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THE PREDICTION OF EARLY TERMINATIONS FROM JOB CORPS BASED
ON BIOGRAPHICAL CHARACTERISTICS

The University of Arizona

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THE PREDICTION OF EARLY TERMINATIONS FROM
JOB CORPS BASED ON BIOGRAPHICAL CHARACTERISTICS

by
Guillermo E. Gallegos

A Dissertation Submitted to the Faculty of the the
DEPARTMENT OF PSYCHOLOGY
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY
In the Graduate College
THE UNIVERSITY OF ARIZONA

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THE UNIVERSITY OF ARIZONA
GRADUATE COLLEGE

As members of the Final Examination Committee, we certify that we have read
the dissertation prepared by Guillermo Enrique Gallegos

entitled "The Prediction of Early Terminations From the Job Corps
Based on Biographical Characteristics"

and recommend that it be accepted as fulfilling the dissertation requirement
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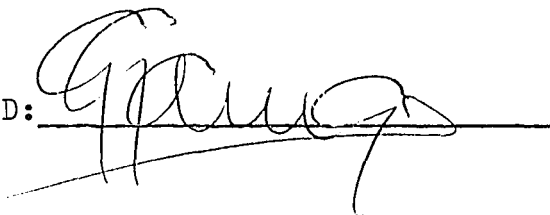
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SIGNED: _____

A handwritten signature in dark ink, appearing to be 'G. P. ...', is written over a horizontal line that serves as a signature line.

A mi esposa Marta
y mis hijos
Teri y Sebastian .

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ABSTRACT

The influence of background characteristics on dropouts from a Job Corps Center was investigated using a Biographical Information Blank. Successful and unsuccessful male and female volunteer Corpsmembers were compared and the data analyzed by univariate and multivariate statistical techniques. Results strongly support the prediction that biographical characteristics are important in determining Corpsmember failure in the program. It was also found that the nature of family and peer relationships; previous social adjustment and structured activity and factors related to ethnicity and cultural attitudes are influential. There are also indications that potential dropouts may be affected in a positive manner to complete their training.

INTRODUCTION

According to the U. S. Department of Labor in the fourth quarter of 1977 the seasonally adjusted unemployment rate for youths 16 to 19 years old was 16.7% and for minority youths the jobless rate was 38.3%. These rates are about two and a half times greater than the jobless rates for the total labor force and for the total minority segment of the labor force. Urban youths are identified by Levitan and Taggart (1971) as peripheral workers characterized by intermittent or part-time, low-income employment concentrated in low income industries and occupations. The authors further distinguish a "credentials gap" or educational difference between Anglo youngsters and their minority counterparts as a prime reason for the continuing disparity in their respective employment patterns. Gordon (1972) offers a "dual labor market" argument where teenagers, particularly those in minority groups, are relegated to compete for low paying, unstable employment opportunities in the secondary labor market. Harrison (1974) expands the dual market proposition to include an "irregular" sector (or the "hustle"), where teenagers engage in a variety of illegal activities, and a "welfare" sector, where individuals

receive income transfer payments in return for their investment of time.

A direct relationship has also been often described between schooling and employment opportunities and income. According to the 1970 census (Kahn, 1973), 33% of those without a high school diploma were earning less than \$6,000 a year, but only 13% of those with diplomas were doing so poorly. The average 1970 earnings for those who had finished high school was \$11,269; for those who stopped after elementary school, \$7,668. Nearly three-quarters of the heads of poor families (\$4,275 annually for a family of four) never finished high school. Despite these statistics, the 1970 census reports that 8 million adults between the ages of 20 and 29 did not possess a high school diploma. They represented 20% of the population between those ages.

Given the severity of the social and economic consequences of the school dropout problem, educators and social scientists have attempted to present solutions. Four general approaches have emerged during the last two decades. One strategy, mainly sponsored by Neil (1960) and Illich (1971), suggests doing away with the coercive nature of education thereby eliminating the possible need to rebel against authoritarian rigor. Another view is presented by Bloom, Hastings, and Madans (1971) who advocate that "the major resources of the schools should be devoted to increasing the effectiveness of individuals rather than to

predicting and selecting talent" (p. 6). Consequently, they recommend curriculum and environmental modifications that impose greater responsibility on the methods of presentation (teacher or material). A few examples of implementation of this approach are open classrooms, team teaching, individualized, self-paced instruction, and teacher accountability. A third approach represents a more direct action than the previous two. It was chiefly implemented by the U.S. Office of Health, Education, and Welfare under Title 8 of the Elementary and Secondary Act entitled Dropout Prevention. This solution entails singling out potential dropouts and implementing with them the suggestions presented by the second approach.

A fourth strategy in dealing with the dropout problem is to provide job training to those who have already left school. In 1962, with the enactment of the Manpower Development and Training Act the federal government began to provide alternatives to school to those youngsters that, for varied reasons, had been unable to complete their regular education. By offering remedial education programs and training in specific job-oriented skills it was hoped to improve the employability of dropouts. When in 1974 the MDTA was replaced by the Comprehensive Employment and Training Act (CETA) it had already enrolled 575,500 youth 21 years and under in classroom skill training and 170,200 in on-the-job training. The Neighborhood Youth Corps provided

work experience in rudimentary tasks to 842,000 out-of-school youths, with 3.6 million enrolled during summers. The most comprehensive of the Manpower programs, the Job Corps, had provided during those years job training, basic education and living skills training to one-quarter of a million male and female young adults. This study will focus on one of 75 Job Corps centers currently in existence.

The Job Corps Program

The Job Corps was established by the Economic Opportunity Act of 1964. Its legislative purpose is

To assist young people who need and can benefit from an unusually intensive program, operated in a group setting, to become more responsibly employable, and productive citizens. (Economic Opportunity Act of 1964, as amended (42 USC 2711)).

The Job Corps program is largely residential. To qualify for admission a prospective Corpsmember must be between the ages of 16 and 21 and

a low-income individual or member of a low-income family who requires additional education, training or intensive counseling and related assistance in order to secure and hold meaningful employment, participate successfully in regular schoolwork, qualify for other training programs suitable to his needs, or satisfy Armed Service requirements. (Economic Opportunity Act of 1964, as amended (42 USC 2713)).

By June 1972, the Job Corps enrollment was 22,700 youths in 71 residential centers in 35 states and Puerto Rico. The population being served was clearly in agreement with the Job Corps mandate. It was composed mostly of

low-skilled, unemployed, or underemployed, school-dropout youth (Gallagher, 1976).

On a programmatic basis, the Job Corps provides its enrollees with

an intensive and well organized and fully supervised program of education, vocational training, work experience, planned avocational and recreational activities, physical rehabilitation and development, and counseling. (Economic Opportunity Act of 1964 as amended (42 USC 2718)).

The program, thus, offers its enrollees alternatives in several areas. Its residential component allows Corpsmembers to move, at least temporarily, from generally impoverished housing conditions to dormitory facilities in the centers. Counselors and Residential Advisors are expected to ease any emotional difficulty created by the transition. The educational component of the program offers compulsory reading and mathematics courses to all enrollees. These courses are organized in a manner that allows Corpsmembers to start at their own level (as determined by tests taken on entrance) and advance at their own pace through a series of programmed materials. Other curriculum offerings include Health Education, Cultural Awareness, Home and Family Life, and Driver Education. "English as a second Language" is provided to those whose primary language is other than English and preparation for the GED (General Education Development) examination is provided to those pursuing a high school equivalent certificate.

Vocational Training offerings vary according to the job market characteristics of the area where each center is located. The training is guided by standards which outline skills needed for about fifty occupations. Some labor unions have contracted with the Department of Labor to provide Corpsmembers part of the required apprenticeship training in their respective trades. In addition, training in the center is later complemented by a Work Experience program that utilizes local institutions, companies, or agencies.

Complete medical and dental programs are also mandatory components of all centers. The emphasis is understandable given that over 50% of all enrollees have not seen a doctor or dentist in ten years (Gallagher, 1976). Medical care is complemented by a nutritional program that provides three balanced daily meals to Corpsmembers. Furthermore, all Corpsmembers receive a monthly allowance and are entitled to placement services and readjustment funds if they remain enrolled in the program for a minimum of 90 days, whether or not they graduate.

The Job Corps system distinguishes three types of enrollee termination. Category I includes those who have completed the program laid for them in its entirety. The duration of programs is individually tailored and varies between nine months and two years. Category II are those who have remained enrolled for a minimum of 90 days but

choose to leave before graduation. Terminees in this category are also considered completers by the Job Corps administration based on the increment of their marketable skills as a result of their enrollment in the program. Finally, Category III includes those who leave before 90 days. Despite the described advantages of remaining in Job Corps to complete the program, about 50% of all enrollees leave in less than 90 days (Gallagher, 1976). The reasons for this high rate of failure are complex and elusive.

The Tucson Job Corps Center

The Tucson Job Corps Center, with 200 slots for resident Corpsmembers and 50 non-residents, is a comparatively small center. It was inaugurated in June 1979, which makes it one of the newest in the country. The Center is located in a low-density, semi-industrial area of Tucson (pop. 500,000), although near important city parks and avenues. Its vocational offerings include electronic assembly, plumbing, building maintenance, welding, electrical wiring, business and clerical, food services, auto mechanics, auto body, and retail sales and accounting.

The Center is intended to serve primarily youths in the Southern Arizona area (the Phoenix Job Corps center attends to the upper half of the state) although applicants from other areas are admitted. During the first year of operation about 70% of enrollees were from Tucson. As of

July 1980, the center enrollees had been 53.5% male and 46.5% female. The racial composition was 41.86% Chicano; 29.84% Caucasian; 11.63% Indian; 8.14% Black; and, 8.53% other.

Of 355 Corpsmembers who left the Center between October 1, 1979, and September 30, 1980, 117 or 33% are Category I, 98 or 27% are Category II; and, 140 or 40% are Category III. The TJCC, when compared with other centers in the country at the time of collection of data, was better than most in terms of its weekly termination rate (2.76, which places it in 8th place among 74 centers). Its completion rate (Categories I and II combined) of 60% was about average.

