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A COMPARISON OF THE DROPOUT AND ACHIEVEMENT  
RATES OF A SELECTED GROUP OF HIGH SCHOOL  
STUDENTS.

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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

A COMPARISON OF THE DROPOUT AND ACHIEVEMENT RATES  
OF A SELECTED GROUP OF HIGH SCHOOL STUDENTS

A DISSERTATION

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BENJAMIN F. HART, JR.

Norman, Oklahoma

1975

A COMPARISON OF THE DROPOUT AND ACHIEVEMENT RATES  
OF A SELECTED GROUP OF HIGH SCHOOL STUDENTS

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A COMPARISON OF THE DROPOUT AND ACHIEVEMENT RATES  
OF A SELECTED GROUP OF HIGH SCHOOL STUDENTS

CHAPTER I

THE PROBLEM

Introduction

Most public school systems have given at least a cursory glance at their dropout problem. Not only can a school system be regarded as having, in some measure, failed when any of its students drop out, but the amount of time and money spent, and often wasted, in trying to recruit school dropouts is phenomenal.

Newer teaching techniques and a more positive attitude toward the students on the part of the teachers have been found, in some areas, to cut down on the dropout rate. School systems that have teachers who care and devote time to working with the students and their problems usually have better high school completion rates.

High school administrators, for the most part, know too little about effective teaching techniques which would enable them to hire a staff with the necessary skills to help prevent students from dropping out of school.

Needless to say, some type of supportive services are needed to help identify and assist the high risk students through their secondary school careers.

A sizable number of public school pupils are affected by environmental factors which limit their aspirations and their achievements in the process of education. For the most part, these children are called disadvantaged. Their failing is not caused by lack of mental or physical ability. They are the innocent victims of social misfortune. There are three major factors which affect the "disadvantaged" child. First of all, his family is economically poor. His home life provides little, if any, stimulation to his intellectual growth. He and his family may suffer from racial, ethnic, or other forms of social discrimination, which may result in the child dropping out of school. When all three are combined, the effects on the child can be unusually frustrating and discouraging.<sup>1</sup>

Contrary to the common thought, all disadvantaged children are not mentally ill. However, because he has not come to learn as well in school as children from other environments, he may appear below average in ability and have been taught by methods appropriate to slow learners and the mentally retarded. Through misunderstanding of the environmental factors which affect these other "normal" children, schools may unwillingly contribute to lack of aspiration and ability of the "disadvantaged" child. Through better understanding of these factors and through special attention on the part of the schools and teachers to compensate for them, "disadvantaged"

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Education and Disadvantaged America, Educational Policies Commission, Washington, D.C.

youngsters can find success in regular school programs.

However, environmental factors should not be an excuse for failing to examine other elements that may contribute to academic weakness. There are many reasons why children do not succeed in school. The environmental factors affecting the disadvantaged child may be only one of them.

The economic and social needs of modern society demand that the number of persons with low educational attainment be reduced to as low a level as possible.

Persons with low educational aspirations and achievement are limited in their ability to adapt to changing requirements for employment. In a technological economy, their contribution, both in terms of productivity and in terms of consumption, is limited. With increasing automation, the possible uses for their unskilled manpower are diminishing. When they work, they can find few jobs and command low pay. Often, they cannot avoid unemployment and must depend on tax-supported public welfare for their subsistence. Frequently, they are rejected for military service. They are deprived of many opportunities for personal development and participation in community affairs. Left on their own, their children are likely to follow a similar pattern and repeat the cycle through succeeding generations.

2

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Sexton, Patricia, Education and Income; Inequalities in Our Public Schools, (New York: Viking Press, 1961).

3

Reissman, Frank, The Culturally Deprived Child, (New York: Harper and Brothers, 1962).

4

Conant, James B., Slums and Suburbs, (New York: McGraw-Hill, Inc., 1961).

Also, social problems intensify as "disadvantaged" families accumulate. The problem of the disadvantaged is intensified in older, densely populated urban centers and certain rural areas where economic and social conditions have forced the "disadvantaged" to collect in areas which the remainder of the population does not otherwise choose to inhabit. The disadvantaged remain marooned and unassimilated. The larger the concentration, the more powerful the forces are in keeping children from changing negative neighborhood attitudes toward education and society.

The disadvantaged exhibit certain common characteristics which stem from their pattern of living, since the "disadvantaged" home provides little informal education in the pre-school years of the kind that will prepare the child for successful learning when he enters school. Thus, "disadvantaged" children generally lack verbal skills. They speak in patterns that are often alien outside their neighborhoods. Their home life does not prepare them for learning. These children do not understand the need for reading and they lack the visual discrimination which enables them to begin reading easily. Consequently, many do not readily learn to read or write well.

"Disadvantaged" children generally are not able to concentrate well and they can listen only for short periods. Left to their own devices, these children are apt to develop improper learning habits. Their vocational and personal goals are vague and uncertain, giving them little incentive to master traditional academic tasks or skills basic to future success in an

advanced technological society.

Some common problems in the areas with a concentration of the disadvantaged include disorganization of the family, absence of traditional patterns, and a wide variety of cultural attitudes and backgrounds.

"Disadvantaged" children are apt to view all authority, including the school staff, with suspicion and sometimes outward hostility. The general conditions of the family are absent of traditional accepted values and social habits which help others to be accepted and succeed in American society.

School dropouts don't just happen, they are caused. Each school should be dedicated to handling the individual needs of each child enrolled. A high degree of flexibility and an abundance of resources must be available in every school. Teachers must be able to employ a wide variety of methods so that in some way every child may be brought into the process of education. Curriculums must be sufficiently extensive and variable so that subjects to be covered can be approached according to the particular previous experience and level of readiness of each individual. "Disadvantaged" children should not be separated from the very mainstream of society into which they should be assimilated. The potential dropout or disadvantaged child does not need a special education as much as he needs a quality education which is flexible enough to encompass his special problems and help him move as rapidly as possible into the normal processes of education.

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Chandler, B.J. Education in Urban Society, (New York: Dodd, Meade, 1962).

7

Lichter, Solomon, et al., The Dropouts, (New York: Free Press of Glencoe, 1962).

In addition to providing a regular, quality school program, school systems should develop additional special approaches to assist the "disadvantaged". These programs should seek to remedy educational short-coming (such as poor reading or speaking ability), to find and correct physiological or emotional troubles (such as vision defect or a frustration problem), to develop cooperation in the home, and to motivate the child to want to learn and succeed. Special attention and help for the disadvantaged should be available at every level of the school program, from pre-kindergarten to post-high school.

School systems which have a concentration of "disadvantaged" children should have teachers and special teams trained to work with disadvantaged children and other pupils having learning difficulties. Such teams should include psychologists, social workers, speech therapists, reading specialists, and medical personnel. Helping teachers, freed from regular class assignments, should be available to individual counseling and assistance to small groups of disadvantaged children who have emotional and social problems or who lack specific knowledge and skills which impede their ability to learn. These special teams should be used in a variety of ways, in some cases working with the teacher alone, and in other cases working with both the child and the teacher in overcoming a problem.

These teams should include at least one school psychologist, a school social worker, a remedial specialist, and a psychiatrist to assist local school districts in operating full programs of special school services so that all disadvantaged children may have such assistance. Class size in schools which have a concentration of disadvantaged children should be under twenty pupils. Little can be accomplished with disadvantaged children if

teachers must handle them in large classes. Where classes include a large percentage of disadvantaged children who require considerable personal attention, remedial instruction and cultural enrichment, class size must be even lower.

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Efforts to eliminate de facto school segregation must be tied to special school programs for helping disadvantaged children. The transfer of pupils from one school to another cannot by itself make up for failure to improve the school program and to meet quality standards of education. Nor, on the other hand, can special school programs themselves avoid the responsibility for alleviating de facto segregation situations where reasonable means exist to prevent them. It is especially important that improvements in the school program accompany any changes so that there are adequate facilities, adequate staffing, and adequate preparation of teachers to handle the varied educational, emotional, and cultural problems of all children in all schools.

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School systems which have a concentration of disadvantaged children should experiment with public pre-school programs to develop language skill and provide cultural experiences for children below the kindergarten age. The pre-school years appear to be crucial for the development of experiences needed for later academic success. Problems of personal identification, self-

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American Psychological Association, Today's Educational Programs for Culturally Deprived Children, (St. Louis: Seventh Division of School Psychologists, Annual Professional Institute of the American Psychological Association, 1962).

9

Klopf, Gordon J. and Israel A. Laster, ed., Integrating the Urban School, (New York: Teachers College, Columbia University, 1963).



worth, social adaptability, creative activity, abstract reasoning, and cultural readiness should be treated at an early age. By receiving experiences in school which the regular pre-school child finds in his home and neighborhood, the young disadvantaged child can enter school with an enriched mental and cultural background closer to that of his age-mates.

Schools should identify the weaknesses and abilities of every student and have a full range of programs designed to capitalize upon abilities and to eliminate weaknesses. Corrective and remedial education should begin in the first grade and be continued in every higher grade. A child who cannot read in the twelfth grade could not read in the first. Teachers at every level must detect potential difficulty and be prepared to remedy it. Teachers must be thoroughly familiar with specialized services available and receive assistance from specialists whenever they themselves cannot provide a remedy to a learning problem.

Schools should have special enrichment programs to broaden the cultural experiences of disadvantaged children. Both through school activities and through encouraged participation in out-of-school activities, the disadvantaged child should be exposed to widely acclaimed achievements in art, music, drama, dance, literature, poetry, and other examples of creative  
10  
expression.

Schools should provide a continuous program of vocational orientation

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and guidance. One reason disadvantaged children fail to succeed in school is their lack of motivation and their inability to see that education is the tool by which they can earn a decent living and rise to a better place in society. Too often, school is another world to them; they see no relationship between education and their present way of life. It is especially important that they be shown examples of people of their own race, economic level, or cultural background who have succeeded.

School systems should give a thorough re-examination to opportunities offered for vocational training and revise or add such programs as are necessary to give every child job skills appropriate to the demands of a modern technological society. High schools should experiment more fully with work-study programs. Such plans would encourage more disadvantaged children to work part of the day to gain job experience and to attend school for enough periods to finish their secondary education.

