</td>
<td>-38.16</td>
</tr>
<tr>
<td>b. Left Opinionation</td>
<td>-1.14</td>
<td>18.37</td>
<td>-3.18</td>
</tr>
<tr>
<td>d. Total Opinionation</td>
<td>-26.95</td>
<td>22.17</td>
<td>-23.63</td>
</tr>
<tr>
<td>12. Unusual Uses Test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Total weighted score</td>
<td>67.64</td>
<td>34.16</td>
<td>66.32</td>
</tr>
<tr>
<td>b. Mean weighted score</td>
<td>3.22</td>
<td>0.65</td>
<td>3.18</td>
</tr>
<tr>
<td>13. Word Association Test, 2D + E score</td>
<td>36.08</td>
<td>11.00</td>
<td>43.76</td>
</tr>
</tbody>
</table>

a N = 20  
b N = 38  
c N = 88, or 107

* data not available
The linguistic factor, which would appear necessarily involved in the requirement of adequacy in the language of the host country, apparently extends to the native language (English) as well.

The sixth citation is for the General Information Survey (Gough, 1956). On the GIS, the male participants score slightly above the baseline and the females slightly below. This test consistently yields higher scores in male than female samples, and in fact is biased in this direction because of its inclusion of items pertaining to athletics and other masculine pursuits. Its emphasis is upon non-academic, non-intellectual, everyday information of the kind that a knowledgeable adult male might be expected to know whether or not he had been to college, traveled widely, or dedicated himself to a life of culture and reflection. Somewhat humorously, the test could be referred to as an index of venal sophistication. With respect to this kind of functional awareness, the overseas samples are not to be distinguished from other students, nor indeed from unselected samples of non-college adults.

The Gestalt Transformation Test, next in the listing, was developed by Guilford and his co-workers (Guilford et al., 1951, 1952) to appraise the ability to see common objects and tools in new and unexpected (transformed) functions. A silk stocking, for example, may be used as a mask, and a French horn could be employed as a receptacle for carrying water. These items are not included in the test, but similar, more subtle items do appear. It is theorized by some psychologists that this capacity to visualize objects in new and unconventional usage is a vital factor in creative innovation. On this factor, whatever it may signify, there is very little difference between our participants and the comparison sample of 107 college students.

Measures of anomie and conservatism (McClosky, 1958) come next. These are short, nine-item scales, which accounts for the low mean values. Anomie is an index of Durkheim's concept of anomie -- a feeling of powerlessness and alienation amid the complexities and impersonal imperatives of modern society. The participants are slightly less prey to these feelings than the non-participants. Conservatism is a measure of a general posture of resistance to change in politico-economic matters, rather than a specific index of capitalistic or neo-capitalistic preferences. The control sample scores very low on this scale for conservatism, but the participants are even less conservative.

The ninth measure is the Modern Language Aptitude Test (Carroll & Sapon, 1959). This test can be given with an oral (taped) section, or just the written portions can be used. Because of limitations of testing time, the "short form" (written section only) was employed. From the test manual, the mean score of 61.40 for college freshmen is cited. The male participants attained a mean of 73.86, and the females of 79.76; both scores are significantly higher (P < .01) than the baseline figure. As mentioned above, one would expect that students accepted for an overseas collegiate program would stand above average on language aptitude.

Test number 11 is the Perceptual Acuity Test (Gough & McGurk, 1967). This is a non-verbal instrument, calling for judgments of length, width, comparative size, angularity, similarity and dissimilarity; approximately 81
per cent of the items incorporate well-known visual illusions, such as those of Baldwin, Mueller-Iyer, Poggendorf, and Sander. Prior research with this instrument suggests it is diagnostic of the adequacy of ego coping, and that it has a clear age-developmental gradient. The average scores for applicants and non-applicants in Table 6 are little different from each other, but all three are significantly higher than what is found for non-college adults.

The eleventh listing is for the subtests used by Rokeach (1960), in his studies of the "open" and "closed" mind. Dogmatism is a 40-item scale reflecting the tendency to take arbitrary, uncompromising stands on any issue. Item weights go from +3 to -3, so that negative totals may be achieved by rejecting the dogmatic stance. The mean for 88 students selected at random is negative, but the EAP participants are even less dogmatic (the differences are significant).

Opinionation reflects a tendency toward unwarranted and probably incorrect political and social belief, including both over-rejection of contrary ideas and over-acceptance of compatible statements. The scale is divided into "left" (ultra-liberal) and "right" (reactionary) beliefs, with 20 items in each part. Scores are negative for all three samples on left opinionation, but the non-participants are lower than the EAP subjects. On right opinionation, all three samples are again negative, but the non-participants are higher. On total opinionation (the score on all 40 items) the differences are minimal. The absolute findings are in accord with expectations, and the slight shifts in relative standing also seem to agree with what one would anticipate.

The twelfth test is Guilford's measure of unusual uses (Guilford et al., 1951, 1952). Comparative statistics are not available, because of the decision to develop a new scoring manual on the basis of testing in the EAP program. The test lists six everyday objects (e.g., an automobile tire) and then asks for suggested new and different uses for the object. A time limit is imposed, so that fluency of ideation is required along with originality.

To develop the scoring manual for the project, all responses obtained for an object were typed into a single list, and then rated by two judges independently. For the automobile tire item, 359 responses were obtained, and the ratings of the judges (on a scale of 1 to 5) correlated +.83. Scoring of each response was based on the sum of the two ratings. For example, the responses "life preserver," "a swing," and "bumper" each receive weights of 2 (1 + 1); the response "make a sand box - fill with sand" a weight of 7 (3 + 4), and the response "to serve as the base for a miniature merry-go-round" a weight of 10 (5 + 5).

The total weighted score in Table 6 is derived by adding the scoring weights given to all of the uses on all six problems suggested by the respondent. The rationale of this scoring is that it reflects the total "value" of all of his output. A torrential outpouring of low-weighted suggestions would, in this scoring, give about the same point total as a more modest production of high-rated uses.

1. We wish to thank Mrs. Dan Peterman and Miss Aileen Satuchek for contributing these ratings.
The "mean weighted score" is simply the average rating of the uses suggested by a respondent. If he suggested only two uses in the full test, but one was rated at 10 and the other at 8, his mean weighted score would be 9.00. Because of this emphasis on quality, the scoring is sometimes referred to simply as the "quality score." In studies of creativity it has been found that a quality score is more diagnostic of originality in work than a total score (see Gough, 1961).

The last variable listed in Table 6 is the "2D + E" scoring of the Kent-Rosanoff Word Association list (Kent & Rosanoff, 1910). Fifty items from this list were administered to the subjects, and responses were then coded according to the Minnesota norms (Palermo & Jenkins, 1964). Five categories were defined for this coding: A - a word given in 50 per cent or more of the responses; B - given in from 25 to 50 per cent of the responses; C - given in from 10 to 25 per cent of the responses; D - appearing in from 1 to 10 per cent of the responses; and E - words appearing in less than 1 per cent of the Minnesota protocols. The progression is from least original ("A") to most original ("E"), and the definitions of "A" and "E" associations are in direct correspondence to Rorschach Ink Blot Test conventions for defining "P" (popular) and "O" (original) perceptions.

In earlier work with this coding of the Kent-Rosanoff List (see Gough, 1961), it was found that the combination most highly correlated with criterion indices of creativity was that given by the 2D + E equation. To obtain an individual's score on the sign, the number of his "D" associations is multiplied by two, and this product is added to the number of his "E" responses. The highest possible score would be 100, which would result if every response was a D-response. If a subject had 17 "D" responses and 13 "E" responses, his total score on 2D + E would be 47.

On the 2D + E word association index, the male participants ranked slightly below the baseline for an unselected sample of 107 Berkeley students, and the female participants ranked slightly above.

If we now go back over the 13 different tests and try to draw together a resume of where participants resemble and differ from their fellow students at the University, the following comments may be made: (a) on verbal ability and linguistic aptitude participants in the education abroad program very clearly surpass the normative baseline; (b) in social and political attitudes, participants are more liberal, more progressive, more internationally-minded, and less conservative than their fellow students; (c) in aesthetic sensitivity, creative potential, and cognitive flexibility they are more or less indistinguishable from their peers; and (d) on indices of social judgment, perceptual acuity, and grasp of the kind of mundane practical information which enters into everyday effectiveness (and commonsense) the participants are likewise not to be distinguished from students-in-general.