The Measurement of Background Data

Owens (1976) defines the scored autobiographical data as follows

Objective or scorable autobiographical data as inputs for predictive, diagnostic, or counseling purposes are typically secured by use of some more or less standardized form, a Biographical Information Blank (BIB), a Biographical Data Form, an application blank, and interview guide, and Individual Background Survey, or something similar. The data form has commonly been composed of multiple choice items which permit the respondent to describe himself in terms of demographic, experiential, or attitudinal variables presumed or demonstrated to be related to personality structure, personal adjustment, or success in social, educational, or occupational pursuits. Usually the items have called for "factual" data but those which have tapped attitudes, feelings, and value judgments resulting from experience have not been excluded.

Excepting the demographic area, the time referred to by the item should be in the past. Two important features of the data are that they are: (1) Self-reports (autobiographical), and (2) in a format which lends itself to conventional psychometric evaluations and interpretations. (pp.612-613)

A direct antecedent of the scorable autobiographical data has been the popular application blank. As early as 1894 at the Chicago underwriter's meeting (Ferguson, 1961), Colonel T. L. Peters of the Washington Life Insurance Co. of Atlanta, Georgia, proposed that one way to improve the selection of life insurance agents

. . . would be for managers to require all applicants to answer a list of standardized questions, such as the following: Present residence? Residence during the previous ten years? Birth date and place? Marital status? Dependent or not dependent for support on own daily exertions? Amount of unencumbered real estate? Occupation during the previous ten years? Previous experience on life insurance sellings? For what company? For what general agents? When and where? Claims, if any, for unsettled accounts? References?

It was, then, a group of businessmen who generated the use of standardized personal history and application blanks. In 1915, Woods (see Ferguson, 1961, 1962) attempted an empirical analysis of the responses of good and bad salesmen to the individual items of an application blank, and, in 1917 Scott, following Woods' suggestion, included an application blank or personal history records among his "Aids in the Selection of Salesmen." By 1922, Goldsmith had published an article on "The Use of the Personal History Blank as a Salesmanship Test" in which the procedures of empirical item

analysis and weighting were made quite explicit. Three years later, Manson (1925) reported on combining items for sales selection via multiple R. Kenagy and Yoakum (1925) examined background factors and personal data in relation to general sales success. Viteles (1932) completed a study in which he established that an objective scoring scheme for an application blank could be useful in the selection of taxicab drivers. Cross-validated on 188 new hires a given critical score would have rejected 60% of the poorest earners, 18% of average, and 22% of the best.

The military establishment of World War II enjoyed considerable success in their use of a scored biodata form. Guilford and Lacey (1947) reported average validities of 0.35 to 0.40 in predicting success of Air Force student pilots in training and comparable r 's for navigators of 0.25 to 0.30. Similarly, Parrish and Drucker (1957) reported on a 16-year research program by the Adjutant General Office, U. S. Army, and noted that the biodata blank had been the most consistently successful device for predicting peer and tactical officer ratings of leadership in OCS ($r = 0.45$). They also noted that a specially constructed inventory key predicted a pass vs. resign criterion at an r of 0.50. Among closely related lines Roy, Brueckel, and Drucker (1954) found the biodata blank more valid ($r = 0.26$) than any combination of ten tests of aptitude, attitude, and

physical proficiency in predicting ROTC leadership ratings of officers and cadet peers at six schools (N = 2,003).

Allport (1942) reviewed the use of personal documents in psychology. He listed them as including autobiographies, questionnaires, verbatim recordings, diaries, letters, and expressive and projective productions. He also noted that biographical data had been employed in studies of attitudes and there were apparent concern with criteria for the life history. In general, Allport characterized the use of personal documents prior to 1920 as "uncritical", but noted that properly handled they do conform to the requirements of science. Guthrie (1944) stated:

An individual's . . . past affiliations, political and religious, offer better and more specific predictions of his future than any of the traits that we usually think of as personality traits. When we know how men adjust themselves through learning to their situation, and also know the situations to which they have been exposed, . . . we know the men themselves and there is no need to speculate concerning the deeper reaches of the soul until we can explore these with similar knowledge.

Owens (1976) points out that in gathering background data the scored autobiographical data blank should be the method of choice for the following reasons: (1) Even if the same information could be obtained through parents, friends, and acquaintances, "vital subjective reactions would be lost"; (2) the questionnaire format could be replaced by letters, recordings, and autobiographies but the method is laborious, often unreliable, and usually lacking in

relevance to a given criterion; (3) the interpretation would not have to be objective and the blank "scored"--yet the projective interpretation of "open-ended" statements is slow, expensive, and of apparently poor relative validity; and the post-hoc establishment of more objective scoring categories or protocols is "tedious, may involve substantial sampling error, and is beset with some subjectivity in the interpretation of a particular response."

The items that compose a scorable biodata blank may be of a variety of types.

(1) Yes - No

Have you found your life to date to be pleasant and satisfying?

(2) Continuum, single choice

What is your weight?

- a) Under 135 Lbs
- b) 135 to 155 Lbs
- c) 156 to 175 Lbs
- d) 176 to 195 Lbs
- e) Over 195 Lbs

(3) Non-continuum, single choice

What was your marital status at college graduation?

- a) Single
- b) Married, no children
- c) Married, one or more children

- d) Widowed
- e) Separated or divorced

(4) Non-Continuum, multiple choice

Check each of the following from which you have ever suffered.

- a) allergies
- b) asthma
- c) high blood pressure
- d) ulcers
- e) headaches
- f) gastrointestinal upsets
- g) arthritis

(5) Continuum plus "escape option"

What was your length of service in your more recent full-time job?

- a) less than 6 months
- b) between 6 months and 1 year
- c) 1 to 2 years
- d) 2 to 5 years
- e) more than 5 years
- f) no previous full-time job

(6) Non-continuum, plus "escape option"

When are you most likely to have a headache?

- a) When I strain my eyes
- b) When I don't eat on schedule
- c) When I am under pressure

d) January first

e) Never have headaches

(7) Common stem, multiple continua

Over the past five years, how much have you enjoyed each of the following?

(Use continuum 1 to 4 at right below)

a) loafing or watching TV

b) reading

c) constructive hobbies

d) home improvements

e) outdoor recreation

f) music, art, or dramatics, etc.

(1) Very much

(2) Some

(3) Very little

(4) Not at all

(From Owens,
1976)

The items of a biodata inventory are typically keyed in one of two ways: first, each option may be scored as a binary variable with either unit weights or weights which reflect both the direction and the magnitude of criterion group differences; or, second, the options may be regarded as lying along a continuum and may be assigned either progressive unit weights or an irregular series. Once items have been keyed, several possibilities exist in terms

of how to best combine them to serve a given purpose. (1) A total score may be a simple sum of weighted or unweighted item scores which have in common only their relationship to a criterion; (2) Relatively homogeneous clusters of items may be identified and scores from them optimally weighted, via multiple R, for the prediction of a given criterion (Owens, 1976).

One clear advantage offered by the scorable autobiographical blank has been its tendency to be an outstanding predictor of a broad spectrum of external criteria. Ghiselli (1966) in his summary on "The Validity of Occupational Aptitude Tests" reported that when validities were averaged across a number of occupations, personal data predictors led all the rest. Their average correlations with criteria of trainability and proficiency were 0.44 and 0.41 respectively. On the other hand, Baehr and Williams (1967), in a review of the research investigating the validity of quantifiable items of background data, criticize the approach for, a) its empiricism, or its "failure to provide any explanation as to why certain background items should be combined or predictive"; and, b) its failure to "shed any light on the dynamic relationships between early home and school environments and eventual performance in an occupation." Schwab and Oliver (1974) reported four studies using Weighted Application Blanks (WAB) with public and private employees. After obtaining high correlations

between six variables and the criterion of tenure they found that none of the variables was able to stand after cross-validation. They concluded that "the WAB procedure is susceptible to identification of spurious relationships through subjective search procedures." That is, methods of determining item response categories guarantee differences in the experimental criterion groups; when a predictor variable is at least of ordinal metric, the number and content of the categories obtained by the methods of equal frequency, equal interval, and maximum weight classes can be manipulated until difference is obtained; nominal data can also be manipulated by collapsing categories. As a result, according to the authors, there is a high likelihood that the experimental weights will not "hold up" after cross-validation.

In their study of research scientists Morrison, Owens, Glennon, and Albright (1962) met the criticism of empiricism by a factor analysis of life-history items which had been previously validated against three performance criteria. Their objectives were a better comprehension of the personal characteristics represented by the items and the use of the identified dimensions to examine the differential profiles of three criterion groups. Five factors were identified which accounted for 23% of the variance. The rather small proportion of variance accounted for, in

the view of the authors, confirms the expectation that life-history data would reveal considerable uniqueness. While this "in-depth" study did generate factors which distinguished between different behavior patterns within the research-scientist occupational classification, the factors could not be expected to be of sufficient generality for use in the broader areas of counseling and placement or to contribute to an understanding of the dynamic relationships between personal background and general occupational success.

It appears, thus, that although scores obtained in quantified background data seem to be valid predictors of various criteria, the weighted items may bear no rational relationship to the criterion in question. To quote Guion (1965) "The procedure is raw empiricism in the extreme; the 'score' is the most heterogeneous value imaginable, representing a highly complex and usually unraveled network of information."

The Job Corps Biographical Information Blank

Between 1969 and 1970 Richardson, Bellows, Henry and Co., Inc., under contract with the Job Corps conducted a study with the main objective of developing a Biographical Information Blank that could determine the probabilities of new enrollees of staying in Job Corps for at least 30 or 90 days. Twenty centers across the country participated in the

study with a total number of 2,512 new enrollees as Subjects. Following a pilot test of the instrument an experimental BIB, consisting of 151 items, was administered to the Corpsmembers. After 30 and 90 days of the Subjects' date of entrance the answer to each item by members of two experimental groups (continuing and dropouts) were compared and correlated in terms of their ability to predict the enrollment status of the Subjects. Each item was weighted and keyed taking into account sex and race of the subject as well as the type of center in which they were enrolled. The procedure yielded two instruments, one for males and one for females, that in their final form appear to possess high predictive validity. An examination of these questionnaires, however, show major problems in the scaling approach utilized. Although many items request information that could be answered on a continuum scale, the authors opted for presenting cut-off points that arbitrarily limit the response options of the subjects. Furthermore, in items that request attitudinal standings or subjective evaluations of past experiences the response options are generally vague and are not sufficiently graded to discriminate fairly gross differences between subjects.