Government and school officials should review the limitation of Oklahoma child labor laws on school-sponsored work-study programs. Where necessary, changes should be recommended and appropriate legislation enacted to assure the success of such plans.

The State of Oklahoma must expand college and other post-high school opportunities to the point where advanced education and training are available for every qualified high school graduate who applies for admission. College opportunities must be available for students from low income homes. Both state and county colleges must study their policies on tuition, fees, living

expenses, scholarships, and loans so that all worthy high school graduates in the state can receive further education. Expansion plans for publicly supported colleges should be drafted and implemented, not only on the basis of those who presently indicate their intention of pursuing higher education, but also in terms of those who are qualified and should be encouraged to improve themselves. In addition to four-year county college programs, public technical institutes should be widely available where post-high school students can continue training for jobs requiring special occupational skills. The knowledge that such post-high school opportunities exist would in itself encourage more disadvantaged youngsters to apply themselves to learning and to finish their regular high school programs.

Special materials and textbooks appropriate for use with disadvantaged children should be investigated and developed by teachers. Since most school textbooks and teaching aids reflect the values of the middle class (the suburban home; the well-dressed father; the clean, shiny car; and white playmates), schools should have available certain special materials to use with disadvantaged children, or at least, improvise materials of their own. Naturally, considerable exposure of the disadvantaged will continue to include "middle class" values; for these reflect many of the standards toward which the teacher wishes the child to aspire. However, complete avoidance of situations which depict surroundings with which the disadvantaged may be most familiar can hinder their ability to grasp ideas, can lead to feelings of self-depreciation, and can accentuate their sense of isolation. Recognition by the school of the realities in which the disadvantaged live is an important factor in gaining

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their acceptance of education as a positive force in their way of life.

Schools should be especially cautious in the use of standardized tests with disadvantaged children. Aptitude tests, for example, produce relevant results only if the child has had the chance to learn the kind of things covered by the tests, has developed a reasonable verbal facility, and has been motivated to score as high as possible. Scores and comparisons to national norms based on standardized tests may not always lead to valid assumptions about the disadvantaged. Such tests should not be used as an excuse for limiting the educational opportunities open to the disadvantaged. A low aptitude score may place a disadvantaged child in a program designed for slow learners when what he really needs is more challenge, not less.

Schools in areas which have a concentration of disadvantaged children should have an active community cooperation program. Teachers, social workers, and community action specialists should be available to meet with parents in their homes and to conduct parent education classes in the school. For the attitudes toward education of disadvantaged children to change, the attitude of parents must also be changed. It is necessary to increase the respect of the family and neighborhood for education. It is necessary to upgrade the ability of parents to help their children develop basic learning skills. Schools should provide complete programs of adult education so that parents may continue their schooling, qualify for higher academic standing, and develop attitudes, job skills, and cultural interest which will improve the family's

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way of living.

Schools should welcome the help of non-professional aides, volunteers, and other community service organizations and agencies. Assistants can relieve teachers of many non-teaching duties, freeing the professional to concentrate on developing appropriate learning and cultural experiences in the schools. In addition, individual volunteers and community organizations can provide valuable experiences such as enrichment, recreation, and study programs for disadvantaged children. Such programs can include in school programs assistance, after school programs, and summer projects, both in the neighborhood and away from home. Schools should study how they may best coordinate and utilize these outside efforts. Their willingness to assist must be recognized and channeled into paths that prove most productive.

Teachers and their professional associations should become familiar and involved in the efforts of other agencies and organizations which are working for improvements in the way of life of the disadvantaged child. The problem of the disadvantaged are not those of the schools alone. Urban renewal, neighborhood rehabilitation, expanded employment opportunities, improved housing, area planning, and many other efforts can help to change the environmental factors which affect the disadvantaged child. Such efforts will make the educational task of the teacher much less difficult. They deserve the study, co-  
14  
operation, and participation of teachers and their organizations.

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Passow, A. Harry, ed. Education in Depressed Areas. (New York: Bureau of Publications, Teachers College, Columbia University, 1963).

14

Isenberg, Irwin. The Drive Against Illiteracy, Volume 36, Number 5 of the Reference Shelf Series, (New York: H. W. Wilson Co., 1964).

The new Federal Economic Opportunities Act should be used to its utmost in Oklahoma to improve the educational and cultural opportunities available to disadvantaged families. Since many of the activities in the act are educational in nature, professional educators should involve themselves as much as possible in their development and operation. Educators should be cooperating with the establishment of "Job Corps" conservation camps and training centers, "Work Training Programs" for college students from low income families, "Adult Basic Education Program" for instructing those over 18 who are unable to read and write English, education and day care assistance for migrant children, and the "Volunteers for Service to America" (VISTA) corps. Educators should be especially involved in the development of Community Action Programs, which can provide special remedial and other non-curricular educational assistance for low income individuals and families. Where no other agency is readily available to sponsor a Community Action Program, local teacher associations should act as recipients for federal grants and as leaders for implementing authorized, out-of-school educational and cultural activities for the disadvantaged.

Local school systems, the State Department of Education, Oklahoma colleges, various professional education associations, as well as other interested agencies, organizations and foundations should encourage research and special study projects on the problems of educating disadvantaged children. At present, teachers generally know only that disadvantaged children miss important background and enrichment experiences and that they generally learn less readily than their age-mates. It is necessary to define and analyze more of the factors in why this is so, what specifically is lacking, and how these omissions in the child's experiences can be overcome.

Many adjustment problems arise between those who consider themselves to be a "little better" and those who are branded as of the lowest income sector. Special social problems also derive from the flow of migrants and the failure of the community to see itself as a community group. There are other ills that stem from a feeling of being hemmed in, of being "despised and unwanted", as well as from intraparochial practices and the fragmentation of personal, social and spatial identities.

It is no wonder that the young people who are caught in a network of flaws, emotional stress, and adjustment problems find themselves in many situations that involve them in pathological activity. The community becomes the "turf" for the youthful delinquents of the gang. The social climate of the depressed area provides the perfect backdrop for the kind of adolescent behavior usually associated with gang-patterned activity. The larger societal setting immerses young people in organized crime, lurid or unhealthful entertainment media, and loosened family ties. All of these are mirrored in an increasingly affluent society of which the depressed-area youth knows he is not an accepted member.

The habitat that produces the gang--the haven from which the members operate--is an unlimited world for them. They look upon their homes as prisons from which they would like to escape. For example, one may be reared by a distant relative, another by an aunt, and still another by friends of one of the parents. Often the father is absent, and many "uncles" move into and out of the homes. By the time the children become adolescents, their accustomed mode of life is that of a transient. Hence, they have little incentive to care for personal property or property that belongs to anyone else, including the public.

They frequently join groups that break into school buildings during weekends and splash ink on desks, mutilate bulletin boards, and otherwise destroy whatever they find. Poor, deprived, and feeling unwanted, these children are only too aware of their public image. Eventually, the motive finds expression in the career of the habitual criminal through all types of crime such as gambling, bootlegging, prostitution, and narcotic traffic. The depressed area thus becomes the receptacle to which deviants tend to gravitate. Hence, residents of the slums, whether deviant or not, are exposed to social conditions conducive to many kinds of illegal and antisocial behavior.

Since about 1912, it has been recognized that crime originates in the unhealthful conditions that exist in slum areas. It is currently estimated that in depressed areas (constituting nearly almost 20 per cent of the average residential space of an American city), there can be found about 45 per cent of the major crimes as well as 55 per cent of juvenile delinquency cases and 50 per cent of the arrests. For example, J. Edgar Hoover, in his report of juvenile offenses in 1963, indicates that the most prevalent were burglary, larceny, and theft of automobiles. However, the three most vicious crimes of youth are rape, assault, and criminal homicide. For youth under the age of eighteen, the percentages for various crimes for 1963 are: assault, 14; criminal homicide, 19; rape, 18; robbery, 26; burglary, 50; larceny, 53; and theft of automobiles, 63.<sup>15</sup>

Juvenile and adult crimes are disproportionately high in the so-



called "inner core area" of a city. For example, in 1960, in Milwaukee, Wisconsin, the inner core contained only 13.7 per cent of the city's population; yet, a large percentage of adult arrests in the city occurred in the depressed areas: murder, 60; rape, 48; robbery, 21; aggravated assault, 47; commercial vice, 72; and narcotics, 67.<sup>16</sup> Other examples could be cited. The sad fact is that crime in the United States is increasing every year. In J. Edgar Hoover's report of March 10, 1965, he calls attention to the fact that 250,000 more serious crimes were committed in the United States in 1964 than in 1963. Offenders under the age of eighteen in rural areas and cities over 100,000 population show a rise in crime of 10 per cent, while in suburban communities, the rise was 18 per cent. The increase in crime by regions was: North Central States, 7 per cent; Northeastern and Southern States, 4 per cent; and Western States, 1 per cent.

Perhaps within the pessimistic web of depressed-area elements, we have been presenting none that is so devastating as the impact of the total community on the psyche of those who must live there. According to Harold Lasswell:

Studies of the reaction and outlook of depressed-areas residents found a widespread feeling of being "out", of feeling worthless as "non-people" who have no control of their own lives or of their surroundings. They have discovered that the people feel isolated and alienated, that theirs is a haven of "anomie" (breakdown of norms of standards that govern the aspirations and behavior of individuals), and a place for the dispossessed. In short, people in these slum ghettos suffer, knowingly and un-

knowingly, from psychic isolation, alone, cut off, unwanted unloved, and unvalued.<sup>17</sup>

No problem is more damaging than that of disease in depressed areas. Many instances of illness are found here that reflect the poor physical and mental conditions among the people who live under slum conditions. It is not uncommon to find, in a city where slums represent about one-fifth of the residential area, that there are as many as one-half of the disease cases. In the Hough section of Cleveland, for example, the death rate from influenza and pneumonia is approximately 45 per 100,000 population, compared with city-wide rates of 18. In the inner-core area of Milwaukee, infant mortality recently was about 29 per cent higher than it was for the over-all city rate. During the same time, in New York City, areas containing approximately 27 per cent of the total population, there were --nearly 45 per cent of infant deaths and 71 per cent of veneral disease. A seven year study of the relationship between mental health and environment revealed that persons of low status in deteriorated neighborhoods had more mental illness than persons of middle or high status; 13 per cent for the low, compared with 3.6 per cent for high-status people, were so categorized.