One final bit of descriptive information should be given before terminating this section of the report; this concerns the academic achievement of the participating students. On a grading continuum where an "A" is accorded 4 points, a "B" 3 points, a "C" 2 points, etc., the 28 males had a mean grade...
point average in all subjects of 3.14, standard deviation 0.26; for females, the mean was 3.11 and the standard deviation 0.38. If attention is directed only to grades in language courses, the mean GPA for males was 3.26, standard deviation 0.50, and for females 3.33, standard deviation 0.51.
Chapter V

PREDICTION OF DIFFERENTIAL PERFORMANCE IN OVERSEAS STUDY

Preface

In this section we shall present data on the prediction of differential performance overseas. The predictor variables include all those which have been described in the preceding section, including grade point averages at the time of application and the ratings of the selection committee.

Four major criteria will also be reviewed. The first comes from nominations of outstanding performance contributed by the students themselves. The second comes from ratings of performance made by the directors and associate directors of the overseas centers. The third is furnished by the grade point average attained in the overseas work. And the fourth comes from each student's own, personal appraisal of the worth and value of his overseas year.

Specification of Criteria

To gather peer nominations, a request was sent individually to each of the 85 students in May of their academic year abroad; a copy of this request is reproduced in Appendix C. Because of comments received in the preliminary study in 1964-65, when we had asked for nominations of both unusually commendable and unusually poor performance overseas, we confined our attention to the favorable pole of the continuum.

Students, as indicated on the form in the appendix, were asked to nominate from 15 to 20 per cent of the students in their center whose work, performance, and overall response to the opportunities and demands of overseas study was superior; if any student's performance was truly outstanding, in the judgment of the nominator, indication of this was also requested. Weights of +2 (outstanding) and +1 (nomination) were assigned on this basis. The scoring weights for each student were summed over all nominating forms received, and this sum was treated as a raw score; the distribution was of course normal, with a preponderance of scores at zero, one, or two, and a "tail" extending upward toward higher values.

Within each of the centers, the nominations were converted to standard scores with a mean of 50 and a standard deviation of 10, so that the peer nominations from all centers could be combined into a single distribution.

To generate the criterion representing directors' evaluations, a different method was used. Directors were given a list of Berkeley students at their centers, and were asked to rank these students on the basis of overall
performance; a copy of the rating format is presented in Appendix D. Where an associate director was available, an independent ranking was also requested from him.

Not all of the directors and associates found it possible to comply fully with our request, i.e., to rank all students from highest to lowest. One director listed only three categories, and another stipulated six levels of performance. In all cases, we converted the ratings or rankings given into standard scores with means of 50, standard deviations of 10, using means and variances computed from the ratings actually furnished by each director. No great precision can be claimed for this procedure, but it can be justified as an unbiased way of bringing all of the ratings into one common distribution of evaluation.

Because ratings were furnished by associate directors on 78 of the 85 students, it was possible to check on the reliability of the standardized ratings. The product-moment correlation between the two arrays of standardized ratings was +.64, which means that the corrected reliability of a new rating criterion based on the sum of directors' plus associate directors' evaluations would be +.78. This reliability coefficient was higher than we had anticipated, and was taken as an encouraging indication of the possibility of developing meaningful and dependable criteria of this type.

The third criterion, as indicated in the preface, came from grade point averages in overseas work. Different grading practices were employed in the overseas centers, but on the basis of policies adopted by the Statewide Office and working procedures evolved in conferences with local faculty at each center, overseas grades were in all instances converted to the 4-3-2-1-0 convention in use at Berkeley. These grades, it should be pointed out, were not contributed at the request of our research project, but were gathered and registered as part of the standard administrative practices of the program. For the 85 students being studied in this project, the mean overseas GPA was 3.43, standard deviation 0.65; this grade point average is somewhat above the mean GPA of 3.12 achieved by the 85 students in their prior work on the Berkeley campus.

The fourth criterion represents each student's own evaluation of the worth of his year overseas. These evaluations were made on a 7-point rating scale, as shown on the rating form reproduced in Appendix E. The enthusiasm of the 85 students for their overseas experiences is documented by the mean rating of 6.50, halfway between the two highest points on the rating scale.

Means, standard deviations, and intercorrelations of the four criteria are presented on the following page:
Table 7  
Correlations between Selection Variables  
and Criteria of Performance Overseas

<table>
<thead>
<tr>
<th>Variables</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Peer nominations</td>
<td>.45</td>
<td>.30</td>
<td>.23</td>
<td>49.94</td>
<td>9.90</td>
</tr>
<tr>
<td>2. Directors' ratings</td>
<td>--</td>
<td>.61</td>
<td>.34</td>
<td>50.05</td>
<td>10.01</td>
</tr>
<tr>
<td>3. Overseas grade point average</td>
<td>--</td>
<td>.04</td>
<td></td>
<td>3.43</td>
<td>0.41</td>
</tr>
<tr>
<td>4. Personal evaluation of the value of the year</td>
<td>--</td>
<td></td>
<td></td>
<td>6.50</td>
<td>0.65</td>
</tr>
</tbody>
</table>

One of the worries we had in seeking criteria of overseas performance was that any one such index would be unrelated to any other; for example, we were cautioned that evaluations from students would not agree with evaluations from directors. The intercorrelations cited above are very reassuring on these points. The students' appraisal of overall performance is not synonymous with that of the directors, but it is significantly correlated with it ($r = +.45$). Because of this degree of relationship, we decided to include a fifth criterion of performance in our analyses -- a "total" rating based on the sum of the ratings by peers and directors. The reliability of this fifth criterion, derived from the zero order correlation of $+.45$, is $+.62$.

Grade point average in overseas work, it might be noted, correlates $+.30$ with the peer nominations, but $+.61$ with the directors' evaluations. One might expect the evaluations of professors to put more stress on academic performance than those of students. An interesting additional finding is that the students' own reaction to the worth of their time spent overseas correlates significantly, although not highly, with both peer nominations and directors' ratings. The only two variables which are not at all related, among those considered, are the self-statements of satisfaction and overseas grade point average.

Predictive Correlations

The first data to be offered stem from the variables used in the selection of the 85 participants. These include: grade point average in language at the time of application, overall grade point average at the time of
application, the number of semester units of language study at the time of application, and the ratings made by the selection committees. Correlations between these four variables and the five criteria are given below in Table 8.

**Table 8**

Correlations between Variables Used in Selection and Criteria of Performance Overseas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Grade point average in language, at application</td>
<td>.01</td>
<td>.35</td>
<td>.24</td>
<td>.33</td>
<td>-.09</td>
</tr>
<tr>
<td>2. Overall grade point average, at application</td>
<td>.23</td>
<td>.47</td>
<td>.43</td>
<td>.47</td>
<td>-.06</td>
</tr>
<tr>
<td>3. Semester units of language study, at application</td>
<td>.10</td>
<td>-.05</td>
<td>.03</td>
<td>-.07</td>
<td>.09</td>
</tr>
<tr>
<td>4. Rating by selection committee</td>
<td>.23</td>
<td>.28</td>
<td>.28</td>
<td>.26</td>
<td>.06</td>
</tr>
</tbody>
</table>

\[ r \geq .21, \ p \leq .05 \]

The two "best" forecasters of performance overseas, from among those considered, appear to be overall grade point average and the ratings of the selection committee. Overall GPA correlates significantly with all criteria save own evaluation of the value of the year overseas, and the magnitude of the coefficients with directors' ratings, total rating (directors plus peer nominations), and grades overseas are high enough to be of practical utility. The ratings by the selection committee, although distinctly lower in magnitude, are also significantly correlated with four of the five criteria.

These ratings by the selection committee, it should be noted, were taken from the notes and decisions of each panel. Once the applicants seen by a panel had been classified as accepted, alternates, and rejected, numerical values were assigned and then these values converted into standard scores. For some panels only three scores were used; other panels, which made use of more gradations (e.g., "A-", "B+", "C-" etc.) could be calibrated in more differentiated manner. In every case, standard score equivalents (mean of 50 and SD of 10) were derived for that panel, and these scores then pooled for all panels and used in the computations reported above in Table 8.
The only criterion which seems unrelated to the variables utilized in selection is the self-statement of satisfaction with the experiences overseas. However, as we shall see later, self-evaluation is predictable from other kinds of variables.

The correlations between scales of the MMPI and the five criteria are presented in Table 9, on the following page. Because there are important sex differences on the MMPI, as well as on the other personality and interest tests to be considered, separate coefficients for males and females will hereinafter be provided.