With the data obtained in this study Gallagher (1976) produced a second study by using a different statistical approach and including one more, smaller sample. She used the Automatic Interaction Detection (AID) to divide the

sample into subgroups of enrollees with similar background characteristics and similar 30-day retention rate (her dependent variable). The subgroup described the relationship between the independent variables and the criterion. The predictive models developed in this manner were able to predict early termination "better than chance". When these models were used to predict the criterion behavior of a second sample they were largely ineffective. The procedure appears to be extremely laborious and does not seem to improve on the traditional approach to scoring BIB data which selects all items significantly correlated with the criterion. More importantly, the AID provides no standard procedure to validate findings or to judge the extent to which the procedure is affected by sampling stability.

The present study utilized the BIB format and most of the items developed by Richardson, Bellows, Henry, and Co. The scaling approach, however, was altered to include continuum items and Likert-type scales. (see Appendix A)

Factors Influencing Early Termination in the Job Corps

The Job Corps has made several studies of dropouts to determine early termination causes and several other studies which include dropout data. Results, although sometimes conflicting, relate early termination to biographical characteristics of enrollees. Some of these studies are described.

According to Job Corps data files (Gallagher, 1976) the racial composition of enrollees is 67% Black, 18% White, and 15% other. Blacks and "other" have a greater length of stay than Whites. Blacks have a higher rate of disciplinary discharge (Unco, 1972), but leave most frequently for "inadequate training, fights, and homesickness" (Harris, 1967). Whites, especially those from rural areas, have the most difficulty adjusting to group and interracial living (Yankelovich, 1967). Harris (1967) showed that Whites left primarily because of "fights" and "too many Negroes in the center." Very few studies report on retention characteristics of Spanish-speaking Corpsmembers. In one center the Mexican-American female enrollees were more likely than others to remain for long periods of time and to have outstanding attendance records (Carrol, Greenberg, and Katsky, 1971).

Women, generally, stay longer, adjust to the program more easily, but have a greater need for emotional support than men while enrolled (Yankelovich, 1967). Data on relatively recently opened co-educational centers have not been found by this author. With respect to age, the literature suggests that 16 and 17 year olds have less success and drop out more frequently (Unco, 1972), present more discipline problems on center (Performance Research, 1967) and are more restless (Yankelovich, 1967) than older Corpsmembers. It has also been stated that proximity of the Center to home

promotes homesickness and departure (Unco, 1972) and that distance from home does not affect drop out (Harris, 1967).

According to Job Corps data files (Gallagher, 1976) the average enrollee has completed ninth grade but reads at the fifth grade level. Math skills at entry averages fourth grade. While there is not documented relationship between drop out and grade completed, enrollees with very low and very high achievement scores appear dropout prone (Engleman, 1971). Also, a previous court history of truancy or drug abuse can be a dropout predictor (Unco, 1970).

Dropouts have been found to have a strong mutual dependence upon parents and to drop out frequently because of homesickness. A large group of dropouts were found to come from relatively stable home environments whereas those who did not drop out came from negative environments (Unco, 1972).

Purpose of the Study

Although many Job Corps policies and programs are standard across all centers, individual centers vary widely in terms of size, geographic location, enrollees' ethnic composition, staff characteristics, physical plant, and vocational program offerings. It is the author's belief that if an early dropout detection system is to be effective it has to be on the basis of center specific models or small groups of similar centers.

The present study examined some of the socio-personal background characteristics of successful and unsuccessful enrollees at the Tucson Job Corps Center. From the studies reviewed it is clear that the demographic factors of this center are sufficiently specific as to warrant such an approach. The Tucson center is co-educational and its population is primarily Mexican-American and Anglo with a very low percentage of Black Corpsmembers. Results from previous studies, thus, offer only limited utility to this center.

By focusing on the student it was hoped to achieve some insight into one but by no means the only factor involved in a Corpsmember's decision of staying or dropping out from the Job Corps. Clearly, many center's characteristics are equally or more important in this process.

The sole purpose of an early dropout detection system was to focus the attention of relevant staff on dropout-prone Corpsmembers. Special programs can, then, be implemented to curb the number of early terminations from the program.

Hypothesis

1. It was hypothesized that biographical characteristics are significant determinants of early termination at the Tucson Job Corps.
2. It was also hypothesized that the biographical characteristics of successful Corpsmembers are significantly different from those of unsuccessful ones.
3. Finally, it was hypothesized that biographical differences would be more evident between Corpsmembers whose success or failure at the Center was marked than those whose performance at the Center was average.

METHOD

Subjects

Subjects were 98 current male and female volunteer Corpsmembers who had been enrolled at the Tucson Job Corps Center for over 90 days and 27 male and female also volunteer former Corpsmembers who remained enrolled for less than 90 days. Their demographic characteristics and status at the center are depicted in Table 1.

Instrument

A modified, by the author, Job Corps-Biographical Information Blank (JC-BIB), was utilized so as to provide subjects with a wider range of options in some items without the arbitrary cut off points presented in the original BIB. Likert-type scales have also been included to allow for more complete Subject reporting on attitudinal positions or subjective evaluations of past experiences. Some other items are "open ended" questions while still others remain as "fixed alternative." Finally, five contingent items have been included to tap biographical aspects pertaining to only a portion of the sample. The modified JC-BIB consists of 57 items plus the variables of sex and age of the subject. Each item-variable is related to one or more of the following 10 independent variables:

- | | |
|--------------------|------------------------------------|
| 1) work and school | 6) behavioral indicators of social |
| 2) self-concept | |

TABLE 1

Subject Characteristics

AGE:	16	17	18	19	20	21	22	23
No. of <u>Ss</u> :	3	27	28	25	22	14	5	1

SEX:	MALE	FEMALE						
No. of <u>Ss</u> :	59	66						

ETHNICITY:	Oriental	Anglo	Native-American	Mexican-American	Black	Other		
No. of <u>Ss</u> :	20	38	13	43	9	2		

	<u>GROUP I</u>			<u>GROUP II</u>				
*STATUS:	A	B	C	D	E			
No. of <u>Ss</u> :	45	13	27	13	27			

* STATUS:	A = Level I Corpsmembers: Graduated and holding a job 9 months later							
	B = Level I Corpsmembers: Graduated, but no job 9 months later							
	C = Still enrolled 9 months later							
	D = Level II Corpsmembers: Left after 90 days, but before completing							
	E = Level III Corpsmembers: Left before 90 days							

- | | |
|------------------------------|------------------------|
| 3) peer relationships | adjustment |
| 4) family relationships | 7) age |
| 5) socio-economic indicators | 8) ethnic group |
| | 9) sex |
| | 10) place of residence |

Procedure

The administration of the modified JC-BIB to current Corpsmembers was done in groups of about 25 and completed in four days. Former Corpsmembers were invited to the center and participated also in group administration of the instrument. Groups of former Corpsmembers varied from 3 to 9 Subjects per administration, requiring five different occasions to complete the sample. Information on the nature and purpose of the study was provided both orally and in written form preceding the instructions and Subjects were advised that they could withdraw from the project at any point.

Nine months after the collection of data was completed a records review was performed to determine the status, at that point, of each of the 98 Subjects who were enrolled at the same time of the administration of the information blank. Four subgroups emerged from this procedure which, together with the subgroup of initial dropouts, comprise the five subgroups described in Table 1. Subgroups A, B, and C were considered successful Corpsmembers (Group I) and subgroups D and E were considered unsuccessful Corpsmembers (Group II).

Statistical Analysis

Each of the 54 variables included in the modified JC-BIB were analyzed separately by univariate ANOVA and Chi-square, depending on their quantitative or qualitative nature, respectively. Multivariate discriminant function analysis was performed on Groups I and II using the 54 items as variables. Furthermore, the 10 independent variables that encompass the information blank were also analyzed by discriminant analysis. Another discriminant function analysis was run to separate the two extreme Subgroups A and E. Finally, in order to test hypothesis 3, a discriminant function analysis was generated for two criterion Subgroups, A and B combined, versus Subgroup E. The resultant weights were used to classify Subgroups C and D.

RESULTS

Results will be presented in the following order: Univariate analyses (Chi-square and F-ratio) of each of the 54 variables included in the modified JC-BIB; multivariate analysis (Discriminant function) of Subjects' responses to the BIB, first taking the 54 items as variables and then grouping the items in relation to ten independent variables. Finally, results of further analyses will be presented including univariate analysis of contingent items; multivariate analysis of extreme subgroups (A vs E); and classification analysis of intermediate subgroups (C and D).

Univariate Analyses

The items of the modified JC-BIB are of two types, non-continuum and continuum. Data obtained from the former is of a discrete nature while that from the latter is continuous. Accordingly, a Chi-square test was performed on the 26 non-continuum items and a one-way Anova used on the 28 continuum items. Results of the Chi-square are presented in Table 2.

As can be seen, four variables yielded statistically significant differences between Group I and II. Responses to item 3 (Where were you born?), $\chi^2 = 18.55$, $p < .001$,

TABLE 2
Chi-square Analysis of non-continuum items
in the modified JC-BIB

Item	x	d.f.	significance
1	7.59	4	----
3	18.55	4	.001
9	15.03	3	.001
10	13.08	10	----
11	16.95	5	.004
12	.58	2	----
14	1.10	4	----
16	.84	1	----
21	.40	1	----
25	2.97	6	----
27	3.05	4	----
29	4.13	4	----
30	1.96	2	----
31	6.14	5	----
32	1.49	2	----
34	3.21	4	----
37	7.78	4	----
38	.60	4	----
40	.05	1	----
41	4.65	1	.03
42	3.88	5	----
43	5.51	4	----
44	12.99	8	----
45	3.39	2	----
48	9.69	5	----
58	2.83	1	----

indicate that Subjects born outside the Southwest tend to be more successful than those from the area. Namely, the data shows that 23 out of 24 (96%) foreign Corpsmembers participating in the study and 23 out of 32 (72%) Subjects born in other areas of the USA were in Group I. This is in contrast with the success rate of Subjects born in Tucson (23 out of 37 or 62%) and in other parts of the Southwest (16 out of 32, or 50%).

Answers to item 9 (What were you doing just before you enrolled at the Job Corps?), $\chi^2 = 15.03$, $p < .001$, suggest that Subjects who had been engaged in a structured activity right before enrolling at the Center tended to be more successful. Specifically, every one of the 18 subjects who had been in school and 74% of those who had been working were in Group I. On the other hand, 26 out of 40 Subjects (65%) in Group II were doing "nothing" before enrolling.