Recently, tuberculosis which was supposed to be declining, began a come back in New York City. The health department announced a 12 per cent increase in the disease over the year before. The sharpest rise was found in disadvantaged areas, particularly among children under the age of ten of Negro and Puerto Rican families. Although there also was an upward trend in the number of cases of tuberculosis among the white people, "these were most minimal

18  
cases".

The pathological picture presented earlier suggests another variable; that is, the lack of sufficient human interest in these depressed communities on the part of those who live there and are qualified to give other inhabitants the right kind of direction and leadership. This failure, in part, accentuates the socially diseased situation which prevails in slums and helps to keep individuals in their weakened condition. Without direction by those in the area who recognize the problems and could help solve them, the deleterious conditions are not likely to be corrected.

A significant factor in the despairing pathology of the depressed area is the absence of constructive leadership. Hence, in this respect, it is an ineffective community. The desiccating conditions mold its residents and help deter them from positive, effective attempts to repair their situation. Whatever, constructive leadership rarely emerges from the people themselves. Also, it is well known that for leaders to be successful, they must be recognized as such by the members of the community.

In depressed areas, guidance is usually provided by the professional social worker, the head of community center, or the leader of a religious institution. Yet, these persons may find it difficult to coalesce their efforts and resources cooperatively; they may be in disagreement as how best to alleviate the onerous plight of the inhabitants. These are not necessarily the kind of efficient leaders who can formulate plans needed to rectify the plight of the

depressed and authorize their implementation.

It is no wonder that these young people are "shook up". Since their social roots are so insecure, the gang group rapidly takes on deep anti-social tendencies. The panoramic portraits of these young misfits can become almost unbelievable. One boy may not be older than thirteen, yet has stolen automobiles. Another, at the age of sixteen, may be a decoy in a shakedown racket. Still another, at the age of fifteen, may be a dope addict. Girls, too are delinquent. One girl may be a mother at the tender age of thirteen. Another, by the age of sixteen, may have turned lesbian. And either a boy or girl may become involved as a homosexual, especially if he or she is offered money.

The delinquent in whom antisocial behavior is generated is a result, in large part, of the socially disorganized living space that typifies depressed communities. These serve as reservoirs for all kinds of accumulating sicknesses. The social ills that afflict the depressed area are vividly portrayed on the canvas of community dissonance already outlined. The depressed area, with much internal heterogeneity and anonymity, is characterized by a paucity of clearly defined and normally accepted standards and is noted for its lack of stability. This condition reduces the effectiveness of normal instruments of social control, including the good opinion of those whose esteem we highly value, pride in the neighborhood, or the "we" feeling among the inhabitants. These places are an added burden on the formal means of control, such as the police, the courts, the schools, and the religious institutions. Often, these agencies are looked upon as enemies of the residents and representative of a strange, antagonistic culture.

Various agencies attempt to prevent crime and to hold down further degradation of the neighborhood. Their usual effect, however, is merely to convince the antisocial deviant even further that society is against him. Thus, punitive action becomes the father of circular negativity; prisons and reformatories function as crime laboratories where criminal technique is fostered and where incarceration provides a motive for engaging in crime when released.

There is another type of leadership that may have come from the local grass roots, yet leaves much to be desired. This is the individual who, having emerged from the slum, gives destructive leadership. He may be a "successful" social boy who "made good" and who tends to "prey" upon, instead of pray for, the poor of whom he was once an integral part. Such an individual is likely to be motivated by leeching rather than by concern for community welfare. His dedication and interest in local problems is questionable.

For the most part, the leadership that exists in the depressed area is not an effective one. It is incapable of bringing community problems into proper perspective in relationship to the wider world beyond its boundaries. What is missing is a type of leadership able to escape the pathological pattern into disciplined, constructive activities and programs which can refocus the underlying hopeless sentiments of the masses. Their energies and feelings can thereby be channeled into constructive purposes that will eradicate the basic problems of the neighborhood which affect so disastrously the children who live there.

### Statement of the Purposes and Objectives

The long range purpose of this study is to offer empirical evidence which would indicate which techniques and methods might be used most effectively by secondary schools which are offering educational opportunities for potential dropouts, who, for the most part, are from minority groups.

This study's intermediate purpose is to demonstrate empirically that certain educational programs such as Upward Bound make a significant contribution to the secondary and post-secondary educational experiences of high risk students from minority groups and will continue to do so. An attempt will also be made to provide empirical evidence which will indicate that the high risk minority students can and do perform satisfactorily in high school and college if given the proper guidance, assistance, and encouragement by special educational programs such as Upward Bound. Additionally, this study, in attempting to arrive at its objectives, will show empirical evidence which will indicate that the GPA, dropout rates and biographical data reported by Upward Bound students prior to their inclusion in the program were not significantly different from non-Upward Bound students enrolled in the same grades at our feeder schools and that all the students involved in this study, both Upward Bound and non-Upward Bound, had a similar economic background level.

### Statement of the Problem

The problem of this study will be concerned with the following:

1. Is there a difference in the dropout rates of 1972 Upward Bound (UB) students and the dropout rates of non-UB students at the same grade level in our

Oklahoma City (OKC) feeder schools?

2. Is there a difference in the biographical profile data of 1972 UB students and the non-UB students attending our feeder schools?

3. Is there a difference in the Grade Point Average (GPA) gain scores reported by 1972 UB students and non-UB students of the same year, who are attending our feeder schools and who are at the same grade and ability levels as indicated by the California Achievement Test or School and College Achievement Test (SCAT)?

## CHAPTER II

### Studies Related to High-Risk Students and School Dropouts

In a nation which values education as much as ours, there is little opportunity for the individual who decides to terminate formal schooling prior to high school graduation. There have always been those who decided on this course of action, but the consequences for them have become more severe in recent years. National leaders in the field of government service as well as education have recognized the dropout problem. The late John F. Kennedy, in his 1963 message on the state of the nation, remarked that:

"The future of any country, which is dependent on the will and wisdom of its children, is damaged whenever any of its children are not educated to the fullest extent of their capacity...and that is a waste we cannot afford."<sup>1</sup>

Two years later, Lyndon B. Johnson stated before the Congress:

"Almost a million young people each year will continue to quit school if our schools fail to stimulate their desire to learn. The cost of his neglect runs high for both the youth and the nation."<sup>2</sup>

During the same year, the Dropout Prevention Program, funded under Title VIII

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<sup>1</sup> Schreiber, Daniel. Profile of the School Dropout, (Toronto: Random House of Canada Limited, 1968), p. 3.

<sup>2</sup> Ibid., p. 3.



of the Elementary and Secondary Education Act of 1965, underlined the seriousness of the problem. Johnson also underlined the determination of this nation to foster exemplary educational programs to reduce the number of children who do not complete their education through elementary and secondary schooling. This effort to halt future dropouts is woven throughout the pages of every major federal legislative mandate dealing with education.

Today, it is impossible not to see the problem of the school dropout as the keystone of a conglomeration of problems which threatens to overwhelm the stability of America's existence.<sup>3</sup>

One of the inherent dangers well-meaning people face in dealing with the dropout problem is the tendency to stereotype dropout youths as discipline cases, delinquents, future welfare recipients who come from welfare families, and if girls, breeders of illegitimate children. Another pitfall is the apparent desire to oversimplify this complex problem in order to propose solutions for its resolution--solutions that are only palliatives and do not deal with the underlying causes. Devices are sought and strategies developed to compel or entice youths to remain in or return to school, but this remedy only precedes failure and doom. One example is a solution usually proposed by well-meaning, well-intentioned legislators. It is simple and direct: raise the compulsory school attendance age to eighteen or nineteen so that youths will be compelled to remain in school through graduation. Another example is the drive to get dropouts to return to school. Here, too, the assumption is that once a youth returns to school, he will remain and graduate. In neither case is an

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3  
Ibid., p. 4

effort made to change the schools, to better accomodate these children. The child must conform and the school remains inviolate--a bastion of rigidity.

Industry too is guilty of a persistent propensity to oversimplify qualifications, and the school dropout is suspect. The high school diploma has become the credential for employment, and personnel officers are using it as a screening device even where the job does not require it. The tendency of industry to escalate its entrance requirements as the educational level of new workers rises (from a little more than ten years of schooling in 1952 to twelve years of schooling in 1962 with the prediction that two years of college will be needed by 1975), plus the real need for better-educated workers will increase the already desperate plight of the school dropout.<sup>4</sup>

The correlation between the number of years of schooling and employment also holds true between the number of years of schooling and lifetime income. The difference of approximately \$65,000 between the lifetime earnings of graduates and dropouts represents the difference between being able to feed, clothe, and educate one's children properly or having them live on starches, wear second-hand clothing and possibly become dropouts too. More important, it may determine whether an individual feels that he is a participating, contributing member of society rather than alienated from it.

In the past, a youth had alternative paths for growing up. A young person could quit school, find a job, discover what he was good at, and eventually become a successful participating adult; or, he could reach adulthood by remaining in school and graduating. Today there seems to be only one way--

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Beinstock, Herbert. Realities of the Job Market for the High School Dropout (New York: Vintage Books, 1972), p. 101.

the school way. The dropout, never really learning in school what he is good at, leaps into adulthood confused, bewildered, insecure and unsure of himself, wondering whether he is good at, or for that matter, good for anything. "For the overriding fact is that there are fewer and fewer places in our society for the dropout, and it becomes increasingly clear that he has no future!"<sup>5</sup>

The United States, no matter how productive and affluent it is, cannot afford to have almost one million youths drop out each year only to become unwanted and unemployed. The accumulation of the millions of excluded and alienated youths and young adults, unceremoniously relegated to the ever increasing slag heap, cannot and will not remain there without causing serious dislocation in our society. If we cannot reconstruct our educational system to provide meaningful, successful experiences for all of our children so that they will become an integral part of our society, then the possibilities for growth and stability in America may be lost.