(see Table 9 on the following page)

There are 80 correlations presented in Table 9 for each sex; therefore, by chance, there should be 8 coefficients (4 for each sex) significant at the .05 level of probability or beyond. For males, only two of the coefficients equal or exceed the .05 level: there is a positive relationship between scores on the Ma scale and peer nominations, and a negative relationship between scores on the Pd scale and own evaluation of the worth of the year abroad.

For females, nine of the coefficients equal or exceed the .05 level: peer nominations are negatively related to scores on L and Ma; directors' ratings are positively related to R (repression) and negatively to Ma; the total (combined) ratings are negatively related to Ma; overseas GPA is negatively related to Pt and Ma; and own evaluation of the overseas experience is positively related to Hs and negatively related to F (uncommon responses).

Because of this relatively scanty yield, and because a number of the relationships go in opposite directions, it was decided not to undertake further analyses with this instrument.

A similar analysis of the CPI is presented in Table 10 (see Table 10 on the page following Table 9). The findings for the CPI resemble those for the MMPI, in that few of the coefficients are significant at the .05 level of probability or beyond. However, one interesting relationship which is strongly present for both sexes is the positive correlation between the So (socialization) scale and own evaluation of the value of the year overseas. The Fe (femininity) scale, it might also be noted, revealed consistently positive correlations with all criteria for both sexes, although only 3 of the 10 coefficients were statistically significant. We would expect that with larger samples (in the present instance the Ns were 28 and 57) both the MMPI and the CPI would yield more clear-cut findings; it should also be observed that patterns and combinations of scales might well yield valid forecasts even though single scales -- taken one at a time -- are not highly predictive.

Table 11 (see page following Table 10) contains a similar set of correlations for the Adjective Check List. Because of the smaller number of cases (20 males, 38 females), the number of significant coefficients is even less than in the preceding two tables. Several consistent trends may be noted,
Table 9

Correlations between Scales of the Minnesota Multiphasic Personality Inventory and Criteria of Performance Overseas

<table>
<thead>
<tr>
<th>Scale</th>
<th>Peer nominations</th>
<th>Directors' ratings</th>
<th>Total ratings</th>
<th>GPA overseas</th>
<th>Own evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>L</td>
<td>-.14</td>
<td>-.27*</td>
<td>.04</td>
<td>-.05</td>
<td>-.06</td>
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<tr>
<td>F</td>
<td>.10</td>
<td>-.11</td>
<td>.16</td>
<td>-.23</td>
<td>.14</td>
</tr>
<tr>
<td>K</td>
<td>-.08</td>
<td>.13</td>
<td>-.06</td>
<td>.03</td>
<td>-.07</td>
</tr>
<tr>
<td>Hs</td>
<td>-.27</td>
<td>.08</td>
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<td>.09</td>
<td>-.31</td>
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<tr>
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<td>-.13</td>
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<td>Pa</td>
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<td>-.18</td>
<td>-.16</td>
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<td>.27*</td>
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<td>.03</td>
<td>.17</td>
<td>.13</td>
<td>.09</td>
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</tbody>
</table>

* P \( \leq .05 \)
Table 10

Correlations between Scales of the California Psychological Inventory and Criteria of Performance Overseas

<table>
<thead>
<tr>
<th>Scale</th>
<th>Peer nominations M</th>
<th>Peer nominations F</th>
<th>Directors' ratings M</th>
<th>Directors' ratings F</th>
<th>Total ratings M</th>
<th>Total ratings F</th>
<th>GPA overseas M</th>
<th>GPA overseas F</th>
<th>Own evaluation M</th>
<th>Own evaluation F</th>
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<tbody>
<tr>
<td>Do</td>
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<td>-.28</td>
<td>.04</td>
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<td>.17</td>
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<td>.13</td>
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<td>Sy</td>
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<td>.04</td>
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<td>.05</td>
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<td>-.05</td>
<td>.16</td>
<td>.04</td>
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<td>-.22</td>
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<td>-.25</td>
<td>.15</td>
<td>-.10</td>
<td>.05</td>
<td>-.05</td>
<td>.21</td>
</tr>
<tr>
<td>So</td>
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<td>.05</td>
<td>.00</td>
<td>.16</td>
<td>.04</td>
<td>.14</td>
<td>.05</td>
<td>.06</td>
<td>.39*</td>
<td>.29*</td>
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<tr>
<td>Sc</td>
<td>.12</td>
<td>.01</td>
<td>.16</td>
<td>.10</td>
<td>.19</td>
<td>.07</td>
<td>.29</td>
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<tr>
<td>To</td>
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<td>.00</td>
<td>-.01</td>
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<td>-.02</td>
<td>-.01</td>
<td>.01</td>
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<td>.10</td>
<td>.03</td>
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<td>.04</td>
<td>.21</td>
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<td>.20</td>
<td>.21</td>
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<td>.09</td>
<td>.37</td>
<td>.09</td>
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<td>.16</td>
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<td>-.25</td>
<td>.23</td>
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<td>.25</td>
<td>-.10</td>
<td>.07</td>
<td>-.06</td>
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<td>.11</td>
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<td>-.07</td>
<td>-.04</td>
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<td>-.09</td>
<td>-.01</td>
<td>.02</td>
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<td>.10</td>
<td>.06</td>
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<td>.11</td>
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<td>.26</td>
<td>-.02</td>
<td>.15</td>
<td>-.09</td>
<td>.28</td>
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<td>.20</td>
<td>-.03</td>
<td>-.03</td>
<td>-.01</td>
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<td>-.07</td>
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<td>.05</td>
<td>-.10</td>
<td>-.07</td>
<td>.06</td>
<td>-.08</td>
<td>-.33*</td>
</tr>
<tr>
<td>Fe</td>
<td>.20</td>
<td>.17</td>
<td>.21</td>
<td>.44*</td>
<td>.21</td>
<td>.36*</td>
<td>.14</td>
<td>.29*</td>
<td>.20</td>
<td>.17</td>
</tr>
</tbody>
</table>

* P < .05
Table 11

Correlations between Scales of the Adjective Check List and Criteria of Performance Overseas