Item 11 elicited the ethnic composition of the sample. Results indicate that the success rate of the Subjects was significantly linked to racial background, $\chi^2 = 17$, $p < .004$. All 20 Oriental Subjects participating were in the successful group. Of the 38 Anglo Subjects, 27 (71%) were in the same group. Nine Black Subjects participated and of them 6 (67%) were successful. Mexican-Americans had a success rate of 58% (25 of a sample of 43) and 54% of the Native-Americans were successful (7 out of 13).

The last item of the discrete variables that yielded significant differences between the two groups was No. 41 (Do you wish this Center had been further from home?) $x = 4.65$, $p < .03$. It suggests that Subjects classified in the unsuccessful group tended more than those in Group I to answer affirmatively. The difference was between 14% of Subjects in Group I wishing to be further from home and 33% from Group II.

The continuous variables were treated with a one-way Anova. The results are depicted in Table 3.

Of the 28 items in question only two yielded statistically significant differences between the two groups. Item 2 (How long did you live--in the place you were before enrolling in the Job Corps?) was one of them, $p < .003$. It appears that Subjects in Group I had significantly less time in such place ($\bar{x} = 9.38$ years) than those in Group II ($\bar{x} = 13.58$).

The second item yielding significant differences was item 7 (How many months did you think you would be at the Job Corps when you enrolled?) $p < .02$. It appears that Subjects in Group I tended to anticipate a significantly longer period of time at the Center ($\bar{x} = 14.8$ months) than Group II Subjects ($\bar{x} = 11.8$ months).

Discriminant Analysis of the Modified JC-BIB

Taking 54 of the 59 modified JC-BIB items as variables a discriminant function analysis was performed to

TABLE 3

Mean Scores and Univariate F-ratio values of
continuum items in the modified JC-BIB

Item	\bar{x} Group I	\bar{x} Group II	Total \bar{x}	F (d.f. 1/123)	P
2	9.38	13.58	10.73	8.93	.003
4	11.73	10.83	11.44	.15	----
5	16.39	16.52	16.43	.20	----
6	10.19	10.37	10.25	.34	----
7	14.79	11.82	13.84	5.40	.02
8	3.39	2.15	2.99	1.87	----
13	16.62	17.65	16.95	2.70	----
15	14.85	14.47	14.73	.15	----
19	3.22	2.42	2.97	1.83	----
20	4.90	4.10	4.65	3.44	----
22	1.53	.92	1.34	1.19	----
23	1.43	1.57	1.48	.10	----
24	1.06	1.35	1.15	1.24	----
26	7.22	10.37	8.23	.92	----
28	15.76	15.82	15.78	.49	----
33	.79	1.55	1.03	1.87	----
35	2.40	2.65	2.48	.47	----
36	2.83	3.20	2.95	1.39	----
39	.83	1.12	.92	.73	----
46	10.64	10.82	10.70	.78	----
47	4.46	4.45	4.46	.27	----
52	.82	1.47	1.03	1.97	----
53	2.15	2.60	2.30	1.74	----
54	2.26	2.35	2.29	.90	----
55	.19	.32	.23	.50	----
56	.20	.30	.23	.59	----
57	6.62	7.40	6.87	8.59	----
59	18.66	19.17	18.82	1.38	----

determine the degree of background differences between successful and unsuccessful Corpsmembers. The remaining 5 items were contingent on special Subject's circumstances (experience in foster homes; parents dead or divorced) and were not included in this analysis. They were analyzed separately and the results will be presented in the Further Analyses section later in this chapter.

Results of the analysis are displayed in Table 4.

The procedure effectively separated both groups at a highly significant statistical level. Furthermore, 86% of the Subjects were correctly classified in the analysis into their respective groups. This classification was achieved on the basis of Subjects' responses to 21 items, selected by the analysis as containing the most classificatory information. A list of those items follows. Their respective discriminant coefficients can be seen in Table 5.

- 1) In what city were you before you enrolled in the Job Corps?
- 6) What grade were you in when you left school?
- 8) How many friends from home did you find at the Job Corps?
- 10) Who is the person you care about most in your life?
- 11) Check the (ethnic group) that fits you.
- 13) How long did you live with (the woman that raised you)?
- 16) Were you ever placed in a foster home?
- 20) How many people live with you at home?

TABLE 4

Discriminant Analysis Using 54 items as variables

Canonical Discriminant Functions						
Eigen Value	Canonical Correlation	Wilks Lambda	Chi-Square	d.f.	Significance	
.79	.66	.56	65.46	21	.0001	

Group Centroids	
Group	Function 1
I	.60
II	-1.28

Classification Results				
Actual Group		N	Predicted Group Membership*	
			I	II
Group	I	85	75	10
Group	II	40	8	32

* Percent of cases correctly classified: 85.6

TABLE 5
Standardized Canonical Discriminant Function Coefficients.
Groups I and II

Variables	Function 1
1	.33
6	.75
8	.32
10	.19
11	-.52
13	-.19
16	.30
20	.32
23	-.22
28	.33
31	.25
34	-.40
37	.18
41	.37
45	-.34
46	-.22
52	-.34
53	-.48
55	-.19
58	-.29
59	-.78

- 23) How many part-time jobs did you have before enrolling at the Job Corps?
- 28) How long were you out of school before enrolling at the Job Corps?
- 31) Who did you live with just before starting at the Job Corps?
- 34) How often have you felt homesick while in Job Corps?
- 37) How often have you felt scared while in Job Corps?
- 41) Do you wish this Center had been further from home?
- 45) Was the Job Corps Center (better, just like, worse, than you thought it would be)?
- 46) How many good friends do you have?
- 52) How many times have you run away from home?
- 53) How many brothers or stepbrothers do you have?
- 55) How many times have you quit a job because you could not get along with others?
- 58) Sex
- 59) Age

Discriminant Analyses of the Independent Variables

Ten discriminant analyses were additionally performed to investigate the influence of ten independent biographical variables on the success or failure of Corpsmembers at the Center. Results follow.

a) Work and School

This variable was composed of the following items.

- 5. How old were you when you left school?

6. What grade were you in when you left school?
9. What were you doing just before you enrolled at the Job Corps?
23. How many part-time jobs did you have before entering the Job Corps?
24. How many full-time jobs did you have before entering the Job Corps?
25. Why did you drop out of school? (with an escape option)
28. How long were you out of school before enrolling at the Job Corps?
48. How good was your attendance record during your last two years in school?
55. How many times have you quit a job because you could not get along with others?
56. How many times have you been fired from a job?

Results are depicted in Table 6.

The results suggest that the work and school background of Group I and Group II was significantly different. Items selected as conveying classificatory information were 9, 48, and 55. Data from item 9 (What were you doing just before you enrolled at the Job Corps?) has already been described. A similar examination of responses to item 48 (How good was your attendance record during the last two years in school?) reveals that, of 25 subjects rating their attendance as "very good", 23 (92%) were in Group I. Furthermore, slightly over 50% of Subjects in that Group

TABLE 6

Discriminant Analysis of the Variable
of Work and School

Canonical Discriminant Functions						
Eigen Value	Canonical Correlation	Wilks Lambda	x	d.f.	Significance	
.07	.25	.94	7.99	3	.003	

Group Centroids	
Group	Function 1
I	.18
II	-.38

Summary Table			
Item	Wilks Lambda	Significance	Standardized Discriminant Coefficients
9	.96	.02	.71
48	.94	.03	-.43
55	.94	.05	-.37

Percent of cases correctly classified: 66%
Group I: 98%; Group II: 7%

were clustered in the "very good" and "good" categories. In contrast, Subjects in Group II tended to cluster around the "average" category with one-third of them qualifying their attendance as "bad" or "very bad".

The third salient variable, item 55 (How many times have you quit a job because you could not get along with others?) although not significant in the univariate analysis contributed to the discrimination between the groups. The data shows that 30% of Subjects in Group II had quit jobs, compared to 15% in Group I.

b) Self Concept

Self concept was explored through the following items.

- 25. Why did you drop out of school?
- 29. How often do you worry about your health?
- 32. You play sports (more, as much, less than others)?
- 37. How often have you felt scared while in Job Corps?
- 56. How many times have you been fired from a job?
- 57. How many times a month did you go out on dates before starting at the Job Corps?

Results indicated that this variable did not yield statistically significant differences between the groups.

c) Peer Relationships

Items related to this variable were the following.

- 26. How many times have you been in fights?

27. How well do you make friends? (to mark one of 5 choices)
30. Before entering the Job Corps (I had more, as many, less friends than others).
37. How often have you felt scared while in Job Corps?
38. How often have you felt good while in Job Corps?
55. How many times have you quit a job because you could not get along with others?

Table 7 depicts the results.

These results suggest that there were statistically significant background differences in relationships with peers between Subjects in Group I and those in Group II. Three items were salient, number 37, which apparently conveyed the most classificatory information, and items 30 and 55. The responses to item 55 have already been presented when describing the variable of work and school. Item 37 (How often have you felt scared while in Job Corps?) was answered in the "Almost never" and "Never" categories by 76% of the sample. Eighty percent of Subjects in Group I, however, gave such answers compared to 67% from Group II. Furthermore, while 12% of Group II Subjects were scared "most of the time", only 2% of the Subjects in Group I felt the same way.

Item 30 (Before entering the Job Corps--I had more, as many, less friends than others) was answered similarly by Subjects in both Groups. About 30% of Subjects in Group I,

TABLE 7

Discriminant Analysis of the Variable
of Peer Relationships

Canonical Discriminant Functions					
Eigen Value	Canonical Correlation	Wilks Lambda	x	d.f.	Significance
.09	.30	.90	11.6	3	.01

Group Centroids	
Group	Function 1
I	-.21
II	.46

Summary Table			
Item	Wilks Lambda	Significance	Standardized Discriminant Coefficients
37	.96	.02	-.83
30	.93	.02	-.64
55	.91	.01	.56

Percent of cases correctly classified: 69%
Group I: 91%; Group II: 23%

however, thought they had had less friends than others, in contrast to 22% of the Subjects in Group II.

d) Family Relationships

The following were items included in this variable.

10. Who is the person you care about most in your life?
12. Who is the woman that raised you?
13. How long did you live with her?
14. Who is the man that raised you?
15. How long did you live with him?
16. Were you ever placed in a foster home?
31. Who did you live with just before starting at the Job Corps?
34. How often have you felt homesick while in Job Corps?
41. Do you wish this Center had been further from home?
42. How well do you (or did you) get along with your father or stepfather?
43. How well do you (or did you) get along with your mother or stepmother?
47. How many times a week does your family eat dinner together?
52. How many times have you run away from home?
53. How many brothers or stepbrothers do you have?
54. How many sisters or stepsisters do you have?