#### Causative Factors

There are certain causative factors which pervade the vast expanse of literature pertaining to the school dropout. These factors are so inter-related that, although they can be listed, as below, their relationship is such that one pervades the other in any attempt to delineate them. Thus the following explanation intermingles the following causative factors: (1) economic background of family, (2) educational background of the family, (3) ethnic or racial background of the family, and (4) environmental background of the family.

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<sup>5</sup>  
Schreiber, op. cit., p. 6.

Since dropping out of school is most frequent and most drastic in its consequences among the children of the poor, and since as Mollie Orshansky concludes, it is poverty itself more than any other factor which breeds poverty, and since we live in a time of rapid change, it would be one thing if poverty hit at random, and no one group were singled out. It is another to realize that some seem destined to poverty almost since birth--by their color or by the economic status or occupation of their parents. It has become a truism that, in good times and bad, certain groups lag behind in the long-term upswing of our economy. Prominent among these are the aged, the families headed by a woman, and minority groups--particularly the blacks.

Year after year the same kinds of people continually appear at the bottom of the income pyramid. In 1971, for example, of the families in the lowest income group (the lowest 20 per cent) almost a third were aged families, a fourth were broken families (usually headed by a woman), and a fifth were nonwhite--proportions identical with those in 1951 and 1961.<sup>6</sup>

The 2¼ million families composed of a mother and her children today represent only one-twelfth of all families with children, yet they make up more than a fourth of all families classified as poor. Together with the 510,000 mothers who are currently living with their children as a subfamily in the home of a relative and who are even poorer, they are raising more than 6 million children. More than a fourth of these families are nonwhite--a reflection of the fact already cited that nonwhite children are more likely than white children to be brought up without a father. Of the families of children with both parents

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Orshansky, Mollie. Children of the Poor, (Cambridge: Wesley Publishing Company, 1970), p. 61.

present, only one in every twelve is nonwhite.

When the statistics for white and nonwhite families are taken separately, they show, as expected, that the nonwhite families fare worse. Even the white mother raising her children without a father in the home usually does so, however, on a limited income. In 1971 the median income was \$2,675 for the white families and \$1,665 for the nonwhite, but the nonwhite mothers had, on the average, nearly three children each and the white mothers slightly more than two.

Nonwhite families in general, despite their smaller incomes, are considerably larger. Three out of every five mother-child families with six or more children are nonwhite, but only one out of five among those with one child. A fourth of the husband-wife families with six or more children are nonwhite, in contrast to seven per cent of those with a single child.<sup>7</sup>

Despite recent advances in school enrollment, in 1970 the mothers in broken homes generally reported little education. Nonwhite mothers had considerably less; more than one-third had not finished the eighth grade, twice the proportion among the white mothers.<sup>8</sup>

Some of the mother-child families may be receiving aid from public programs, but those who must depend on them exclusively are likely to find themselves in low-income status. The public programs specifically designed to aid families that can no longer count on a father's earnings are old-age,

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Derived from tabulations of Current Population Survey (March, 1972) by the Bureau of the Census for the Social Security Administration.

8

Morgan, James N. and others. Income and Welfare in the United States, (New York: McGraw-Hill Book Co., Inc., 1972), p. 216.

survivors, and disability insurance and aid to families with dependent children. (A number of mothers and children also receive payments under Veterans Administration programs.)<sup>9</sup>

With nine out of ten workers now covered by the Federal insurance program, the chances are almost that high that, when a father dies today (or becomes disabled), his child will be able to count on some regular income until he reaches age 18. On the other hand, for children bereft of support because the father and mother separate, divorce, or were never married--a much more common crisis--the possibility of support under a public program is much more limited.<sup>10</sup>

The program of aid to families with dependent children, which is the most applicable to this group, currently makes payments on behalf of children in nearly a million families.<sup>11</sup>

Many of these mothers work in private households, in retail stores, and in laundries, and other service establishments not covered by Federal minimum wage laws or unemployment insurance. Three out of every five of the nonwhite mothers who are employed are working at service jobs, including domestic work in private households. Two out of five of the employed white mothers are clerical, sales, of kindred workers.

A number of these mothers work intermittently, with the result that

<sup>9</sup>  
Orshansky, op. cit., p. 78.

<sup>10</sup>  
Morgan and others, op. cit., p. 79.

<sup>11</sup>  
Ibid., p. 78.

their future old age benefits will undoubtedly be minimal. Thus we may already  
 be creating the old age assistance caseload of the 1980's and 1990's.<sup>12</sup>

With day care of young children largely unavailable or in any event beyond their means, the mothers' employment opportunities will be severely limited or children must be left unattended. Manpower and retraining programs up to now have offered little to the woman with little formal education as most of these mothers have. Rehabilitation programs have seldom provided for child care while the mother is being trained. Many of the same difficulties characterize the father in husband-wife families with inadequate income. Such families as a group can look to even less help from public programs than broken families can. It is perhaps the inability of the man to earn, particularly among nonwhites, that is conducive to the disruption of the marriage, or the failure ever to undertake legal marriage, that leaves so many mothers to bring up children without a father. Research now under way suggests that families in which the father is an unskilled laborer, as well as broken families, contribute much more than their proportionate share of high school freshmen who rank low in aptitude.

There are more children deprived by low family income of their rightful chance at making their way in society who live with both a father and mother than there are similarly deprived children living with the mother only. One of the ways to abate the problem of the low-income mother-child family is to take appropriate action while the family is still intact.

A recently released study of cases assisted by aid to families with

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Mugge, Robert H. "Aid to Families with Dependent Children: Initial Finding of the 1971 Report on the Characteristics of Recipients", Social Security Bulletin (March 1973).

dependent children shows that, for a nationwide sample of such families whose cases were closed early in 1971 "more than 40 per cent of the mothers and/or fathers were raised in homes where some form of assistance had been received at some time"<sup>13</sup>. Nearly half of these cases had received aid to families with dependent children. This estimated proportion that received some type of aid is more than four times the almost ten per cent estimated for the total United States population. With education so important these days for any chance at a well paying job, the educational attainment of children formerly receiving aid to families with dependent children fell well below that of the same age group in the general population. Thirteen per cent of the total population, aged 18-24 had not gone beyond the eighth grade, but in the sample of families receiving aid, the corresponding proportion was twice as high.<sup>14</sup>

Poor families have been found in various studies not only to have less resources but much less often, to have aspirations toward providing a college education for their children, despite the fact that education today is the key not only to a better job, but to any job at all.

Children from the broken families who represent so large a proportion of the poor undoubtedly will often fall in the same unskilled category. The mothers with no education or cultural expectation for themselves, with little money to provide a home environment conducive to study, and needing the help of their older children to satisfy the bread-and-butter needs of the younger ones,

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Welfare Administration, Bureau of Family Services, Division of Program Statistics and Analysis, Characteristics of Families Receiving Aid to Families with Dependent Children, Nov. Dec., 1971, (April, 1973).

14

Ibid.



often are in no position to encourage even gifted children to stay in school, though scholarships are available. The fact that schools in poor neighborhoods are likely to be short on counselors, books, and other tools needed by the student will serve to compound rather than mitigate the home deficiency.<sup>15</sup>

There is need for considerable refinement of the definition or standards by which poverty is to be measured, if we are to trace its course with assurance. Nevertheless, compelling evidence already suggests a lingering reservoir of self-perpetuating low-income status among particular population groups--toils the individual often is powerless to escape and a deprivation that falls in large part outside the scope of existing remedial programs. Along with the basic research into the cause and long-range cure for chronic low income, there is need for more thorough-going inquiry into the characteristics of those currently affected and a means of counteracting some of the more dire social consequences, at least for children.

If it be true that the children of the poor today are themselves destined to be the impoverished parents of tomorrow; then some social intervention is needed to break the cycle, to interrupt the circuits of hunger and hopelessness that link generation to generation. For the common benefit of all we must assure the security and well-being of all our children--at the same time the nation's most precious and most perishable resource.

We have lived with a welfare system which aids only a fourth of those who are poor, which forces men to leave their families so that public assistance can be obtained, which has created a dependence on their fellow citizens that is

degrading and distasteful to giver and receiver alike. In the long run, welfare payments solve nothing, for the givers or the recipients; free Americans deserve the chance to be fully supporting--and this requires education.

The effects of the shortage of meaningful employment are reinforced by a welfare structure which is frequently destructive both of individuals and of the community in which they live. "Thus", as one economist says, "we penalize old age pensioners who get jobs, by cutting their social security benefits in correspondence with their pay; we terminate welfare payments when the wage-earner head of large family gets even a poor-paying job, sometimes at a lower level of income than that provided by his welfare payment"<sup>16</sup>. And in the midst of much hand-wringing about the disintegration of black families, we compel fathers to leave home so that their families may receive a federal assistance; this teaches their sons the lesson that the best way to provide for a family is to abandon it.

For too many, then welfare is not only inadequate, but appears as a reluctant handout designed to screen the poor away from the rest of society.<sup>17</sup>

The value orientation of the lower class student makes him uncomfortable perhaps, and ill at east in the middle-class school system. He develops expectations of failure.

The lower class value orientation of the dropout causes him to be antagonistic toward the middle-class school system. There is usually a com-

16

Kennedy, Robert F., Report to his New York Constituents, Washington, D.C., May 1967.

17

Kennedy, Robert F., Testimony, Senate Finance Committee, August, 1967.

munication problem between a middle-class teacher and a lower class student. Research also shows a pattern of values and attitudes possessed by the dropout which usually differs from the values of the school.<sup>18</sup>

It is also pointed out by Clarence Senior that these values play an instrumental role in keeping lower class students at the same status position held by their parents.<sup>19</sup>

Some educators maintain that education is not an elevator to higher social class, but rather a "conveyer belt". The teacher is also generally a product of middle-class culture.<sup>20</sup> There is, therefore, a problem for the teacher to accept the child with a lower class orientation, and a further problem for the child to understand the teacher with a middle-class orientation.<sup>21</sup> What occurs is a kind of "subconscious conflict".