<table>
<thead>
<tr>
<th>Scale</th>
<th>Peer nominations</th>
<th>Directors' ratings</th>
<th>Total ratings</th>
<th>GPA overseas</th>
<th>Own evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Ckd</td>
<td>.10 F</td>
<td>.07 F</td>
<td>-.08 F</td>
<td>-.01 F</td>
<td>.06 F</td>
</tr>
<tr>
<td>Dr</td>
<td>-.11 .07</td>
<td>-.01 -.11</td>
<td>-.06 -.02</td>
<td>.27 -.04</td>
<td>.12 -.08</td>
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<tr>
<td>Fav</td>
<td>.22 .18</td>
<td>.21 -.07</td>
<td>.27 .06</td>
<td>.26 -.04</td>
<td>.04 -.02</td>
</tr>
<tr>
<td>Unfav</td>
<td>-.29 -.17</td>
<td>-.04 .16</td>
<td>-.23 .01</td>
<td>-.17 .06</td>
<td>.00 .05</td>
</tr>
<tr>
<td>S-Cfd</td>
<td>-.08 .28</td>
<td>.23 -.07</td>
<td>.06 .12</td>
<td>.25 -.07</td>
<td>.02 .17</td>
</tr>
<tr>
<td>S-Cn</td>
<td>.24 -.01</td>
<td>-.05 .01</td>
<td>.13 .00</td>
<td>.12 .13</td>
<td>-.06 -.08</td>
</tr>
<tr>
<td>Lab</td>
<td>.36 .25</td>
<td>.25 .04</td>
<td>.37 .15</td>
<td>.11 .20</td>
<td>-.10 -.16</td>
</tr>
<tr>
<td>Per Adj</td>
<td>.20 .10</td>
<td>.13 -.10</td>
<td>.21 -.01</td>
<td>.20 -.07</td>
<td>.05 .03</td>
</tr>
<tr>
<td>Ach</td>
<td>-.06 -.04</td>
<td>.33 -.24</td>
<td>.15 -.15</td>
<td>.37 -.25</td>
<td>-.14 .03</td>
</tr>
<tr>
<td>Dom</td>
<td>-.18 .15</td>
<td>.24 -.07</td>
<td>.04 .05</td>
<td>.34 -.22</td>
<td>-.28 .19</td>
</tr>
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<td>End</td>
<td>-.07 .07</td>
<td>.22 .01</td>
<td>.11 .06</td>
<td>.31 -.01</td>
<td>-.13 .05</td>
</tr>
<tr>
<td>Ord</td>
<td>-.02 .02</td>
<td>.28 .11</td>
<td>.14 .09</td>
<td>.42 -.02</td>
<td>-.02 .21</td>
</tr>
<tr>
<td>Int</td>
<td>.22 .20</td>
<td>.32 .13</td>
<td>.31 .17</td>
<td>.38 .01</td>
<td>.00 .11</td>
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<tr>
<td>Nur</td>
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<td>-.01 -.06</td>
<td>.15 .04</td>
<td>.11 .01</td>
<td>.04 -.06</td>
</tr>
<tr>
<td>Aff</td>
<td>.10 .32*</td>
<td>.04 .02</td>
<td>.09 .19</td>
<td>.11 .16</td>
<td>-.04 -.01</td>
</tr>
<tr>
<td>Het</td>
<td>.17 .15</td>
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<td>.19 -.01</td>
<td>.40 -.10</td>
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<tr>
<td>Exh</td>
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<td>.01 .06</td>
<td>-.25 .23</td>
<td>-.04 .01</td>
<td>-.07 .26</td>
</tr>
<tr>
<td>Aut</td>
<td>-.15 -.14</td>
<td>.36 -.19</td>
<td>.08 -.18</td>
<td>.17 -.24</td>
<td>.06 -.08</td>
</tr>
<tr>
<td>Agg</td>
<td>-.25 -.10</td>
<td>.02 -.06</td>
<td>-.15 -.08</td>
<td>-.07 -.15</td>
<td>-.14 .08</td>
</tr>
<tr>
<td>Cha</td>
<td>.04 -.04</td>
<td>.28 -.26</td>
<td>.17 -.18</td>
<td>.30 -.27</td>
<td>-.08 -.14</td>
</tr>
<tr>
<td>Suc</td>
<td>-.12 -.24</td>
<td>-.22 .16</td>
<td>-.23 -.03</td>
<td>-.17 .20</td>
<td>-.05 -.08</td>
</tr>
<tr>
<td>Aba</td>
<td>.14 -.18</td>
<td>-.31 .11</td>
<td>-.10 -.04</td>
<td>-.07 .21</td>
<td>.15 -.20</td>
</tr>
<tr>
<td>Def</td>
<td>.04 .04</td>
<td>-.34 .17</td>
<td>-.16 .12</td>
<td>-.07 .23</td>
<td>.05 .00</td>
</tr>
<tr>
<td>Crs</td>
<td>.20 -.18</td>
<td>.02 -.10</td>
<td>.12 -.15</td>
<td>-.07 -.08</td>
<td>.18 -.02</td>
</tr>
</tbody>
</table>

* P ≤ .05
even if the coefficients involved are not at a significant level. First, the scale for intraception has positive correlations in nine of the ten columns, and in three instances reveals coefficients greater than .30. The lability scale seems positively related to the first four criteria, but negatively to the self-evaluation of the year's experience. Third, both the need:aggression and need:succorance scales have negative correlations in eight out of ten entries. Perhaps with larger samples these relationships would persist and could be more firmly established.

The next instrument to be presented is the Study of Values (Allport, Vernon, & Lindzey, 1951), in Table 12 below.

Table 12
Correlations between Scales of the Study of Values and Criteria of Performance in Overseas Education

<table>
<thead>
<tr>
<th>Scale</th>
<th>Peer Nominations</th>
<th>Directors' ratings</th>
<th>Total ratings</th>
<th>GPA overseas</th>
<th>Own evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>1. Theoretical</td>
<td>-.50*</td>
<td>.12</td>
<td>-.24</td>
<td>.11</td>
<td>-.48*</td>
</tr>
<tr>
<td>2. Economic</td>
<td>.02</td>
<td>-.05</td>
<td>.36</td>
<td>-.11</td>
<td>.19</td>
</tr>
<tr>
<td>3. Aesthetic</td>
<td>.29</td>
<td>.09</td>
<td>.05</td>
<td>.08</td>
<td>.25</td>
</tr>
<tr>
<td>4. Social</td>
<td>-.18</td>
<td>.15</td>
<td>-.35</td>
<td>.05</td>
<td>-.32</td>
</tr>
<tr>
<td>5. Political</td>
<td>-.34</td>
<td>-.12</td>
<td>-.20</td>
<td>-.06</td>
<td>-.29</td>
</tr>
<tr>
<td>6. Religious</td>
<td>.40</td>
<td>-.15</td>
<td>.23</td>
<td>-.07</td>
<td>.39</td>
</tr>
</tbody>
</table>

* P < .05

Three of the coefficients in Table 12 are significant at the .05 level, the exact number which would be anticipated on a chance basis. Furthermore, there are no consistent trends for both sexes across criteria which we know from earlier analyses (see Table 7 above) to be related.

When we turn to the correlations for the tests of ability, interest, and attitudes as given in Table 13 (see following page), a more abundant yield of relationships is observed. The first variable, the anti-colonialism scale, reveals only low correlations, of inconsistent sign. However, the Barron-Welsh Art Scale is negatively correlated with all five criteria for
Table 13

Correlations between the Variables Indicated and Criteria of Performance in Overseas Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Peer nominations</th>
<th>Directors' Total rating</th>
<th>GPA overseas evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anti-colonialism</td>
<td>M: .05 F: .05</td>
<td>M: .11 F: .01 M: .08 F: .03</td>
<td>M: -.09 F: .06 M: -.18 F: -.08</td>
</tr>
<tr>
<td>8. McClosky's scales for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Rokeach's scales for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Left opinionation</td>
<td>M: .00 F: .10</td>
<td>M: .10 F: -.03 M: -.02 F: .04</td>
<td>M: .19 F: .08 M: .21 F: -.07</td>
</tr>
<tr>
<td>12. Unusual Uses Test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Mean weighted score</td>
<td>M: -.42 F: .18</td>
<td>M: -.24 F: .30 M: -.34 F: .27</td>
<td>M: -.20 F: .32* M: -.31 F: .05</td>
</tr>
</tbody>
</table>

* P ≤ .05
both sexes. Creative potentiality, which extensive prior research has shown to be one of the chief diagnostic implications of the scale (cf. Barron, 1965; Gough, 1961), may not be an esteemed quality in the eyes of peers and directors in the overseas centers; any such speculation, of course, must be viewed with great caution until cross-validation can be carried out.

The authoritarianism scale shows no consistent relationships with the criteria, and except for a rather high negative correlation with overseas GPA the Chapin Social Insight Test also gives equivocal results. The fifth test, the College Vocabulary Test, Form A, however, shows promise as a forecaster of nominations, and ratings of the female subjects.

The General Information Survey, Form A, also correlates consistently with nominations, ratings, and academic performance. The Gestalt Transformation Test generates contradictory results, as do the anomic and conservatism scales. The Modern Language Aptitude Test, on the other hand, gives positive forecasts of the first four criteria.

The Perceptual Acuity Test may have moderate value in forecasting the performance of females, but did not function validly in forecasting performance of males. Rokeach's scales for dogmatism, left and right opinionation, and total opinionation did not correlate significantly with any of the criteria, although (somewhat surprisingly) the total opinionation scale related positively to all five criteria for both sexes.

The two scorings of the Unusual Uses test correlated negatively with all criteria for males, and positively with all criteria for females. Cross-validational evidence would appear to be a necessity before any conclusions could be drawn from these findings.

The final variable, the 2D + E scoring of the 50-item word association test revealed a clear trend toward positive relationships, with somewhat stronger findings among females than males.

As in the previous chapter, perhaps a brief recapitulation of the more prominent findings and relationships may be of help to the reader. It should be stressed, in so doing, that the findings have not been cross-validated and are therefore to be seen as heuristic only. Nonetheless, comprehension of the report should be enhanced by re-mentioning its most prominent findings.