Results are depicted in Table 8.

These results suggest that Groups I and II were significantly different in their responses to items related

TABLE 8

Discriminant Analysis of the Variable
of Family Relationships

Canonical Discriminant Functions					
Eigen Value	Canonical Correlation	Wilks Lambda	x	d.f.	Significance
.20	.41	.83	21.97	9	.01

Group Centroids	
Group	Function 1
I	.31
II	-.65

Summary Table			
Item	Wilks Lambda	Significance	Standardized Discriminant Coefficients
41	.95	.01	.54
13	.93	.01	-.70
34	.91	.009	-.50
53	.89	.008	-.33
52	.88	.007	-.31
10	.86	.007	.51
16	.85	.006	.37
15	.84	.007	.31
12	.83	.009	-.25

Percent of cases correctly classified: 70%
Group I: 89%; Group II: 30%

to family relationships. The nine items listed in Table 8 were salient in separating the groups. In item 41 (Do you wish this Center had been further from home?) we find that, as seen before, while 14% of Group I Subjects wished that the Center had been further from home, 33% of Subjects in Group II wished the same. Data from item 13 (How long did you live with--the woman that raised you?) indicate that Group I Subjects lived with such person one less year ($\bar{x} = 16.6$ years) than those from Group II ($\bar{x} = 17.6$ years).

Response differences between the groups to item 34 (How often have you felt homesick while in Job Corps?) were mostly noticeable in the "Almost never" and "Never" choices where 63% of Group II were clustered. This in comparison to 47% from Group I which suggests that this group tended to be more homesick. Item 53 (How many brothers or stepbrothers do you have?) revealed that Group I members had less of them ($\bar{x} = 2.15$) than Group II ($\bar{x} = 2.60$). Item 52 (How many times have you run away from home?), in turn, shows that Group I ($\bar{x} = .82$) tended to have exhibited such behavior in lesser degree than Group II ($\bar{x} = 1.47$).

Item 10 (Who is the person you care about most in your life?) offers interesting information in that 23% of Subjects in Group II stated "My child" or "My children", compared to only 7% of those in Group I. Other answers to the question did not greatly differ with the exception of

"Boy-girlfriend", given by 14 % of Group I and only 5% of Group II. In general, it appears that while 28% of Group II Subjects are married and/or have children, only 8% of those in Group I are in such situation.

From the answers to item 16 (Were you ever placed in a foster home?) it appears that a greater number of Subjects in Group II had that experience (13%) than Group I members (6%). On items 15 (How long did you live with--the man that raised you?) and 12 (Who is the woman that raised you?) the information obtained from both groups was very similar making it difficult to distinguish a particular trend on the part of one Group or another. For example, the mean number of years subjects of Group I lived with the man that raised them was 14.85 while for Group II it was 14.47.

e) Socio-Economic Indicators

This variable was investigated with the following items:

20. How many people live with you at home?
21. In the home you lived in before enrolling at the Job Corps (Did you have: electricity, a telephone, etc.)?
22. How many people slept in the same room with you at home?
33. How many years has your family been on welfare?

Results of the discriminant analysis indicated that there were not statistically significant differences between the groups in terms of socio-economic status.

f) Behavioral Indicators of Social Adjustment

Items utilized to measure this variable follow.

7. How many months did you think you would be at the Job Corps when you enrolled?
8. How many friends from home did you find at the Job Corps?
16. Were you ever placed in a foster home?
23. How many part-time jobs did you have before entering the Job Corps?
24. How many full-time jobs did you have before entering the Job Corps?
25. Why did you drop out of school?
26. How many times have you been in fights?
27. How well do you make friends?
32. You play sports (more, as much, less than others)?
34. How often have you felt homesick while in Job Corps?
35. How often do you smoke pot?
36. How often do you drink beer or liquor?
38. How often have you felt good while in Job Corps?
39. How many times in your life have you been arrested?
40. Have you ever had a Probation Officer?
45. Was the Job Corps Center (Better, just like, worse than you thought it would be)?
46. How many good friends do you have?
52. How many times have you run away from home?
56. How many times have you been fired from a job?

57. How many times a month did you go out on dates before starting at the Job Corps?

The results are shown on Table 9.

The results suggest that there were statistically significant background differences in terms of social adjustment between Groups I and II. Four of the items were selected as the ones conveying the classificatory information. Of them, items 7, 34, and 52 have been previously described in this section under other headings. The remaining item 45 (Was the Job Corps Center--Better, just like, worse, than you thought it would be?) elicited a differential trend between the groups. Forty-eight percent of Group I rated the Center better, in contrast to 37% in Group II. Conversely, 14% of Subjects in Group I thought the Center was worse than what they had expected, compared to 27% of those in Group II who thought the same.

g) Place of Residency

The following items were used to explore this variable.

1. In what city were you before you enrolled in the Job Corps.
2. How long did you live there?
3. Where were you born?
4. How long did you live there?
19. How many times have you moved from one town to another?

The results can be seen in Table 10.

TABLE 9

Discriminant Analysis of the Variable of
Behavioral Indicators of Social Adjustment

Canonical Discriminant Functions					
Eigen Value	Canonical Correlation	Wilks Lambda	Chi-square	d.f.	Significance
.09	.29	.91	11.28	4	.02

Group Centroids	
Group	Function 1
I	.21
II	-.45

Summary Table			
Item	Wilks Lambda	Significance	Standardized Discriminant Coefficients
7	.96	.02	.59
34	.94	.02	-.56
45	.92	.02	-.49
52	.91	.02	-.40

Percent of cases correctly classified: 71%
Group I: 98%; Group II: 32%

TABLE 10
Discriminant Analysis of the Variable
of Place of Residency

Canonical Discriminant Functions						
Eigen Value	Canonical Correlation	Wilks Lambda	Chi-Square	d.f.	Significance	
.09	.30	.91	11.36	2	.003	

Group Centroids	
Group	Function 1
I	-.21
II	.45

Summary Table			
Item	Wilks Lambda	Significance	Standardized Discriminant Coefficients
2	.91	.001	.42
3	.92	.003	-.67

Percent of cases correctly classified: 66%
Group I: 84%; Group II: 28%

This variable appears, thus, to have established statistically significant differences between the two Groups. Items 2 (How long did you live--in the city you were in before you enrolled in the Job Corps?) and 3 (Where were you born?) were the salient variables producing the discrimination. Item 3 was previously described. An examination of the pattern of responding to item 2 shows that the difference resides between those who had been in Tucson for two years or less and those who had been there longer. Specifically, 38% of Subjects in Group I had less than two years in Tucson. In contrast, 90% of Subjects in Group II had been in Tucson for a longer period of time.

h) Sex

The analysis of this variable showed that there were not statistically significant differences between the groups with respect to sex.

i) Age

Age was not a statistically significant variable contributing to the success rate between Groups I and II.

j) Ethnicity

Results of the analysis of this variable are depicted in Table 11.

TABLE 11
Discriminant Analysis of the Variable
of Ethnicity

Canonical Discriminant Functions						
Eigen Value	Canonical Correlation	Wilks Lambda	Chi-Square	d.f.	Significance	
.10	.31	.90	12.22	1	.005	

Group Centroids	
Group	Function 1
I	-.22
II	.46

Percent of cases correctly classified: 67%
Group I: 93%; Group II: 13%

As can be seen, ethnicity was a statistically significant variable between Groups I and II, $p < .0005$.

Further Analysis

Contingent Variables

Five of the items included in the modified JC-BIB applied to only a portion of the sample. Those who answered "yes" to item 16 (Were you ever placed in a foster home?) were asked to provide further information on items 17 and 18. Also, those whose fathers or mothers were dead were asked to report their ages at the time it happened in items 49 and 50. Finally, those whose parents were divorced were also requested to report their ages at the time in item 51. Results of Chi-square tests performed indicate that there are not statistically significant differences between Groups I and II with respect to the number of Subjects in each group who had been in foster homes or whose parents were dead. There is, however, a significant difference in terms of the age of Subjects whose parents divorced ($p < .05$). Subjects in Group I were significantly younger when it happened ($\bar{x} = 8.6$ years old) than Group II Subjects with the same experience ($\bar{x} = 12.06$ years old). Thirty-six percent of Subjects in Group I and 45% of Group II Subjects were included.

Discriminant Analysis of Subgroups A and E

Discriminant analysis was performed on subgroups A and E using 54 items as variables to discriminate between

two widely divergent subgroups in terms of their success at the Tucson Job Corps. Table 12 shows the results.

TABLE 12
Discriminant Analysis of Subgroups A and E

Canonical Discriminant Functions						
Eigen Value	Canonical Correlation	Wilks Lambda	Chi-Square	d.f.	Significance	
4.85	.91	.17	97	30	.0001	

Classification Results				
Actual Subgroup		N	Predicted Subgroup Membership*	
			A	E
Subgroup	A	45	45	0
Subgroup	E	27	0	27

* Percent of cases correctly classified: 100

These results suggest that the differential success experience at the Job Corps of these two subgroups are reflected in their responses to the information blank. The difference is statistically significant, $p < .0001$, and

subjects were classified in their respective subgroups with 100% accuracy.

Classification Analyses

In order to determine the predictive ability of the modified JC-BIB two discriminant analyses were performed to classify the two intermediate subgroups (C and D) as either potentially successful or unsuccessful at the Tucson Job Corps. The criteria subgroups were A and B on the successful side and E on the unsuccessful side.

a) Classification of Subgroup C

Results are depicted in Table 13

TABLE 13

Discriminant Analysis to Classify Subgroup C				
Actual Subgroup		N	Predicted Subgroup Membership*	
			AB	E
Subgroup	AB	58	56	2
Subgroup	E	27	2	25
Subgroup	C	27	18	9

* Percent of cases correctly classified: 66.7

As can be seen, about two-thirds of the cases were correctly classified under the AB subgroups.

b) Classification of Subgroup D

Results of the classification analysis are shown in Table 14.

TABLE 14

Discriminant Analysis to Classify Subgroup D					
Actual Subgroup		N	Predicted Subgroup Membership*		
			AB	E	
Subgroup	AB	58	56	2	
Subgroup	E	27	2	25	
Subgroup	D	13	9	4	

* Percent of cases correctly classified: 30.8

The analysis indicates that less than one-third of the cases were classified as expected under subgroup E.