The effects of the broken home as it pertains to the educational levels of families in black communities is a real problem. A good deal has been written about the effects of the broken home, but most data have been meager and the results sometimes inconsistent. One could say that coming from a broken home has both positive and negative effects on educational attainment of blacks.

18

Charters, W. W. and N. C. Gaye, eds., Readings in the Social Psychology of Education (Boston: Allyn and Bacon, 1973), pp. 4-5.

19

Senior, Clarence. "Newcomers, Strangers, and Schools", The School Dropout, 1971, p. 112.

20

Ibid., p. 115.

21

Ibid., p. 121.

Its positive effect lies in the fact that blacks from the South whose families break up have more opportunity to complete high school by going North. The negative effect is that mothers who are the results of broken homes have no place to go. Elizabeth Herzog and Cecelia Sudia, who wrote "Boys in Fatherless Families", stated that with regard to academic performance it seems unlikely that father absence in itself would show significant relation to poor school achievement, if relevant variables (including type of father absence) were adequately controlled.<sup>22</sup>

When looking at the relationship between stability and income of black men, the story is somewhat different than when looking at their educational differences. Black men from broken homes, whether broken by death or separation, incomes were nearly \$800 lower than homes that were stable (both parents in homes).

Usually the mother's education is the better predictor of the black child's behavior than that of the father. It is interesting to note that mothers in black homes that are stable are slightly less likely to be high school graduates than mothers in broken homes. For the black child, coming from a stable home is an economic resource equivalent to about two or three years of formal education, and is nearly three times as valuable as having a father who was a high school graduate, which is rare in the black community.

Those children of the poor who do graduate from high school--in some "inner city" schools as many as 70 per cent drop out before commencement--are not prepared to compete with any hope of success in the world they are about to enter.

Most read at levels three or more years behind the national average (it is not unusual to find seniors with fourth-grade reading proficiency). Few can compose an essay in acceptable English or perform simple arithmetic operations accurately. Even more tragically, their thirteen years of formal education have left them with only vague, misshapen conceptions of life beyond the ghetto's boundaries (of 175 graduating seniors in a Detroit ghetto school, more than 80 per cent believed that between 60 and 95 per cent of the U.S. population was <sup>23</sup> black).

The causes of the public schools' inability to educate the children of the poor are many and complex. Educators have been slow to recognize that techniques and materials that produce results in middle-class areas often do not motivate and engage the interest of slum kids. Too many "inner city" teachers have convinced themselves that slum children are "uneducable", thus providing a handy rationale for their own failures and unwillingness to devote the time and imagination necessary to create relevant, interesting, and de-<sup>24</sup>manding classes for their students.

There also is a tendency among these same teachers to take literally the "culturally deprived" label affixed to their students by sociologists. The label was intended to indicate the absence in certain lower-class children of certain attitudes, habits, and experiences associated with success in a middle-class society, not the total lack of a culture. Unable, or unwilling to recognize

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Kennedy, op. cit., p. 2.

24

Ibid.

the existence of a vital lower-class culture, many teachers in slum schools bypass the opportunity to use this culture as a pertinent subject of study as a bridge to topics beyond the untutored preview of ghetto students.<sup>25</sup>

Using the mother's education as a measurement is not adequate for a complete explanation of the broken home effect. Broken homes are often poor, even when the mother is well educated, and it might be that boys from broken homes have lower incomes because they have not been able to compensate for the limited resources of their poor upbringing. But before one can accept this rationale, he or she must at least consider three other views or reasons:

1. If the poverty of the broken home is critical, then the greatest effect should occur in families where the main earner, the father, died. In the case of separation, there is at least a possibility that the father will continue to contribute income.
2. Broken homes usually result in poverty stricken areas, such as the South moves to the North. Poverty is a very powerful factor.<sup>26</sup>
3. Since childhood, poverty is a major factor in explaining the low incomes of parents from broken homes. We should expect first, that children from broken homes would care less about education and be more prone to dropping out of school.<sup>27</sup> That these who manage against these odds to obtain a better education would es-

25  
Ibid

26  
Rainwater, Lee, Behind Ghetto Walls: Life in a Federal Slum, (Chicago: Aldine, 1972).

27  
Klineberg, Otto, "Negro-White Differences in Intelligence Test Performance: A New Look at an Old Problem", (April, 1973.)

cape most of their childhood consequences that were unfortunate. But as far as black men are concerned the effects of family stability on education are not as large as one would think for men. Some studies have actually found that parents coming from broken homes who had graduated from high school greater effects  
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than those parents who had not graduated from high school.

It has often been said that one of the main problems with the black family is that the women are too powerful and the men too weak.

It has been suggested that the black male creates more marital problems than the women. It has even been stated that in supposedly stable black families (homes), emasculated fathers provide a poor role model for young black  
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males. In reality, the weak father is not much better than the absent father.

Mirra Komareusky, in her book Blue-Collar Marriage, argues that lower class marriages are characterized by segregation of roles between husband  
30  
and wife.

In partial conclusion, the effects of coming from a home broken by divorce, separation, or death are not uniformly bad, depending on such factors as region (North and South) and sex. Coming from broken homes does depress educational attainment for men and women. Poverty does not account for the effects of the broken home, nor does the hypothesis that males from female-dominated

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Ibid

29

Hyman, Herbert and John Shelton Reed, "Black Matriarchy Reconsidered: Evidence from Secondary Analysis of Sample Surveys", Public Opinion Quarterly, 33 pp. 346-354.

30

Komareusky, Mirra, Blue Collar Marriage (New York: Random House, 1964).

homes underachieve. Personality is strongly associated with the broken home; men from broken homes tend to be more violently aggressive and less happy and have a low sense of control.

#### Higher Education Programs

There are programs around the country designed to break down and help eradicate some of the effects of these problems in disadvantaged students. These programs are designed to identify and set up an academic program for these students. Geared to the students' identified weaknesses, these weaknesses are diagnosed through diagnostic testing. The programs are called Upward Bound. This program originated from pilot projects funded during the summer of 1965 with private funds from the Carnegie Corporation and research and demonstration funds for experimental programs from the Office of Economic Opportunity. The pilot projects were designed as summer units for low-income students who would enter college the following September, but were in need of intensive college preparatory programs.

As the results were analyzed, the Office of Economic Opportunity decided that a year-round program was needed to meet the special needs of disadvantaged students preparing for college, including both residential summer and academic year follow-up activities, and extending service throughout the two or three years prior to high school graduation to students who could be characterized as "academic risks". The new program was subsequently authorized as a national program under the 1966 amendments of the Economic Opportunity Act, becoming a component of the Community Action Program in the Spring of 1966.

The Upward Bound Program was intended "to generate skills



and motivation necessary for success in education beyond high school for enrollees from low-income backgrounds with inadequate secondary school preparation for post-secondary education by enrolling students in essentially full-time project activities." Program guidelines required a residential summer program together with a limited academic year follow-up program (weekly meetings) to gauge the success of the summer's activities in terms of individual student performance in the secondary school classroom. The eligible student population was broadly defined as those with "academic risk" for post-secondary education in view of their inadequate levels of academic preparation in the secondary school system, and the lack of personal motivation for education.

The Higher Education Amendments of 1968 transferred the Upward Bound Program from the Office of Economic Opportunity to the Office of Education and established certain specific requirements for the program. Individual projects were required to: effect arrangements to assure cooperation between institutions of higher education and secondary schools; provide health services for all participants; provide limited stipend payments up to a maximum of \$30 per month per participant; and establish a maximum cost-per-student of \$1,800 per annum, with the federal share of expenditures limited to a maximum of 80 per cent of total program costs (\$1,440 per student).

The Education Amendments of 1972 removed all of the requirements cited above except for the maximum limitation on stipends. Removal of the non-federal share requirements and the cost-per-student ceiling increased the federal cost to 100 per cent.

There are over 200 such programs now throughout the United States and Guam. The continental United States is broken down into regions with the

University of Oklahoma being a member of Region VI which alone has 50 projects, in states like Arkansas, Louisiana, New Mexico, Oklahoma and Texas. Their goals are the same. Program formats may vary a little but only with approval from HEW.

#### Definition of Terms

What follows is a series of key terms which are defined not on any absolute basis, but as they will be used in the present study:

1. Upward Bound Program -- a program designed to help disadvantaged students with post-secondary educational and career planning. (See Table 2.1).
2. Upward Bound Student -- a student participating in the program who has been classified by the project staff and all concerned as a person with academic potential whose scholastic achievement has been hampered by social, economic, and/or cultural reasons rather than intellectual capacity.
3. Non-Upward Bound Students -- the students who participated in the study who were from the same economic background and feeder schools as the Upward Bound students.
4. Minority Group Students -- students who participated in the study who were from one of the following backgrounds: black, Mexican-American, or Indian.
5. Disadvantaged Students -- those participating students who were declared economically disadvantaged because of their family's low gross annual income.
6. Feeder Schools -- those schools in Oklahoma City which supply us our students. They are Capitol Hill, Southeast, Del City, Crooked Oak, Classen and Northwest Classen.

TABLE 2.1

## SOCIOECONOMIC GUIDELINES ESTABLISHED FOR UPWARD BOUND PROGRAM

List A

Number of members in family	Annual Income	
	non-farm	farm
1-----	\$2,254-----	\$1,916
2-----	\$2,823-----	\$2,399
3-----	\$3,356-----	\$2,383
4-----	\$4,277-----	\$3,644
5-----	\$5,048-----	\$4,301
6-----	\$5,679-----	\$4,849
7-----	\$7,000-----	\$5,963

List B

Number of members in family	Annual Income	
	non-farm	farm
1-----	\$2,800-----	\$2,400
2-----	\$3,500-----	\$3,000
3-----	\$4,200-----	\$3,500
4-----	\$5,300-----	\$4,600
5-----	\$6,300-----	\$5,400
6-----	\$7,100-----	\$6,100
7-----	\$8,800-----	\$7,500

7. High-Risk Students -- those students who participated in the study who were from low income families according to HEW/OE guidelines as established for Upward Bound Programs.