In offering this summary, relationships involving the first four criteria (peer nominations, directors' ratings, total ratings, and GPA overseas) will be treated under one heading as these four criteria appear to represent different aspects of a single broad index of successful performance in the program. The more successful student, under this conception, seems to have a high order of verbal ability, including talent for the learning of language, and a wide range of general information; he is introspective in temperament, emotionally more labile than his fellow students, but less apt to behave in a brusque and peremptory manner; his academic attainments are superior, both in languages and in other subjects. With respect to originality and creative potentiality, the more successful student seems not to excel the less successful, and in fact may even fall slightly behind.
The dispositions which lead to a favorable evaluation of the year overseas are of a somewhat different color. Prior academic achievement seems to have no bearing, nor in fact does achievement while overseas. The degree to which cultural imperatives of control, rectitude, and acquiescence have been internalized is associated with higher evaluations, and indices of willfulness, anxiety, and social alienation have negative implications. The student who feels content with his year abroad is to some extent the student who would feel content with any year -- an individual of obliging, constructive, uncomplaining, and moderate dispositions.

Interviewers' Diagnoses

From among the 53 students who were interviewed, as described in the preceding chapter, 30 later went abroad. The criterion ratings (total) were tallied for these students, and 15 with high ratings were selected for contrast with 15 with low ratings; there were 11 females and 4 males in each subsample.

The mean placements of each of the 60 items in the special Q-deck were computed, and t-tests of the high vs. low mean differences then calculated. The five items with highest positive t-values, hence more descriptive of students later receiving high criterion ratings, were these:

1. Is a conscientious, responsible, dependable person.
2. Has a high degree of intellectual ability.
3. Is optimistic about his own professional future and advancement.
4. Internally motivated -- "inner directed," seeks out and initiates new endeavor whether coerced or not.
5. Conveys a sense of vitality, spontaneity, responsiveness, etc.

The five Q-sort items with largest negative t-values, hence more often used to characterize students later receiving low criterion ratings, were these:

1. Indifferent to time, inattentive to dates, periods, epochs, and the time-aspect of man's experience.
2. Attentive to and values personal appearance, dress, clothing, etc.
3. Tends to be ostentatious and exhibitionistic.
4. Seeks approval from a small circle of friends; not concerned about reactions of people-in-general.
5. Tends to feel superior to students who are less intelligent, less sophisticated, less talented. These items from the interviewers' Q-sort evaluations complement what was inferred from the testing battery. They also add greater emphasis to the notion of vitality and responsiveness to experience, and to the optimism which may be a derivative of this capacity. The descriptions of the less highly rated students bring to light a kind of immature and self-satisfied sophistication -- or perhaps what should be termed pseudo-sophistication.

One final bit of evidence from the interviews awaits reporting. Adjective Check List descriptions were available for 15 higher-rated students (10 females, 5 males) and 15 lower-rated (10 females, 5 males). These ACL descriptions were furnished by the interviewers, and therefore prior to the year of overseas study.

The 30 ACL protocols were scored on the 24 variables of the instrument, with the results indicated in Table 14 on the following page. The two ACL profiles have been drawn in Figure 7 (see page following Table 14) to facilitate visualizing of the findings.

Although only one of the differences is statistically significant (the higher-rated students were described by interviewers as lower on the need for succorance), the two profiles show a characteristic pattern. The profile for higher-rated students is higher on the left (need: achievement through need: affiliation) and lower on the right (need: heterosexuality through need: deference). This pattern (see the ACL Manual, Gough & Heilbrun, 1965) is generally diagnostic of more effective social and interpersonal behavior.

Combinations

Perhaps the best way to maximize prediction of the overseas criteria from the testing and other data available in the year prior to departure is to compute regression equations, or other statistical indices. This approach, admittedly powerful, is nonetheless frankly empirical and must therefore be cross-checked before any credence can be put in its findings.

As indicated in the preface to Chapter III, a cross-validating sample is not yet available for this project, and such data will not become available until six months or more from the date on which this report is being written. It is therefore deemed unwise to go very far into the development of patterns and combinations of predictive variables, lest "signs" be put into the literature which must at some later date be withdrawn. Although the contract under which the work up to this point has been conducted has terminated, the authors hope to continue their efforts and do plan to search extensively for predictive combinations which can then be cross-checked on the sample of students spending the 1966-67 academic year in overseas study.
Table 14
Comparison of Interviewers' Descriptions on the Adjective Check List of Students Who Later Received Higher or Lower Criterion Ratings in Overseas Study

<table>
<thead>
<tr>
<th></th>
<th>Higher-rated&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Lower-rated&lt;sup&gt;b&lt;/sup&gt;</th>
<th>diff</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number checked</strong></td>
<td>46.20 2.83</td>
<td>45.33 2.50</td>
<td>0.87</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Defense</strong></td>
<td>55.20 9.97</td>
<td>54.53 5.57</td>
<td>0.67</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Favorable words</strong></td>
<td>59.00 10.14</td>
<td>55.33 10.53</td>
<td>3.67</td>
<td>0.97</td>
</tr>
<tr>
<td><strong>Unfavorable words</strong></td>
<td>44.40 7.03</td>
<td>48.67 4.84</td>
<td>-4.27</td>
<td>1.94</td>
</tr>
<tr>
<td><strong>Self-confidence</strong></td>
<td>58.73 14.09</td>
<td>58.67 17.24</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Self-control</strong></td>
<td>58.53 11.81</td>
<td>55.80 7.54</td>
<td>2.73</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>Lability</strong></td>
<td>48.67 10.32</td>
<td>50.80 8.78</td>
<td>-2.13</td>
<td>0.61</td>
</tr>
<tr>
<td><strong>Personal adjustment</strong></td>
<td>55.33 8.09</td>
<td>50.67 6.46</td>
<td>4.66</td>
<td>1.75</td>
</tr>
<tr>
<td><strong>Achievement</strong></td>
<td>64.13 10.96</td>
<td>60.33 15.23</td>
<td>3.80</td>
<td>0.78</td>
</tr>
<tr>
<td><strong>Dominance</strong></td>
<td>57.67 13.31</td>
<td>56.40 17.64</td>
<td>1.27</td>
<td>0.22</td>
</tr>
<tr>
<td><strong>Endurance</strong></td>
<td>62.00 10.93</td>
<td>59.27 12.31</td>
<td>2.73</td>
<td>0.64</td>
</tr>
<tr>
<td><strong>Order</strong></td>
<td>59.07 13.21</td>
<td>58.00 11.99</td>
<td>1.07</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Intraception</strong></td>
<td>61.47 7.92</td>
<td>56.73 7.85</td>
<td>4.74</td>
<td>1.64</td>
</tr>
<tr>
<td><strong>Nurture</strong></td>
<td>51.33 8.84</td>
<td>48.20 9.11</td>
<td>3.13</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>Affiliation</strong></td>
<td>52.20 9.21</td>
<td>47.47 9.80</td>
<td>4.73</td>
<td>1.36</td>
</tr>
<tr>
<td><strong>Heterosexuality</strong></td>
<td>48.07 13.06</td>
<td>48.60 16.86</td>
<td>-0.53</td>
<td>0.10</td>
</tr>
<tr>
<td><strong>Exhibition</strong></td>
<td>44.33 11.69</td>
<td>50.00 15.89</td>
<td>-5.67</td>
<td>1.11</td>
</tr>
<tr>
<td><strong>Autonomy</strong></td>
<td>53.53 13.92</td>
<td>52.47 11.26</td>
<td>1.06</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Aggression</strong></td>
<td>47.27 8.84</td>
<td>49.20 11.43</td>
<td>-1.93</td>
<td>0.52</td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td>48.27 14.82</td>
<td>50.00 14.69</td>
<td>-1.73</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>Succorance</strong></td>
<td>40.20 7.09</td>
<td>46.20 7.10</td>
<td>-6.00</td>
<td>2.31*</td>
</tr>
<tr>
<td><strong>Abasement</strong></td>
<td>44.87 10.92</td>
<td>49.13 14.15</td>
<td>-4.26</td>
<td>0.92</td>
</tr>
<tr>
<td><strong>Deference</strong></td>
<td>45.60 11.76</td>
<td>47.27 12.02</td>
<td>-1.67</td>
<td>0.38</td>
</tr>
<tr>
<td><strong>Counseling readiness</strong></td>
<td>58.53 9.15</td>
<td>58.80 11.32</td>
<td>-0.27</td>
<td>0.07</td>
</tr>
</tbody>
</table>

<sup>a</sup> N = 15
<sup>b</sup> N = 15

*P ≤ .05
Figure 7. Interviewers' characterizations on the Adjective Check List of students who later received higher (-----) or lower (---) criterion ratings in the study abroad program.
It should also be recalled that a small pre-study was conducted on the students participating in the 1964-65 program. Fifty-two students (39 females, 13 males) were tested with some of the instruments used in the contract project, and criteria in the form of peer nominations and directors' ratings were gathered. This sample can therefore be used for a partial check on validity.