DISCUSSION

If results of the present study are to be summarized it can be said that 1) Background circumstances and experiences are influential in determining success or failure at the Tucson Job Corps; and, 2) the modified JC-BIB showed to be, in general, a useful instrument in reflecting such background differences.

Although some aspects of the procedure validate Guion's (1965) comment in terms of its extreme empiricism and heterogeneity of the score values, an examination of the specific findings may shed some light into the factors that determined Corpsmembers' success or failure. This will be done following the order of presentation in the previous section.

Univariate Analyses

Of the 26 items that requested qualitative information four showed significant statistical differences between successful and unsuccessful Corpsmembers. Place of birth was one. It basically indicated that Subjects born outside the Southwest have a better chance of success in the program. This rate of success is particularly high for foreign-born Subjects of whom 96% were in Group I. A closer examination of the data shows that 20 out of 24 foreign-born

Subjects were from Southeast Asia and that they had a 100% success rate in the Center. This finding will be further discussed later when the variable of ethnicity is examined. Among the USA-born Subjects, however, it was found that nearly three-fourths of Corpsmembers born outside the Southwest were successful. The data indicates that of the 23 Corpsmembers included in this category, 19 were Anglo and 4 were Black. The Mexican-American and American-Indian populations participating in the study were all born in the Southwest with the majority of the former being from Tucson or a relatively nearby town. This manifest lack of mobility or sedentarism is in contrast with that of the Anglo population in the sample. Out of 38 Anglo Subjects, 25, or 66%, came to the Southwest from other parts of the country. Considering that all Corpsmember families are below the poverty line, it could be assumed that there is an element of search for better opportunities, or hope, when a family decides to drastically change their area or region of residence. By the same token, poor families that remain stationary in a region of residence could be thought of as not expecting any major change by moving to some other city. Mobility, thus, may represent a certain expectation of improvement, or the existence of better conditions somewhere else, which Anglo families appear to have in a greater degree than Mexican-American or American-Indian families. These differences in terms of expectations about the future

might be transmitted to the children in the form of hope or determination to produce change in their current conditions, as opposed to an acceptance of their lot in life, which could produce a diminished willingness to make an effort to succeed.

Another item that produced significantly differential responding between the two Groups was No. 9: "What were you doing just before you enrolled at the Job Corps?" Most of the Subjects in the successful Group had been either working or in school while 65% of Subjects in the unsuccessful Group were out of school and unemployed. Some research has been conducted in this area. Stevenson (1978) finds ultimate negative employment and earning effects to be pervasive among young people who are initially out of school and out of the labor force. Doeringer and Piore (1971) express concern about the effects of early labor market instability on work habits and attitudes, including job dissatisfaction, lowered aspirations, and a proneness to quit. Bachman, O'Malley and Johnston (1978) report that high school dropouts showed a marked tendency to be unemployed. It was not clear to the authors why this occurs because when employed the high school dropout might be considered as doing as well as the high school graduate who went no further in his education. It is possible, they suggest, that the same psychological orientations that lead to dropping out of school also lead to dropping out of work.

A period of inactivity, thus, appears to have deleterious effects on the future job stability of young people although it is not clear neither in this nor other studies how long a youngster could remain inactive for it to be significantly detrimental.

The variable of ethnicity (Item 11) was also significant ($p < .004$) in determining the success or failure of Corpsmembers at the Tucson Job Corps. Of particular interest is the 100% success rate of Southeastern Asian Subjects who comprise 16% of the sample ($N = 20$). Most of these Corpsmembers had been in the U.S. for less than 2 years and were mostly from Viet Nam with a few from Cambodia and Laos. Although it is common knowledge that Oriental students, in general, tend to excel in academic endeavors, until a few years ago the bulk of their population in the USA was composed of Japanese, Chinese and Korean. The end of the Vietnam War produced a large number of Southeastern refugees in the USA whose adjustment and performance at work and school is just beginning to be documented. A recent article in Time Magazine (March 28, 1983) reports the following

At Chicago's Lane Technical High School, for example, there are few disciplinary problems with the 15% of the student body that is of Asian parentage. Says Principal Norman Silber: 'Our Asian kids have terrific motivation. They feel it is a disgrace to themselves and their families if they don't succeed.' The results bear him out: between 40% and 50% of pupils in Lane Tech's advanced-placement math classes are of Asian background, and

two of the school's four National Merit Scholarship winners so far are Asian . . .

Nearly half of the 160 Vietnamese students at Brighton High School in Boston left their families in VietNam or in refugee camps. These immigrants must learn English at school in bilingual programs . . . out of 83 students on the honor roll at Brighton High, 56 are Vietnamese. All 32 Vietnamese members of last June's graduating class went on to college . . .

Factors involved in this high degree of achievement are, at this point, only conjecture and, no doubt, as social scientists become aware of the phenomenon determinant variables will begin to emerge.

The other ethnic groups were represented in the sample by 34.4% of Mexican-Americans; 30.4% of Anglo-Americans; 10.4% of American-Indians; 7.2% of Black-Americans; and 1.2% other. The small proportion of American-Indians and Blacks do not allow much comment on their success rate. The main comparison, thus, could be made between Anglo and Mexican-American Subjects. Seventy-one percent of the Anglo sample was in Group I, compared to 58% of Mexican-Americans. Assuming that these percentages are a fairly adequate representation of their success rate at the Center at large, it appears that Anglo Corpsmembers tend to drop out less from the Tucson Job Corps than their Mexican-American peers. Reasons for this may be varied and complex and go beyond the scope of this study. Nevertheless, the issue of differences of regional mobility between

these sample subgroups offers interesting possibilities for further investigation.

The other qualitative variable that showed significance ($p < .03$) was item 41: "Do you wish this Center had been further from home?" Here 14% of Subjects in Group I answered positively, compared to 33% in Group II. The implications of this result may be linked to social adjustment and quality of relationships with family and friends. To be further from home means, of course, less opportunity for direct interaction and perhaps exposure to unpleasant experiences. This issue will be discussed in more detail when issues of family and peer relationships are examined later in this section, where an alternative interpretation will be presented.

A univariate F-ratio was used to test the quantitative variables. Only 2 of 28 items elicited statistically significant differences of responding from the two groups. One was item 2: "How long did you live in the city you were in before enrolling in the Job Corps?" Group I Subjects lived in such city significantly less time than those in Group II (9.3 and 13.5). As it has been noted above, foreign-born Corpsmembers and those not native to the Southwest have showed to be generally more successful in the program than those who remained in Tucson most of their lives. The link between the two variables seems clear.

Item 7: "How many months did you think you would be

at the Job Corps when you enrolled?" was also statistically significant ($p < .02$). This same item was, according to Gallagher (1976) "the most stable and dependable variable . . . Those who said they expected to stay less time did so on the average . . . In essence, potential dropouts select themselves". The fact that unsuccessful Corps- members expect from the beginning to be less time at the Center than the successful ones gives some indications of differential motivation to complete the program. Expectations about gains to be made and degree of commitment to training could also be determinant in answering this item.

Discriminant Analyses

Clearly, solely on the basis of the variables discussed above it would be almost impossible to make fairly accurate predictions about the probabilities of success or failure of a given individual. Any attempt at group classification would likely run soon into contradictions and obstacles to the decision-making process due to overlap among the two groups in each variable. Furthermore, important differences between the groups may have been lost in the average figures, and potentially important classificatory information could have been left aside as not statistically significant. Discriminant function analysis, by providing a suitable weighted combination of the variables, the discriminant score, helps achieve a far better

separation of the groups. The weights have the property of bringing out important differences relating to the variables involved that best discriminate between the two groups. They are chosen in such a way that, compared to the differences within groups, the differences between groups are maximized.

Using the 54 non-contingent items as variables, discriminant analysis was performed to separate the successful and unsuccessful groups. The procedure resulted in an accurate classification of 85.6% of the total sample of subjects. The differential responding of successful and unsuccessful Corpsmembers was statistically significant ($p < .0001$). What this means is that on the basis of their responses to the questionnaire alone less than 15% of all Subjects would have been assigned to the wrong group.

A stepwise analysis screened the 54 variables and selected 21 items holding most of the information needed for classification of subjects. These items, as can be seen in Appendix B, are heterogeneous and, in most cases, their group means were not statistically different. Group means, however, as it was pointed out above, tend to obscure differences between groups which is reflected by the standard deviation of each measurement. With discriminant analysis, the region of variance overlap between groups is considerably reduced by the weighted combination that produces the discriminant score.

In the stepwise analysis performed, however, it was surprising to find that some items such as No. 9, No. 2, and No. 7, were not included in the analysis. These items elicited significantly different responses between the two groups according to the univariate analyses employed and it would be assumed that they contained important classificatory information. Reasons for this discrepancy appear to lay on the nature of the stepwise procedure. It sequentially selects out from the original set of variables those that contain most of the classificatory information. In the first step the computer tries all variables and picks the one that discriminates most among the different groups, i.e., the one that maximizes the ratio of the mean sum of squares between groups to the mean sum of squares within groups. Next the computer tries combining each of the remaining variables with the first one selected and chooses the second variable that goes best with the first one chosen, in terms of maximizing the F-ratio based on two variables, and so on until adding further variables does not yield a high enough partial F value. In the sample used in the present study the one variable selected as containing the most classificatory power was No. 11, ethnicity. This variable was heavily loaded by the presence and performance of the 20 Southeast-Asian Corpsmembers. Undoubtedly, this portion of the sample is atypical and may have unduly influenced some of the findings. Nevertheless, the fact that

over 85% of Subjects were correctly classified indicates that, as a whole, the modified JC-BIB is a useful instrument. Further refinement, however, and cross-validation appear to be necessary.

Discriminant analysis was also performed to determine the extent of influence on Corpsmembers' success of each of the ten independent variables selected as criteria of background characteristics. Differential background in terms of the variables of work and school; peer relationships; family relationships; behavioral indicators of social adjustment; place of residency; and ethnicity were found to be statistically significant. The variables of self-concept; socio-economic indicators; sex; and, age did not show statistically significant differences between the two groups.

Work and School

Results from items related to this variable indicate that successful Corpsmembers were mostly busy before enrolling at the Center; they tended to rate their past school attendance between "Good" and "Very Good"; and, had less of an inclination to quit their jobs than did those in Group II. Group I Subjects, thus, appear to be somewhat better adjusted to societal demands, more responsible and consistent than Group II Subjects, according to their own reports. The Job Corps is, in many cases, a combination of

work and school environments and the results on this variable are consistent with the differential past experiences of members of both groups.