#### Hypotheses Tested in the Study

In order to make definite statements about the results reported by the different groups of student participants, four (4) hypotheses were tested at the .05 level of significance:

HO<sub>1</sub> There is no significant difference between the dropout rates reported by the 1972 Upward Bound students and the dropout rates reported by the non-Upward Bound students.

HO<sub>2</sub> There is no significant difference between the grade point average reported by the 1972 Upward Bound students and the grade point average reported by the non-Upward Bound students.

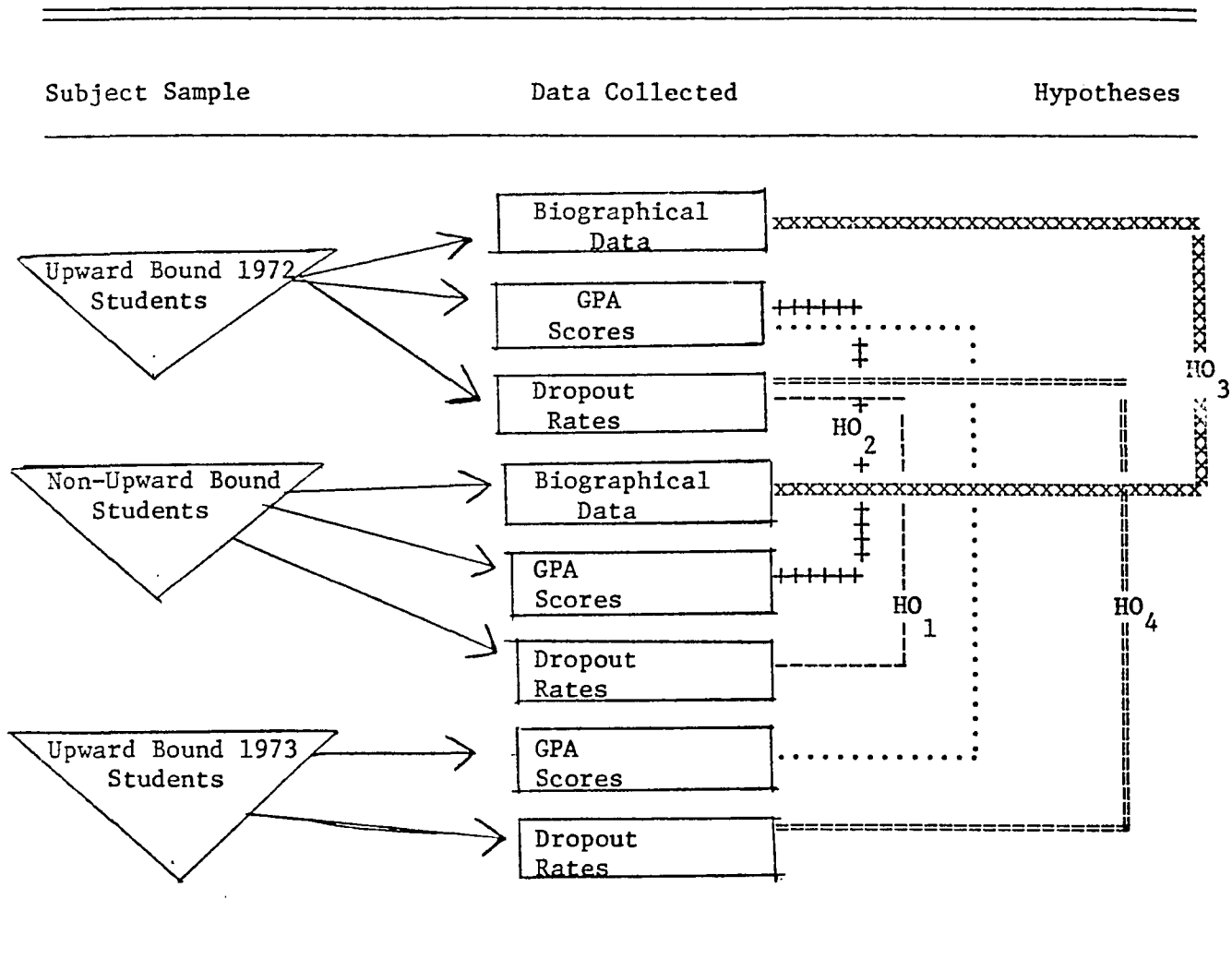
HO<sub>3</sub> There is no significant difference in the biographical data reported by the 1972 Upward Bound students and the biographical data reported by non-Upward Bound students.

HO<sub>4</sub> There is no significant difference between the dropout rates reported by the 1972 Upward Bound students and dropout rates reported by 1973 Upward Bound students.

In order to test these four (4) hypotheses it was necessary to collect three types of data from the study participants: (1) GPA scores; (2) biographical data; and (3) statistics concerning the dropout rates of each group. An illustration of the data collected and the comparisons made is presented. (See Table 2.2).

TABLE 2.2

ILLUSTRATION OF COMPARISONS MADE IN TESTING HYPOTHESES



### Limitations of the Study

For the purpose of this study, certain limitations were set in order to make the study feasible. The samples of subjects was by far the most important of these limitations, along with the independent variables which were controlled. These limitations are:

1. The 1973 Upward Bound student sample of participants was limited to the fifty-five who were enrolled in the program last year.

2. The sample of the 1972 Upward Bound students was limited to the forty students who were enrolled in the program during the 1971-1972 school year.

3. The sample of non-Upward Bound students was limited to fifty-five who were randomly selected and whose economic backgrounds are similar to those of the Upward Bound students.

4. The number of variables controlled in the study was limited to those shown on the data-collection instrument in Appendix B and to the variables listed in the stated hypotheses. The data collected from the subjects was generally of nominal and ordinal measurement levels. Because of these levels of measurement, the number and kind of appropriate statistics which were used in the statistical calculations is limited.

### Assumptions Underlying the Study

For the purpose of this study, it was necessary to make several major assumptions concerning the data-collection instrument, the sampled participants, and the statistical techniques used in the data analysis. Those assumptions are as follows:

1. It was assumed that the variables being measured in the study were related to the high school student's level of academic success.

2. It was assumed that the sample of non-Upward Bound students was statistically equal to the Upward Bound samples as a result of the stratified random selection procedures used.

3. It was assumed that samples of Upward Bound students constituted a normal population of Upward Bound students.

4. It was assumed that the samples of Upward Bound students and non-Upward Bound students constitute a population representation large enough to allow generalization.

5. It was assumed that the items contained on the questionnaire actually measured areas related to academic achievement in college and high school.

6. It was assumed that the responses of each student to the questionnaire were independent of the responses of all other students and could therefore be treated with statistical tests which have an independent-of-errors assumption.

## CHAPTER III

### Methods and Procedures

Data was collected from fifty-five Upward Bound students from the year 1972 and fifty-five non-Upward Bound students from our feeder schools located in Oklahoma City, Oklahoma, in order to compare the biographical data, dropout rates, and GPA scores of the two groups.

A sample of 55 non-UB students matched on composite national achievement test scores and sex was drawn and their overall GPA's for the first and second semesters, their dropout rates and their biographical data will be compared with the GPA's, dropout rates and biographical data of UB students of 1972. The Upward Bound Program at Oklahoma University was first implemented in the fall of 1970, and has received limited, though continuous, funding since that time. This study was an attempt to determine its effectiveness as measured by its ability to retain high school students in the program and help them with their post-secondary educational efforts whether it is a two or four year college or business school, or vocational school, etc., as compared to a non-Upward Bound population of students.

The methods and procedures used in conducting the study were divided into three areas: data-collection procedures, data-analysis procedures, and pre-evaluation procedures. These areas were, in turn, subdivided into tasks



or procedures and are discussed at length in the following passages.

### Pre-Evaluation Procedures

These procedures consisted of all those tasks which it will be necessary to complete before the actual data collection collection is begun.

### Development of a Data-Collection Instrument

It was necessary to develop a data-collection instrument in order to obtain measures of the variables shown in Table 3.1. This instrument, the Confidential Survey Questionnaire shown in Appendix B, was developed for the proposed study. The instrument has already been field tested on a variety of subjects. The amount of information collected from the students was restricted to the questions shown in order to encourage a higher percentage of participation.

### Choice of Testing Statistic

1

A students t-test was used to test the four hypotheses, if the various biographical data variables were found to be unrelated to the dependent measures taken. A correlation matrix was computed to determine the amount of relationship existing between and among the different variables being controlled in the study. In the event that the correlation matrix indicated that some of the biographical data variables were in fact related to the measures taken, the first and second semester GPA scores, and the dropout rates, it was planned to compute a statistic which is designed to make comparisons between two or more means while making mathematical adjustments for the effects caused by extraneous,

---

1

Student, "Errors of Routine Analysis", Biometrika, 19, 1927, p. 151-64.

but related variables. Such a statistic is the one-way Analysis of Covariance<sup>2</sup> (ANCOVA). Thus, the testing statistic was planned to be a student's t-test or a one-way analysis of covariance. The one used depended upon the results of the correlation matrix computed among the various measures taken from each of the subjects in the study.

These tasks include such operations as the choice of variables studied in the study, development of data-collection instruments, and choice of statistical analysis procedures.

### Choice of Research Design

The term "research design" is intended to mean the plan, structure, and strategy of investigation conceived to obtain answers to research questions, and to control external sources of variance.

The structure is the paradigm of the operation of the variables being studied; the plan is the program of the evaluation problem or the overall scheme; and the term strategy means the actual method used in analyzing and gathering the data.

There are two basic purposes served by a research design. First of all, it controls external sources (variables) or variation. In other words, it is through the design of a study that research is made effective and interpretable.<sup>3</sup> Secondly, it provides answers to research questions posed by the

2

Kirk, Roger, Experimental Design: Procedures for the Behavioral Sciences, (Belmont, Cali.: Brooks/Cole Publishing).

3

Kerlinger, Fred N. Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1966).

investigator.