Under the cautionary provisos just adumbrated, we would like to proceed to mention several forecasting equations so as to illustrate the application of the method. First, let us consider the total rating, based on the sum of the peer nominations and the directors' ratings. For the 58 (out of 85) students who took the test battery, three of the cognitive variables were chosen for analysis: College Vocabulary Test, Form A; Modern Language Aptitude Test, Short Form; and the 2D + E scoring of the 50-item word association list. Correlations with the criterion were, respectively, +.36, +.33, and +.33. The multiple correlation between these three variables and the criterion was +.55, and the regression equation to forecast the ratings was:

Performance overseas = 8.605 + .337CVT-A + .212MLAT + .229(2D+E)

The weights were determined empirically, and the constant is set so that the mean of an array of new computed scores on a comparable sample will approximate 50.00.

The Modern Language Aptitude Test was not administered to the 1964-65 sample, so this equation cannot as yet be cross-validated; it will be verified, of course, in the 1966-67 sample when criterion data become available.

To illustrate analyses within a single instrument, an equation was derived on the CPI, including the scales for social presence, self-acceptance, responsibility, and achievement by conformance, as shown below:

Performance overseas = 42.914 - .381Sp + .623Sa - .226Re + .516Ac

The CPI had been given in 1964-65, so that it was possible to compute scores for the 52 students on this equation and then to correlate these scores with the total rating. The predicted scores had a mean of 50.28, standard deviation 2.16, and correlated +.29 with the criterion; this coefficient is low, but statistically significant at the .05 level.

To discover the diagnostic implications of the CPI equation, a conceptual analysis (Gough, 1965a) was undertaken, part of which merits summary here. In samples of 140 males and 92 females, tested in living groups, each student was described on the ACL by five acquaintances. Words were checked once if they were deemed descriptive, and then from 5 to 10 "key" words were checked twice. By tallying these checks, descriptive scores ranging from 0 to 10 were obtained for each of the 300 items in the ACL. Scores on the equation were then correlated with the 300 descriptions, separately by sex. The purpose of this analysis is to discover how students who score high and low on the equation are described by their peers. Diagnostic implications of the equation are thereby brought to light.
For the 140 males, a mean score of 49.45 was obtained on the equation, standard deviation 2.91. The 10 adjectival totals correlating most highly with the scores on the equation were these:

- formal (+.34)
- mannerly (+.31)
- responsible (+.29)
- ambitious (+.29)
- organized (+.26)
- efficient (+.26)
- idealistic (+.25)
- dependable (+.25)
- moderate (+.25)
- practical (+.25)

These 10 adjectives summarize the impression a high-scoring male makes on his peers; to the extent that the equation forecasts superior performance in overseas study it can be assumed to derive its validity from the constellation of qualities just outlined.

The 10 adjectives with largest negative correlations, and hence most descriptive of males with low scores on the equation were these:

- spontaneous (-.31)
- shiftless (-.28)
- rude (-.26)
- apathetic (-.24)
- reckless (-.24)
- zany (-.23)
- rebellious (-.23)
- immature (-.21)
- impulsive (-.20)
- uninhibited (-.19)

The diagnostic implications of low scores on the equation are clearly unfavorable, and would appear to characterize a person in friction with himself and others, too expressive of hostile and negative affect.

For females, the psychological meanings of the dimension defined by the equation are somewhat different; this finding -- of different psychodynamic patterns for males and females on the same variable -- occurs frequently in conceptual analysis and underscores the necessity of independent consideration.

The mean score for the 92 females was 50.00, standard deviation 2.61. The 10 descriptions most characteristic of high-scoring females were these:

- determined (+.35)
- bossy (+.33)
- self-punishing (+.28)
- defensive (+.26)
- opinionated (+.25)
- determined (+.25)
- planful (+.25)
- hard-headed (+.25)
- concealed (+.24)
- dominant (+.23)

It is easy enough to imagine the woman characterized by this syndrome as being "successful" in just about any activity she might undertake, but the quality and attractiveness of the syndrome is less than that defined for male subjects.

The 10 descriptions most characteristically assigned to low-scoring females on the CPI equation were these:
informal (-.33)
relaxed (-.32)
easygoing (-.31)
mischievous (-.31)
irresponsible (-.29)
careless (-.28)
lazy (-.24)
cheerful (-.22)
natural (-.22)
adventurous (-.20)

Again, this cluster needs little interpretation and it is easy to see why someone like this would receive lower ratings of performance in a program devoted to academic and intellectual pursuits.

At the risk of being repetitious, it must be repeated that these brief portraits of high- and low-scorers are not portraits of students who actually performed in a more- or less-superior fashion overseas. The portraits attach to diagnostic equations which were generated from tangible performance. But, whenever such forecasting or diagnostic indices are used we wish to know their underlying psychological basis of operation, as well as how accurately they forecast the ratings, grades, or other outcomes they were constructed to predict. The specification of this underlying basis, furthermore, must always be carried out empirically as it is almost impossible in most instances to "intuit" its meaning by noting the component variables and then thinking rationally about what they might imply.

A final example of a predictive combination of variables may be mentioned, this one derived from the criterion of own evaluation of the worth of the year overseas. This equation included the following four variables: the CPI scale for socialization; the ACL scale for self-control; the ACL scale for need:order; and the 2D + E scoring of the 50-item word association list, and was defined as follows:

\[
25.669 + .602S_o - .271S-Cn + .164ord + .159 (2D+E)
\]

The multiplying weights were set empirically, and the constant of 25.669 is added so that the mean of an array of computed scores will approximate 50.00. Higher scores on the equation will tend to go with greater satisfaction with overseas study, and lower scores will tend to forecast less satisfaction with experiences abroad. In the sample on which the equation was developed the multiple correlation with own evaluation was +.55. The equation has not been cross-validated, and so the coefficient of +.55 cannot be assumed to have anything other than heuristic meaning.

In concluding this brief section on patterns and combinations of variables we must again confess to a degree of ambivalence. Some illustration appears necessary so that readers can clearly envisage what should be done, once cross-validating cases become available, and what the authors intend to do. No claims to confirmed validity can be made for the three illustrative equations offered in this section.
Chapter VI

SUMMARY AND DISCUSSION

Study abroad, although an established and accepted educational phenomenon since antiquity, has only recently begun to flourish in the planning of American colleges and universities. From modest beginnings in the 1930s and 1940s the number of such programs has risen to more than 250, and the expectation is that by 1970 there will be 400 or more. If the average enrollment per year in each program is set (arbitrarily, of course) at 40, this would mean 16,000 young Americans going abroad each fall under college auspices. And if, as has been estimated, such formal participants represent half or less of all those students who do go overseas, then before long one can expect from 40 to 50 thousand American young people to be going abroad each year. The magnitude of this phenomenon would by itself require and compel the attention of anyone seriously interested in the course of American education.

There are additional reasons, obviously, for wishing to pay careful attention to this trend. The very fact of distance from home will intensify and perhaps dramatize any problems which students abroad will encounter. The visibility of the American student in a foreign land will bring into awareness whatever he may do -- be it good or bad. And because of universal dispositions to personalize judgment and evaluation, what others think of us may come to depend on the impression that our students create.

There is more cause for hope than alarm in this formulation, most educators would probably agree, as it is hard to think of a more attractive representative for any society than the kind of intelligent, aesthetically responsive, independent, and resourceful young person who seeks the adventure of overseas study. But there is still a serious and meaningful domain for research, for not every student will profit from overseas experience and a few may even be injured by it. Further, not every student who applies can be accepted (no university can make a place for every student, native or foreign, who might wish to come), and whenever selection is necessary one must seek justifiable and rational bases for such choice.

American institutions of higher education are well aware of this last-mentioned need, and one hears recurrently the request for information on verified and valid guidelines. But however urgent the need, there is in fact very little such information to be found. This report, exploratory and tentative as it admittedly is, constitutes one of the pioneering efforts to study the predictive validity of techniques of selection currently in use, and of experimental procedures for appraising applicants which might later be employed.

Because of this urgent need for information, and because in our own program we must each year reject from 50 to 60 per cent of all those who apply, we decided to undertake this provisional inquiry. It was our hope that at
least broad trends would emerge, so that later more definitive study could be planned and initiated and so that problems and pitfalls in such research could be brought to light and later avoided.