Peer Relationships

Responses given to the six items that measured this variable were effective in significantly discriminating between the two groups ($p < .01$). The items directly or indirectly requested information about ability to make and maintain friends (items 27 and 30); reaction to interpersonal conflict with peers (items 26 and 55); or level of comfort in social situations of forced interaction with peers (items 37 and 38). By stepwise analysis items 30, 37, and 55 were selected as those with the best classificatory ability. Results from a Chi-square test of item 30 indicated that, although there is not a significant difference between the groups, there is a tendency in the direction of "less friends than others" for Group I and "more friends than others" for Group II. The obvious difference, however, is so small that any implications drawn from this result would be adventurous. The item nevertheless was effective in the classification task.

Item 37 presents a similar picture considering that the Chi-square test resulted in no significant difference between the groups. It was, however, the variable selected as being the one that discriminated most among the groups.

In terms of tendencies, 48% of subjects in Group I stated that they were "never" scared at the Job Corps, compared to 35% in Group II. This difference is made up in the "most of the time" category chosen by 12% of Group II members as opposed to 2% from Group I.

Finally, item 55, also included in the variable of work and school, was among the three discriminating variables under discussion. The item, which was taken unchanged from the original JC-BIB, requests information that is two-fold. One, in terms of the individual's willingness to quit a job and, two, the presence or absence of serious conflicts with others. As was seen before Group I Subjects tended less to leave a job because of interpersonal conflicts.

Family Relationships

The modified JC-BIB included 15 items requesting information on this variable. Nine of them were selected by stepwise analysis as holding information to discriminate between the two groups. The variable selected as most influential was No. 41 "Do you wish this Center had been further from home?" to which more Subjects in Group II than in Group I agreed. On the basis of this discrimination the remaining eight salient variables were selected resulting in a separation of the two groups that was statistically significant ($p < .01$) and was successful in correctly classifying slightly over 70% of the cases.

The advantages of performing discriminant analysis on this type of research become evident in dealing with this variable. The two groups are not differentiated on the basis of one measurement at a time, but on the manner in which the various responses associate with each other. It is, thus, the result of a combination of observations. Responses or observations are classified, assigning each one to the group whose mean discriminant score is closest to that of the observation. This comparison is, of course, performed using standardized weights or coefficients because raw discriminant weights are affected by the particular unit used for each variable. The sign and size of each estimated coefficient, then, determines group assignment. Each new variable tested for the extent of its contribution to the discrimination is considered in terms of whether it adds to the maximization of the F-ratio. A cut off point is given below which a variable will be excluded.

The sign of the group centroid for Group I was positive (Discriminant coefficient = .307) and negative for Group II (Discriminant coefficient = -.652). Items with positive sign were: 41, 10, 16, and 15. Items with negative sign were: 13, 34, 53, 52, and 12. The former are associated with Group I and the latter with Group II. The more positive a given variable is, the more it reflects a tendency that distinguishes Group I from Group II and vice versa.

It appears, then, that Group I Subjects tended to be comfortable with the Center's location, as indicated by Item 41. It may mean that they want to be close to home or that they were already far enough from it. Data from other items shows that nearly 40% of Subjects in Group I had been in Tucson for two years or less (7% of Group II Subjects were in this category) and that only 54% had been living with their parents, compared to 70% of Group II members. Alternative living arrangements were equally divided between "other relatives" (21%) and "other" (22%) for Group I members. Undoubtedly, the home situation of the Southeast Asia refugee Corpsmembers had a heavy influence on the data.

Item 10 explored affective bonding with family members. Exactly the same percentage of Subjects (45%) in each group chose their parents as the people they care for most in their lives. The difference was provided by the marital situation of the Subjects. Apparently over 27% of Subjects in Group II were married or had children or both, compared to 7% of Group I members. Considering that there was not a statistically significant age difference between the groups it could be assumed that one factor influencing early termination from the Tucson Job Corps is the establishment of a family by Corpsmembers by marrying and/or having children.

Items 15 and 16 indicate that Group II members tended to be less time with the man that raised them and that more Subjects in this group had been in foster homes,

respectively. Again, these items by themselves presented very little difference between the means of Groups I and II. They appear, however, to have combined with other items in a manner that maximizes the F-ratio.

Group II Corpsmembers tended to live longer with the woman that raised them; one more year on the average. It is likely that family disruption due to the Viet Nam war is also responsible for this difference considering the heavy presence of Asian Corpsmembers in Group I. Group II Subjects were less prone to feel homesick while in Job Corps than those in Group I. This finding is probably due to the fact that a larger percentage of Group II Subjects (93%) had their homes in Arizona itself, compared to only 79% of Group I members. It may also indicate that Group I Subjects feel, to some degree, more positively about their home. Group II Subjects, also, had on the average more brothers or stepbrothers than those in Group I and they tended to have run away more often from home. Finally, although an equal percentage of Subjects in both groups had been raised by their mothers, if she was not present slightly more Subjects in Group II had been raised by "other relative" as opposed to "stepmother" as in Group I.

Behavioral Indicators of Social Adjustment

This variable was investigated by 20 items requesting information as varied as "How many good friends do

you have?" or "Do you play sports?" to "How often do you smoke pot?" or "How many times have you been arrested?" Results indicate that there are significant differences in terms of social adjustment between Group I and Group II. The separation of the groups was made on the basis of four items: No. 7; No. 34; No. 45; and No. 52, and was significant at the .02 level. The last three had a negative sign discriminant coefficient, as the group centroid for Group II (-.451), while item 7 had a positive one, similar to the group centroid of Group I (.213).

As discussed before, Group I Subjects expected to remain enrolled at the Center for a significantly longer period of time than those in Group II (Item 7). Group II Subjects tended to feel less homesick than Subjects in Group I and had run away from home more often. (Items 34 and 52). Responses to Item 45 indicate that more Corpsmembers in the successful group felt the Center was better than they had thought before enrollment than Corpsmembers that failed.

It appears, thus, that Group I members had a better attitude towards the Job Corps from the beginning and were more determined to complete their training than Group II Subjects. Furthermore, the latter may have had more difficulties adjusting to family life as indicated by their higher frequency of run aways from home. The element of homesickness appears to be more in function of distance from home, than an indication of affection, or lack of, toward

family members. Also interesting is the fact that other, perhaps more obvious, indicators of social adjustment did not appear to provide enough classificatory information. Items such as number of fights, or of police arrests, or frequency of drinking or marijuana smoking were no different in the backgrounds of Subjects in both groups. It may be that, in this regard, despite fairly similar background characteristics of successful and unsuccessful Corpsmembers, there may be a better disposition to seize the training opportunity provided by the Center on the part of Group I Subjects. How this disposition is determined appears to depend on other factors, particularly variables such as family relationships and experiences in school and work.

The last two variables that successfully discriminated between Groups I and II, place of residency and ethnicity, have been discussed before in this section. It may be worthwhile to note, however, that, as was seen, there is an interesting connection between the two variables. Mexican-American and American-Indian Corpsmembers in the sample were all native to the Southwest, in contrast with the Oriental and most of the Anglo Subjects that were not. A greater percentage of the former failed in the program which may suggest an element of renovation or renewed effort to succeed in those who are mobile, as opposed to those who are sedentary or do not have an opportunity to move. Furthermore, the Job Corps program is tailored in such a manner

that the Corpsmember progresses at his or her own pace, which takes, in some cases, going back to basics, like teaching the student the elements of reading or simple arithmetical calculations. Success or failure in the program depends, to a great extent, on the Corpsmember's willingness to stay and complete rather than on any particular talent or ability.

The variables of self-concept, socio-economic status, sex and age were not found to significantly discriminate between Groups I and II. This was expected with regards to the socio-economic variable given that applicants to the Job Corps are eligible only if their families fall below the poverty line. There was, then, homogeneity in this aspect among the participants on the study. Self-concept, on the other hand, is a construct that presents greater difficulties for measurement and, although utilized in many studies of this sort, results are frequently contradictory. One of the most complete and thorough investigations in the field was conducted by Bachman, O'Malley, and Johnston (1978). They completed a longitudinal study of a nationwide sample of more than 2,000 male youths, extending from 1966, when they were entering the 10th grade in public high schools to 1974, when many of them had entered the work force. Various social psychological measures, including self-esteem and personal control over success variables, were gathered along with other

measures such as parental socio-economic status and intellectual ability. The major aims of the study were to determine the effects of dropping out of high school; factors facilitating prediction of educational and occupational attainment; the impact of occupational and other experiences on attitudes toward race, job satisfaction and self-esteem. The focus of the study was on levels of occupational attainment rather than on factors that affected employment as such.

Of the variance in the youths' educational attainment in 1974, 50% was accounted for by measures made in 1966. The single strongest predictor in the multiple regression equation was the grade average of the youth in the 9th grade. The next strongest was the socio-economic level of the youths' family. Neither the self-esteem nor the internal control measures maintained their significance.

It appears that we seem to know at an intuitive level that our self-concept or self-esteem may be related to our experiences of success or failure. It is likely, however, that until a more operational definition of the construct is provided studies dealing with this variable will continue presenting inconclusive results.

The two final variables, sex and age, were not found to be significant as determinants of success or failure in the program. Gallagher (1976), who also considered the age variable in her study of 20 Job Corps

Centers found it not to be statistically significant either. Other studies, however, such as Unco's (1972) suggest that 16 and 17 year old Corpsmembers drop out in greater numbers than older students.

Further Analyses

The Contingent Variables

These variables were applicable only to those subjects who had been in a foster home, whose father or mother was dead, and to those whose parents were divorced. The only finding in this section appears to be an interesting one. Successful Corpsmembers whose parents had divorced were, at the time it happened, significantly younger than unsuccessful Corpsmembers in the same condition. The age difference was approximately 3.5 years, significant at the .05 level. It suggests that the experience of parental divorce appears to be more traumatic and may influence future vocational failure if the child is in the early adolescent years than if it happens earlier in life. Considering that almost one out of two Subjects in Group II were of broken families this finding opens a variety of questions in terms of conditions under which the experience seems to be most deleterious to the child, such as presence or absence of a parent substitute; the quality of the relationship with the remaining parent; age of siblings; quality of ties with extended family; attitude of the parent who maintained custody of the child toward the divorce; and the quality of further interaction between the child and the absent parent. Answers to these questions are beyond the

scope of this study but obviously suggest an interesting field of research meriting attention.