Kerlinger makes the following statement in regard to evaluation and research designs:

Research designs set up the framework for 'adequate' tests of the relations among variables. The design tells us, in a sense, what observations (i.e.-measurements) to make and how to analyze the quantitative representations (i.e.-data) of the observations. Strictly speaking, design does not 'tell' us precisely what to do, but rather suggests the directions of observation making and analysis, how many observations should be made and which (independent) variables are active variables and which are assigned. We can then act to manipulate (i.e. - control) the active variables and to dichotomize or trichotomize or otherwise categorize the assigned variables. A design tells us what type of statistical analysis to use. Finally, an adequate (i.e.-appropriate) design outlines from the statistical analysis.<sup>4</sup>

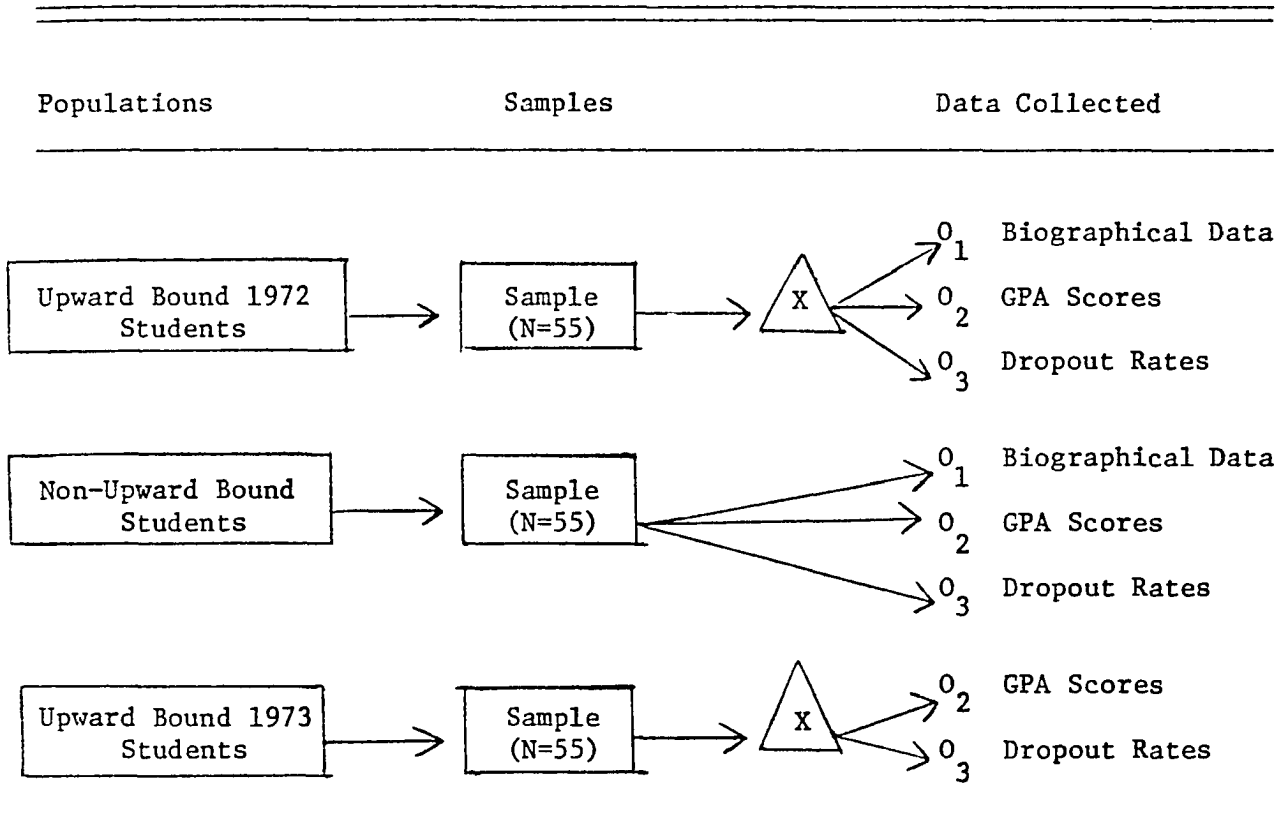
A survey-type study, supplemented by additional data from other reliable sources, was the chosen type of research design for the present evaluation.

A paradigm of this design is presented in Table 3.1.

#### Choice of Student Population and Samples

Three groups of subjects were used in making the initial comparison for testing the hypotheses stated in Chapter II. These three groups were composed of the following: (1) fifty-five Upward Bound students from 1972; (2) fifty-five non-Upward Bound students; and (3) fifty-five 1973 Upward Bound students who are regularly enrolled in our feeder schools. The 1972 Upward Bound group were comprised of fifty-five students who participated in the 1972 Upward Bound summer program and who attended school during the 1972-1973 academic

TABLE 3.1  
PARADIGM OF RESEARCH DESIGN\*



Explanation of Symbols:

- $O_n$  Observation made; test given; data collected
- $\triangle X$  Experimental treatment -- in this case the experimental treatment was the Upward Bound Program

\* Reference: D.T. Campbell, and J.C. Stanley, Experimental and Quasi-Experimental Designs for Research. (New York: McGraw-Hill Company, 1963).

year. Fifty-five non-UB students who attended school during the 1972-1973 academic year and who have the same grades and economic background as the 1972 UB students were randomly selected from our feeder schools. The 1973 UB group consisted of fifty-five students who were enrolled in last year's program.

#### Choice of Variables to be Studied

Choosing the experimental variables to be controlled and/or measured in the study was the next step in the pre-experimental procedures phase, since it is necessary to control all variables that are "known" to be related to the dependent measures being taken. <sup>5</sup> The literature reveals several variables which have been shown in past research efforts to be related to the success of minority-group, high-risk students in post-secondary education.

The three most important of these variables have been shown to be the student's grade point average, ACT scores, and achievement scores from standardized testing. However, several other biographical information variables were controlled in this study. These are shown in Table 3.2.

#### Preliminary Correspondence to Student Participants

In order to insure a maximum return of the survey questionnaires, it was necessary to make an initial contact with the students chosen to participate in the study.

A letter was developed and is included in Appendix C. It was necessary to mail this letter to the fifty-five non-UB students, the fifty-five

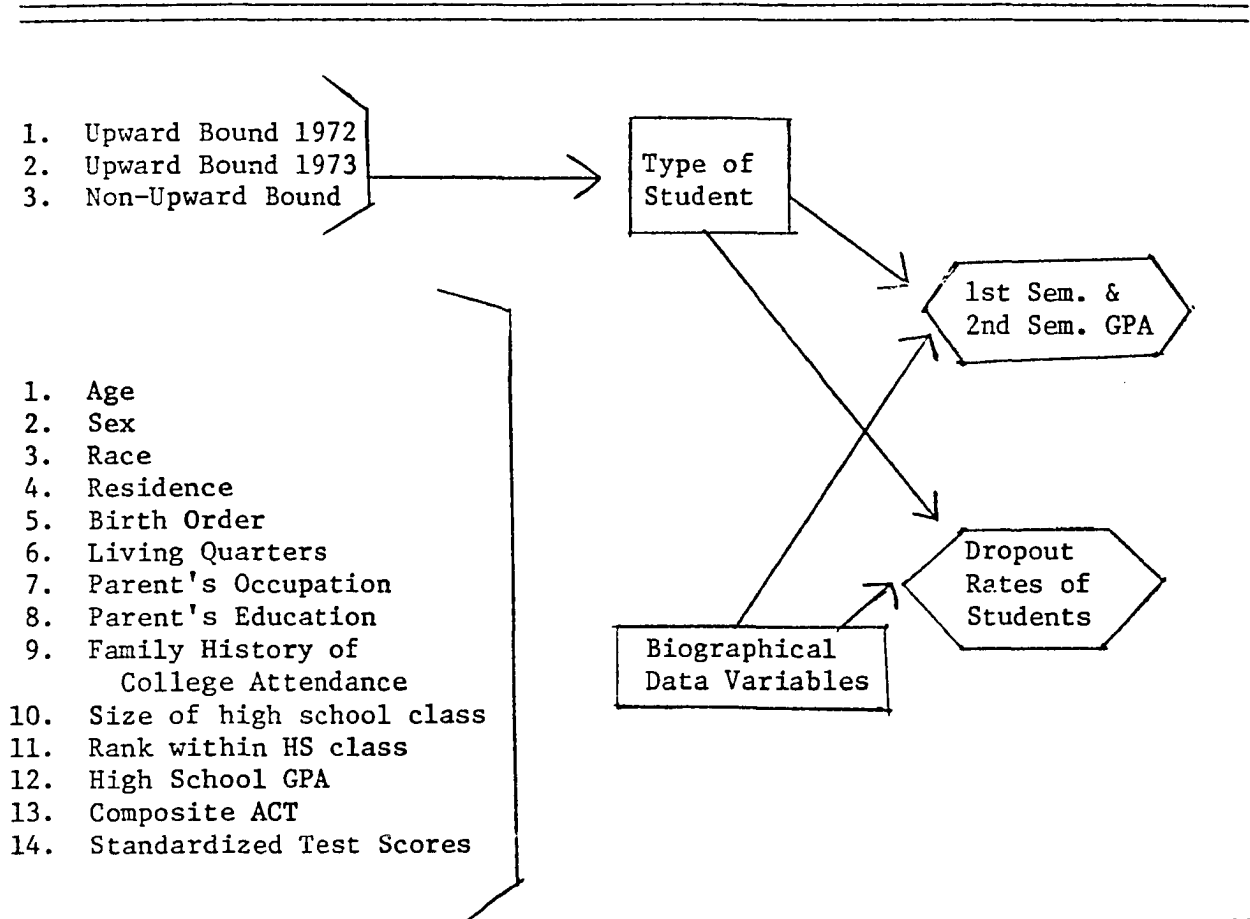
---

5

Ferguson, George A. Statistical Analysis in Psychology and Education, 2nd ed., (New York: McGraw-Hill Book Company, 1966).

TABLE 3.2

## ILLUSTRATION OF FACTORS TO BE STUDIED



1972 UB students and the fifty-five 1973 students. As soon as the preliminary correspondence was mailed to the three groups of participants, the first phase of the methods and procedures was completed.