The basic sample for our inquiry consisted of 85 students (28 males, 57 females) who applied and were accepted for study abroad in the spring of 1965. In the fall of 1965 these students went overseas, and in the spring and summer of 1966 their performance overseas was evaluated.

At the time of application, academic achievement in general, and in language, was recorded, ratings by the selection panels were gathered and standardized, and an experimental battery of tests and interviews was administered. Not every subject participated in every phase of this survey, but the frequencies were in all cases large enough to permit later statistical analyses.

From comparison of these sources of information with similar data gathered on students of equivalent academic standing who did not apply for the overseas programs it was possible to specify some of the factors differentiating applicants from non-applicants.

Scholastic achievement, by fiat as it were, was a major determiner as applicants were required to have a B-average in all work, and likewise in courses in language. To minimize the influence of this factor on other determinants of participation, a sample of non-applicants having similar standing on academic achievement was studied.

In comparing these two samples of high-achieving students several prominent themes were discovered, and several other themes that one might expect to find were not found. One factor of clear differentiation had to do with range of interests in general, and breadth of viewpoint. These perspectives were perhaps most clearly illuminated in the personal interviews held with 30 applicants and 23 non-applicants. The applicants, on a special "interviewers' Q-sort" were described as adventurous, interested in the new and different, and deeply responsive to their experiences; whereas, the non-applicants were characterized as narrower, more conventional, and as stressing income and financial status as major life goals.

A second differentiation lay in political and social attitudes. The applicants were more anti-colonial, more anti-authoritarian, and less conservative. They valued change -- of any kind -- more highly, and were more impatient with the status quo and any errors it might contain.

A third contrast was found in measures of verbal and linguistic ability. The applicants scored considerably above the non-applicants in this domain.

Among the factors on which differences were not observed, two may be chosen for citation. First, on all indices of aesthetic discrimination, originality, and creative potential the applicants achieved about the same scores as the non-applicants. And second, on measures of social judgment and social perceptiveness the two samples were approximately equal. These data are presented, and interpreted, in Chapter IV above.
Preliminary analyses were also made of selected versus rejected applicants and of accepted applicants who were willing or unwilling to participate in the assessment project. The findings will not be reviewed here (they appear in Chapter IV), as we wish to keep this summary as brief as possible and the major focus should be on those variables which related to the quality of performance in overseas study.

To develop criteria of overseas performance, four lines of information were developed. First, nominations of outstanding performance were requested from the students themselves; from these nominations, standardized scores were derived for use in the later statistical analyses. Second, rankings of student performance were requested from directors and associate directors of each overseas center; again, standardized indices were generated from each set of rankings, so that a single composite distribution could be used in subsequent analyses. Third, adjusted (to Berkeley standards) grade point averages were available, and were used as one of the criteria; and fourth, each student was asked to contribute a numerical rating of his own personal evaluation of the worth of his year overseas.

The first three criteria (peer nominations, directors' ratings, and academic attainment) were significantly intercorrelated, and might be viewed as three slightly different facets of an overall assessment of quality of performance. The fourth criterion -- personal satisfaction with the year abroad -- stood alone, and should be studied, therefore, as an independent criterion. In a very shorthand way, what one wishes in a student going overseas is first a very good quality of work and effort -- which will be revealed and registered in the appraisals of his peers, his directors, and his instructors -- and second a personal reaction that the year overseas was worthwhile and rewarding.

From among the many tests, ratings, and other indices available, several patterns of relationship were found. Prior academic achievement, and cognitive tests such as those of verbal ability and linguistic aptitude, gave relatively valid forecasts of standing on the first three criteria. A selection committee, in other words, would be well-advised to pay serious attention to past performance and to any additional test-based evidence of linguistic aptitude and verbal ability.

From the interviewers' Q-sorts, qualities of spontaneity, vitality, sense of responsibility, and optimism were diagnostic of better performance overseas, and qualities of indifference, feelings of superiority to other less sophisticated students, and over-attention to dress and appearance were negative forecasters.

The personality tests (Adjective Check List, California Psychological Inventory, Minnesota Multiphasic Personality Inventory, and Study of Values) did produce significant correlations, but the yield was not great and the magnitudes of the relationships were generally exceeded by those found in other domains of assessment. Dispositions toward intraceptive habits of mind, self-acceptance, and lability appeared to have positive prognostic implications; whereas, aggressiveness and the need for succorance had negative.
Measures of political and social attitudes had little or no forecasting power, nor did measures of creativity and originality. Range of information was positively correlated, and perceptual acuity with respect to physical and tangible stimuli offered some promise.

The pattern of relationships with the remaining criterion -- personal reaction concerning the worth of the year abroad -- was different. Prior achievement, cognitive talents, and breadth of knowledge were of little moment. What seemed to forecast a favorable opinion was the degree to which control, rectitude, and acquiescence had been already internalized at the time of application. Students who feel a sense of accomplishment and fulfillment in a year overseas tend to be those who would feel that life is worthwhile and rewarding under other and more ordinary circumstances. A year abroad, i.e., is no "cure" for anomie, distress, and disaffection; an applicant with these problems will be no happier about his lot overseas than at home; however, he might profit intellectually and academically.

In the concluding section of our analyses brief attention was paid to patterns and predictive combinations of variables. This is clearly the route one should take if he wishes to maximize the accuracy of forecasts, and it is a route we intend to take in our future efforts. However, because of the highly empirical nature of any such search for combinations the requirements for cross-validation and verification are exceedingly stringent. Without such cross-validation -- and in this provisional and exploratory endeavor we can offer none -- it would be quite improper to dwell on the combinations we derived merely to illustrate the methodology and our intention.

As a final statement, we should like to say that we have been distinctly encouraged by our research efforts to date. We have discovered some new and to us unforeseen leads which we will wish to exploit, and we have been likewise encouraged to find some of our expectations disconfirmed. It is our hope that we will soon be able to undertake new and more definitive inquiries, and we also hope that other researchers -- perhaps stimulated by our comments -- will initiate parallel and more comprehensive inquiry. With so little known, and nothing proved, support must surely be given to anyone proposing serious study of the problem.
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Appendix A

Items from the Research Interviewer's Q-sort.

Instructions: The 60 items in this Q-sort are to be used in formulating a diagnostic portrait of the person interviewed. The set of statements should be sorted into 7 categories, with frequencies of 3-7-10-20-10-7-3. In the first category, put the 3 statements which are most descriptive, diagnostic of, or salient for the interviewee; in the second category place the 7 statements which are next most descriptive; and continue this sequence of placement down to the last category in which the 3 least descriptive statements should appear.

1. Is stereotyped and unoriginal in his approach to problems.
2. Is verbally fluent, conversationally facile.
3. Prefers action to contemplation.
4. Sees himself as an intellectual; values intellectual endeavor.
5. Tends to arouse hostility and resentment in other people.
6. Has a good sense of humor.
7. Is optimistic about his own professional future and advancement.
8. Is self-reliant; independent in judgment; able to think for himself.
9. Is frank and candid in his relations with others.
10. Is concerned with philosophical problems, e.g., religion, values, the meaning of life, etc.
11. Communicates ideas clearly and effectively.
12. Tends to be ostentatious and exhibitionistic.
13. Has high degree of intellectual ability.
14. Has a narrow range of interests.
15. Has slow personal tempo; responds, speaks and moves slowly.
16. Is socially perceptive; responsive to interpersonal nuances.
17. Is a conscientious, responsible, dependable person.
18. Takes an ascendant role in his relations with others.
19. Is rigid; inflexible in thought and action.
20. Is a likeable person. (N.B. the subject's general acceptability rather than the rater's personal reactions is intended.)
21. Has good judgment, common sense; can deal effectively with the concrete and practical.
22. Is persistent in working toward his goal.
23. Lacks insight into his own motives and behavior.
24. Is natural; free from pretense; unaffected.
25. Is persuasive; tends to win other people over to his point of view.
26. Identifies with management, men of property, financially successful people.