Discriminant Analysis of Subgroups A and E

Subgroups A and E constitute the extremes in the successful-unsuccessful criteria considered in the present study. Corpsmembers in subgroup A had, nine months following their participation in the study, graduated from the program and obtained a job. Corpsmembers in subgroup E had not completed the minimum 90 days in the program to entitle them to any of the services the Job Corps is mandated to provide former Corpsmembers. Their performance at the Center had, thus, been clearly divergent and it was expected that the modified JC-BIB would be able to reflect such contrast. As it happened, on the basis of their responses to the information blank, both subgroups were correctly classified by discriminant analysis with 100% accuracy. In other words, the background characteristics of Subjects in each of the two subgroups were within-group consistent and between-group divergent to the extent that not a single case was misclassified. This finding indicates that the modified JC-BIB is particularly effective in obtaining background information that is clearly determinant of potential Corpsmember success or failure.

Classification of Subgroups C and D

Subgroups C and D were composed of Corpsmembers whose success or failure in the program was not as clear-cut as those in the extreme A and E subgroups. As described above, Subgroup C included 27 subjects still in the process of completing their training nine months after their active participation in the present study. Subgroup D was composed of 13 Subjects who, at the time of their completion of the information blank, had been in the program for at least three months but had dropped out within nine months thereafter. Even if the latter had failed to complete their program the Job Corps system is mandated to provide follow-up services to them for a time by virtue of their completion of the probationary period. For the purposes of this study subgroup C was part of the sample of successful Corpsmembers and subgroup D of the unsuccessful sample. In order to test the predictive ability of the modified JC-BIB the two subgroups were isolated and their Subjects classified in the successful or unsuccessful categories on the basis of their background similarities with either subgroups A-B or E.

The results were mixed. While two-thirds of subgroup C Subjects were correctly classified, only one-third of Subjects in Subgroup D were assigned to the corresponding category. Two alternative explanations may be provided for these results. One may lie with the predictive instrument, the information blank, which most likely necessitates

further refinement to become more sensitive to ambiguous cases. Another lies with the nature of the sample itself. The classification may have been correct on the basis of background characteristics but extraneous factors may have intervened to either keep potential dropouts in the program or to make dropouts of potential completers. In either case, it seems clear that the predictive ability of this or probably any other instrument has to be considered cautiously given the complex nature of human behavior. More importantly, it may suggest that a number of potential dropouts can be positively influenced to stay and complete their training at the Center.

In fact, this is currently being done to a great extent within the Job Corps system in the form of counseling and the Residential Advisors program. Based on observation of a Corpsmember's performance and behavior one or more staff members intervene at the first sign of difficulties and efforts are made to correct them by, depending on the nature of the problem, increased contact with the student or, if possible, rearrangement of social-environmental conditions. Occasionally, however, early detection of difficulties that could lead to a Corpsmember's failure is not possible and staff's intervention may be too late. It is under these circumstances that implementation of the modified JC-BIB could prove to be useful. To serve this purpose, a cross-validation procedure is necessary. Furthermore, generalization of the

findings of this study to other Job Corps centers would require a much larger sample than that used in this project.

SUMMARY

The present study investigated the influence of biographical characteristics on early termination from the Tucson Job Corps Center. To this end 85 successful Corpsmembers, defined as those who had completed the program or were close to completing it, were compared with 40 unsuccessful Corpsmembers, defined as those who dropped out before completing their training. The comparison was made on the basis of Subjects' responses to the modified by the author JC-BIB (Job Corps-Biographical Information Blank). The data was analyzed with univariate (Anova; Chi-square) and multivariate (Discriminant function analysis) techniques. Results of the univariate analyses mainly indicate that Subjects born in the Southwest have less probabilities to succeed than those from other parts of the country and particularly from other countries; that ethnicity plays a role in success and failure, most likely due to cultural values and family expectations; that structured occupation before enrolling at the Job Corps increases the chances of success; and that Corpsmembers who anticipate to stay longer in the program do so.

Results from the discriminant analyses supported the prediction that biographical characteristics are determinant of Corpsmember success or failure at the Tucson Job Corps. The variables that appeared to be most influential were work and school, peer relationships, family relationships, social adjustment, place of residency, and ethnicity. Further analyses of the data suggested that the negative effects of parental divorce is a function of age of the children; the older the child the greater the probabilities are of failure in the program. Finally, the modified JC-BIB was more effective in correctly classifying clear-cut successful and unsuccessful Subjects than in discriminating between less defined participants.

APPENDIX A

BIOGRAPHICAL INFORMATION QUESTIONNAIRE

Name _____ Date of birth _____

1. In what city were you before you enrolled in the Job Corps?

Print city or town

Print State

2. How long did you live there?

3. Where were you born?

Print city or town

Print state

4. How long did you live there?

5. How old were you when you left school?

6. What grade were you in when you left school?

7. How many months did you think you would be at the Job Corps when you enrolled?

8. How many friends from home did you find at the Job Corps? (Count family members also)

(-2-)

9. What were you doing just before you enrolled at the Job Corps?
-
-

10. Who is the person you care about most in your life?
(Don't write the name, just his or her relation to you)
-

11. Check the one that fits you.

- a) ☐ I am Oriental
- b) ☐ I am White
- c) ☐ I am an American Indian
- d) ☐ I am Mexican-American
- e) ☐ I am Black
- f) ☐ I am a Latin-American
- g) ☐ I am Puerto Rican
- h) ☐ I am _____

12. Who is the woman that raised you?

(Don't write the name, just her relation to you.

Example: mother, stepmother, aunt, etc.)

13. How long did you live with her?
-

14. Who is the man that raised you?

(Don't write the name, just his relation to you.

(-3-)

Example: father, stepfather, etc.)

15. How long did you live with him?

16. Were you ever placed in a foster home?

a) ☐ Yes

b) ☐ No

17. If yes, how many different foster homes have you lived in?

18. How many years did you live in foster homes?

19. How many times have you moved from one town to another?

20. How many people live with you at home?

21. In the home you lived in before you enrolled at the Job Corps (Answer all of these)

a) Did you have electricity? ☐ Yes - No ☐

b) Did you have a telephone? ☐ Yes - No ☐

c) Did you have heat in every room? ☐ Yes - No ☐

d) Did you have a radio? ☐ Yes - No ☐

e) Did you have a TV? ☐ Yes - No ☐

f) Did you have a clock? ☐ Yes - No ☐

g) Did you have a toilet inside the house? ☐ Yes - No ☐

(-4-)

h) Did you have a shower? ☐ Yes - No ☐

i) Did you have a washing machine? ☐ Yes - No ☐

22. How many people slept in the same room with you at home?

23. How many part-time jobs did you have before entering the
Job Corps?

24. How many full-time jobs did you have before entering the
Job Corps?

25. Why did you drop out of school? (Mark as many as you
want to.)

1. ☐ I didn't drop out. I finished 12th grade

2. ☐ I didn't like it

3. ☐ To make money

4. ☐ To enroll at Job Corps

5. ☐ I was asked to leave by the school

6. ☐ For another reason. Explain: _____

26. How many times have you been in fights?

About _____ times

27. How well do you make friends? (Mark one)

1. ☐ It's always easy for me

2. ☐ It's usually easy for me

3. ☐ It's not easy nor hard for me

(-5-)

4. ☐ It's usually hard for me
5. ☐ It's always hard for me
28. How long were you out of school before enrolling at the Job Corps? _____
29. How often do you worry about your health?
- a) ☐ Always
- b) ☐ Usually
- c) ☐ Sometimes
- d) ☐ Almost never
- e) ☐ Never
30. Before entering the Job Corps (Mark one)
- a) ☐ I had more friends than others
- b) ☐ I had as many friends as others
- c) ☐ I had less friends than others
31. Who did you live with just before starting at the Job Corps? _____
32. You play sports (Mark one)
- a) ☐ More than others
- b) ☐ As much as others
- c) ☐ Less than others
33. How many years has your family been on welfare?

34. How often have you felt homesick while in Job Corps?
(Mark one)
- a) ☐ All the time

(-6-)

- b) ☐ Most of the time
- c) ☐ Sometimes
- d) ☐ Almost never
- e) ☐ Never

35. How often do you smoke pot?

36. How often do you drink beer or liquor?

37. How often have you felt scared while in Job Corps? (Mark one)

- a) ☐ All the time
- b) ☐ Most of the time
- c) ☐ Sometimes
- d) ☐ Almost never
- e) ☐ Never

38. How often have you felt good while in Job Corp? (Mark one)

- a) ☐ All the time
- b) ☐ Most of the time
- c) ☐ Sometimes
- d) ☐ Almost never
- e) ☐ Never

39. How many times in your life have you been arrested?

(-7-)

40. Have you ever had a Probation Officer? (Mark one)
- a) ☐ Yes
 - b) ☐ No
41. Do you wish this Center had been further from home?
- a) ☐ Yes
 - b) ☐ No
42. How well do you (or did you) get along with your father or stepfather? (Mark one)
- a) ☐ Always well
 - b) ☐ Usually well
 - c) ☐ Sometimes well, sometimes bad
 - d) ☐ Usually bad
 - e) ☐ Always bad
43. How well do you (or did you) get along with your mother or stepmother? (Mark one)
44. What bothers you most about the Job Corps is:
-
-
45. Was the Job Corps Center (Mark one)
- a) ☐ Better than you thought it would be
 - b) ☐ Just like you thought it would be
 - c) ☐ Worse than you thought it would be
46. How many good friends do you have? (Count also those who are not in Job Corps) _____

(-8-)

47. How many times a week does your family eat dinner together? _____
48. How good was your attendance record during your last 2 years in school? (Mark one)
- a) ☐ Very good
 - b) ☐ Good
 - c) ☐ Average
 - d) ☐ Bad
 - e) ☐ Very bad
49. If your father is dead, how old were you when he died?

50. If your mother is dead, how old were you when she died?

51. If your parents are separated or divorced, how old were you when it happened? _____
52. How many times have you run away from home?

53. How many brothers or stepbrothers do you have?

54. How many sisters or stepsisters do you have?

55. How many times have you quit a job because you could not get along with others?

(-9-)

56. How many times have you been fired from a job?

57. How many times a month did you go out on dates before
starting at the Job Corps?

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