27. Seeks approval from a small circle of friends; not concerned about reactions of people-in-general.

28. Identifies with laboring class and union organization.

29. Can disagree with others without becoming anxious.

30. Relatively uninterested in esthetic matters, e.g., art, sculpture, ceramics, etc.

31. Has little interest in the new and/or different; is more comfortable with and prefers the old and well-known.

32. Self-sufficient and independent; can cope unaided with nearly any situation.

33. A "traveler" by nature; seeks what is different, unexplored, and challenging.

34. Attentive to and values personal appearance, dress, clothing, etc.

35. Basically conservative in political and social outlook.

36. Has strongly moral views on right and wrong ways of behaving.

37. Income and financial status are major life goals.

38. Tends to see fellow-students as immature, adolescent, etc.

39. Lives pretty much day-by-day, has few if any long-range plans.

40. Has a strong sense of purpose in life, even if these purposes are as yet ill-defined.

41. Feels more or less untouched and unchanged by educational experiences to date.

42. Responds strongly to erotic stimuli and provocation.

43. Tends to arouse erotic responses in members of the opposite sex.

44. Unable to admit weakness, doubt, inadequacy, etc., in self.

45. Tends to yield, give in, and defer in interpersonal differences.

46. Speaks up and defends own views without hesitation.

47. Is made anxious and uneasy by ambiguity, uncertainty, and confusion.

48. Prefers books, theories, ideas, etc., which are clearly structured, well-defined, and unambiguous.

49. Dedicated to humanitarian and egalitarian ideals.

50. Tends to feel superior to students who are less intelligent, less sophisticated, less talented.

51. Reluctant to commit self to any overt course of action; prefers to wait, delay and sense what others will do.

52. Indifferent to time, inattentive to dates, periods, epochs, and the time-aspect of man's experience.

53. Puts a high value on achievement, e.g., GPA in college, tangible success in life, etc.

54. Unambitious, more interested in enjoying life than in accomplishing something in life.

55. A complex, deeply responsive individual.
56. Basically simple and undifferentiated in personality (N.B.: not necessarily unintelligent, dull, etc.).

57. Conveys a sense of vitality, spontaneity, responsiveness, etc.

58. Appears apathetic, listless, uninterested in others and the world around.

59. Externally motivated - reads, thinks, works, etc., when prompted by others and/or external demands.

60. Internally motivated - "inner directed," seeks out and initiates new endeavor whether coerced or not.
Appendix B

Letter of Invitation Sent to Students Selected for Study Abroad in 1965-66

University of California
Institute of Personality Assessment
and Research
2240 Piedmont Avenue
Berkeley, California

May 6, 1965

Last year the Institute began a study of students participating in the Education Abroad Program. Each student took a number of attitude questionnaires, answered a set of questions pertaining to educational goals and expectations, and then came to the Institute for about an hour and a half to complete some experimental devices that need to be done under supervision.

These same students are now being asked to tell us something of their experiences in overseas study and living, and their evaluations of what has happened. These outcomes are to be studied in the context of the research materials gathered last spring.

We are writing to you to ask if you would be willing to participate in the study of this year's students going overseas from Berkeley. Education abroad is a significant and rapidly expanding venture in American colleges; its virtues, difficulties, values, etc., are largely unknown, and careful study of participants is therefore vital. If you like what happens in your year overseas, and prosper from it, this should be known; if you do not, and if your progress is less than you would have liked, this too should be known.

These, in brief, are the reasons for asking you to join in this study. We think that you would find most of the questionnaires and inquiries tolerable, and a few of them are usually thought to be interesting. However, the justification for the request lies in the seriousness and significance of the topic, and not in any entertainment value of the tools being used.

All of you have already taken one test at the Institute, the Minnesota Multiphasic Personality Inventory. This test is one of the aids used in selection, and is administered to applicants at all campuses of the University. The instruments which would now be administered come under a different category: they are intended for research analysis only, and would not be used in any way whatsoever to determine your assignment or selection. All records obtained in the research project are kept under confidential file at the Institute, and used only for analysis of overall trends and relationships. The Institute, incidentally, has been studying individuals intensively for over 16 years, and is very cognizant of its responsibilities in taking care of records of this kind.

We are enclosing a postcard, which we hope you will return indicating willingness to participate. All but one or two of the students who are
now overseas from Berkeley participated last year, and we hope to equal this in 1965. There are two things to do in the study this spring: first, a packet of materials to be completed at home; these will take about five or six hours altogether, but by spacing the work out over a 10-day or two-week period the task is not odious; second, coming to the Institute (we will get in touch with you about convenient times) for a one and one-half hour session of timed tests.

Because time is short, the packet of tests to be done at home is enclosed. A return address is on the inside envelope; if you do not wish to participate in this study, please drop the packet in any campus mail box so that the materials may be returned to us. If you are able to participate, and we hope that you will, please try to complete these tests and return them (via campus mail) by May 17. This will then leave two weeks in May to schedule the sessions at the Institute.

Because of the fact that we will want to check with you again in the spring of 1966, it will not be possible now (1965) to report your scores back to you; however, after the follow-up in the spring of 1966 we will be glad to give you a personal, and confidential, report on your own results.

If you have any questions, please call (ext. 4055), and we will do our best to answer them. We hope the project arouses your interest and impresses you as something worth doing. Your participation would be greatly appreciated.

Sincerely,

Harrison G. Gough
Associate Director, and
Professor of Psychology

William A. McCormack
Campus Coordinator,
Education Abroad Program
Appendix C

Confidential Nomination Form -- Education Abroad Project

Instructions:

The names of the ___ students from Berkeley who participated in the Education Abroad program in _____ are listed below. As explained in the accompanying letter, we are asking you to nominate the ___ or ___ students who in your judgment most clearly attained the goals — both academic and personal — of the program. You may (and should) nominate yourself if you think it is warranted.

In making your nominations, factors such as the following should be considered: scholastic achievement; growth in self-insight and personal maturity; deepened sensitivity to art, literature, music, and life in general; broadened perspectives on economic and political issues; heightened appreciation of the different yet appropriate ways in which different cultures and different people come to terms with the demands and exigencies of the human condition; constructive and/or beneficial impact on students and other residents of the host country; ability to form meaningful friendships and personal contacts.

To record your nominations, please place a check mark on the line in front of the names of the ___ or ___ students you feel should be nominated.

(names listed here)

If you feel that any one of the nominees is especially outstanding, please indicate by drawing a circle around the name of this student.

These nominations will be treated in full confidence, and will be used only in the analysis of general trends. Your help in submitting a set of nominations is sincerely appreciated. When this form is finished, please send it (unsigned) via airmail to:

Education Abroad Project
Institute of Personality Assessment and Research
University of California
Berkeley, California 94720
U.S.A.
Appendix D

Confidential Ranking Form for Education Abroad Program

Name of rater: _________________________________  Date: ________________

Instructions:

The names of the Berkeley students who came to your center for the 1965-66 program are listed below. Would you please rank all students, giving your evaluation of their overall performance in the overseas program. If a student has dropped out, please include him in the overall ranking as some form of rating is desired for every student.

Overall performance may be viewed as a composite of these considerations: quality of academic work, responsiveness to the opportunities and challenges of the overseas situation; maturity and good judgment in meeting stress and uncertainty; and the degree to which the student fulfilled the aims and goals of the education abroad program.

On the list below, please enter a "1" after the name of the student ranking highest on overall performance, then a "2" after the student ranking second-highest, and so on down until all students have been ranked. Tied ranks may be used where necessary, but the goals of the study will be best served by keeping ties to a minimum; i.e., even small differences between students should be preserved in the rankings.

The Berkeley students participating in the program at ____________:

(names listed here)

When finished, please return via airmail to:

Education Abroad Project
Institute of Personality Assessment and Research
University of California
Berkeley, California 94720
U.S.A.
Appendix E

Education Abroad Project -- Personal Report Form

Name: ___________________________ Date: ____________
Overseas center: ___________________________

Instructions:

Please read through the ratings and definitions below, and then check the line after that category which best coincides with your own reaction.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Personal choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>My year overseas has been a wonderful and worthwhile experience; I don't see how I could have spent a year more profitably.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>My year overseas was very rewarding; I derived a great deal of benefit from this experience.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>My year overseas was very pleasant, and I believe I profited more from my overseas experiences than I would have from a year at home.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>My year overseas was pleasant and beneficial, but only slightly more profitable than a year at home.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>My year overseas was worthwhile, but no more so than a year at Berkeley, had I remained at home.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>My year overseas was not, on the whole, very worthwhile, and I probably would have been better off had I remained at home.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>My year overseas was not at all worthwhile or profitable, and I definitely would have been better off had I remained at home.</td>
<td></td>
</tr>
</tbody>
</table>

When you have checked your response, and entered your name, date, and overseas center, please mail this sheet via airmail to:

Education Abroad Project
Institute of Personality Assessment and Research
University of California
Berkeley, California 94720
U.S.A.