#### Data-Collection Procedure

The second major phase of the methods and procedures involved the actual collection of data from the three groups of student participants. This data was collected in two ways; by having the students fill out questionnaires and by searching the records and reports submitted on the UB participants and on non-UB participants. The proposed method of collecting data from each of the groups is considered in the following passages.

#### Collection of Data From 1972 UB Students

The data needed from many of the students was obtained from past records maintained by the UB office at the University of Oklahoma and at our feeder schools. Information was collected concerning the GPA's of the 1972 UB students during their participation in that program from its inception in the fall of 1972. The dropout rates of these students was also collected. This completed the data-collection process (procedures) for the 1972 UB students.

#### Data-Analysis Procedures

The final area of the methods and procedures was the data analysis procedures. The data-analysis procedures include all those tasks which were completed after the data was collected from the three groups of participants and before the results of the statistical calculations were made. The majority of these procedures were concerned with the coding and processing of the data using electronic data-processing equipment.

## CHAPTER IV

### RESULTS OF DATA ANALYSIS

First and second semester grade point averages and dropout rates of non-Upward Bound high school students enrolled in the Oklahoma City Public Schools for the 1972 and 1973 academic years were compared to the first and second semester GPA's and dropout rates of students who were enrolled in the Upward Bound 1972 and 1973 Program. The Upward Bound Program is a federally funded program designed to assist low-income students to prepare for college by providing guidance and counseling services, tutorial assistance, part time job opportunities, etc.

The purpose of the study was to compare the academic achievement and dropout rates of high-risk students with the academic achievement and dropout rates of regularly enrolled students who had been matched with the Upward Bound students on composite ACT score and sex.

Academic progress was determined by computing the mean grade-point averages for at least one semester of classwork per semester. A second measure, student dropout rates, was also recorded for all three groups. These two measures were used to test the four stated hypotheses. However, participants were also asked to complete a Confidential Questionnaire such as the one presented in the Appendices. The data from these questionnaires are presented in the ancillary findings of this chapter.

Finally, the results of testing the hypotheses and the ancillary



findings are synthesized in the final section of the results.

Comparisons were made among the three groups in order to test four hypotheses. Two hypotheses were related to academic achievement and two were related to dropout rates. The results of testing these four hypotheses are presented in this chapter along with several ancillary findings pertaining to biographical information collected from each group of participants.

The ancillary (secondary) findings are divided into four separate areas: (1) personal data; (2) biographical data; (3) educational data; and (4) occupational and educational history of the student's family.

#### Results of Testing the Hypotheses

The results of testing the stated hypotheses are presented in the following sections. The data presented within the text represent only the descriptive statistics needed to perform the analysis made in testing the particular hypotheses. All raw data are presented in the appendices, however.

#### Results of Testing Hypothesis Number One

Null hypothesis number one was tested as follows:

$H_{01}$  There is no significant difference between the dropout rates reported by the 1972 Upward Bound students and the dropout rates reported by the non-Upward Bound students.

The first hypothesis was tested by performing a t-test between the dropout percentages shown for the Upward Bound 1972 students and the dropout percentages computed for the non-Upward Bound group. However, the number of dropouts reported, (N=7) does not include those who transferred to other schools.

The results presented in Table 4.1 show that the dropout percentages computed for the two groups were significantly different ( $z = 2.143$ ;  $p < .0162$ ).

This result allowed the researcher to reject the null hypothesis number one and conclude that there was a significantly higher percentage of the non-Upward Bound students who dropped out of high school during the year of 1972 (12.069 per cent) than there were of the Upward Bound 1972 students who dropped out of the Program during that same period of time (1.724 per cent). The number of students in each sample, the number of dropouts, and the z-value are presented in Table 4.1.

TABLE 4.1

A COMPARISON OF THE DROPOUT RATES OF THE UPWARD BOUND  
1972 STUDENTS AND THE NON-UPWARD BOUND STUDENTS

Group	Number of Students	Number of Dropouts	Percentage of Dropouts	z-value
Upward Bound 1972	55	1	1.818	z = 2.143
Non-Upward Bound	55	7	12.545	
		z = 2.1430	p < .0162	

Results of Testing Hypothesis Number Two

Null hypothesis number two was tested as follows:

HO<sub>2</sub> There is no significant difference between the grade point average reported by the 1972 Upward Bound students and the grade point average reported by the non-Upward Bound students.

The second hypothesis was tested by performing a student's t-test between the mean GPA value computed for the Upward Bound 1972 students and the mean GPA value computed for the non-Upward Bound students. The mean first-semester GPA, mean second-semester GPA, the mean cumulative GPA, and the t-values are presented in Table 4.2. The actual raw data reported for each group are presented in the appendices along with the mean ( $\bar{X}$ ) and standard deviation (S) of each measure taken.

The results presented in Table 4.2 show that one of the grade-point comparisons made was statistically significant but the other two were not. A comparison of the first-semester GPA's computed for the Upward Bound 1972 and non-Upward Bound groups showed a significant difference between the two ( $t = 2.188$ ;  $df = 113$ ,  $p < .05$ ). These results indicate that the Upward Bound 1972 students had a significantly higher grade-point average at the end of the first semester than the non-Upward Bound students for that same period of time.

On the other hand, a comparison of the second-semester GPA's for these same two groups indicated that there was no significant difference between the means of the two groups ( $t = .650$ ;  $df = 106$ ,  $p > .05$ ). These results should be interpreted with caution since they do not imply that the non-Upward Bound group had raised their scores to a level comparable to the Upward Bound 1972 group during the second semester. Even though the non-Upward Bound participants ended the first semester with GPA's which were significantly lower than the Upward Bound 1972 students' and showed no significant difference with the Upward Bound 1973 students at the end of the second semester, these results can be explained in part by the fact that seven (7) of the non-Upward Bound students dropped out of school after the first semester. A perusal of the records of

TABLE 4.2

A COMPARISON OF THE GRADE-POINT AVERAGES RECORDED FOR  
UPWARD BOUND 1972 STUDENTS AND NON-UPWARD BOUND STUDENTS

Grade-Point Averages	UB '72 Group	Non-UB Group	t-Values	Sign Level
First- Semester GPA	2.249 (N=55)	1.972 (N=55)	2.188	.05
Second- Semester GPA	2.038 (N=55)	2.128 (N=55)	0.650	.05
Cumulative GPA	2.144 (N=55)	2.120 (N=55)	-0.220	.05

these seven dropouts showed that they were near the bottom of the group academically. The elimination of seven of the poorer (academically) students from the non-Upward Bound group was the actual reason for their higher grade point average at the end of the second semester (GPA of non-Upward Bound group for first-semester ( $n=55$   $\bar{X} = 1.972$ ; for second semester ( $N=55$ )  $\bar{X} = 2.128$ ).

The Upward Bound 1972 group showed that one student dropped out of school who was enrolled during the two semester period of the study. The differences between the group's dropout percentages are compared in the next hypothesis.

A comparison of the cumulative grade-point averages of the Upward Bound 1973 and non-Upward Bound groups failed to show a significant difference ( $t = 0.200$ ;  $df = 106$ ,  $p > .05$ ). While the non-Upward Bound group showed a

slightly lower cumulative grade-point average ( $\bar{X} = 2.120$ ) than the Upward Bound 1973 group ( $\bar{X} = 2.144$ ), it should be remembered that the non-Upward Bound mean does not include the seven students who failed to return the second semester.

Results of Testing Hypothesis Number Three

The exact null hypothesis tested in hypothesis number three was as follows:

$H_{03}$  There is no statistically significant difference between the dropout rates reported for the Upward Bound 1972 students during the 1972 academic year and the dropout rates reported for the Upward Bound 1973 students during the 1973 academic year in the Oklahoma City Public Schools.

The third null hypothesis was tested by performing a z-test between the dropout percentage shown for the Upward Bound 1973 students and the dropout percentage shown for the Upward Bound 1972 students. The number of students considered in each sample, the number of dropouts, the percentage of dropouts, and the z-value are presented in Table 4.3.

TABLE 4.3

A COMPARISON OF THE DROPOUT RATES OF THE UPWARD BOUND 1972  
STUDENTS AND THE UPWARD BOUND 1973 STUDENTS

Group	Number of Students	Number of Dropouts	Percentage of Dropouts	z-value
Upward Bound 1972	55	14	25.00	3.858
Upward Bound 1973	55	1	1.724	
z = 3.858 p < .0001				

The results presented in Table 4.3 show that the dropout percentages computed for the two groups were significantly different ( $z = 3.858$ ;  $p < .0001$ ). This result allowed the researcher to reject the null proposition of hypothesis number four and conclude that there was a significantly higher percentage of the Upward Bound 1972 students who dropped out of high school during 1972's academic year (25.00 per cent) than there were of Upward Bound 1973 students who dropped out during a comparable period of time (1.724 per cent) during the 1973 academic year.

#### Summary of Hypothesis Testing

The results of testing the three hypotheses showed that the Upward Bound 1973 students had a significantly higher cumulative grade point average after one semester of college work than either the Upward Bound 1972 group or the non-Upward Bound group. A comparison of the first semester grade-point averages of the Upward Bound 1973 students and the non-Upward Bound students showed that the Upward Bound 1973 groups' GPA's were significantly higher than those reported for the non-Upward Bound participants ( $t = 2.188$ ;  $df = 114$ ,  $p < .05$ ).

At the same time, it was determined that a significantly greater number of the non-Upward Bound students and the Upward Bound 1972 students had dropped out of high school during or immediately after their first semester of work during the testing periods. The non-Upward Bound group showed a dropout percentage of 12.069 per cent while the Upward Bound 1973 group showed a dropout percentage of only 1.724 per cent. A z-test between these two percentages showed that they were statistically different ( $z = 2.143$ ;  $p < .0162$ ).

The Upward Bound 1972 group had experienced a dropout rate of 25.00 per cent. When this figure was compared to the 1.724 per cent experienced by the

Upward Bound 1973 group the results showed that the number of dropouts from the Upward Bound 1972 students who dropped out of the program ( $z = 3.858$ ;  $p < .0001$ ).

These results indicated that the Upward Bound students have been able to perform as well academically as non-Upward Bound students in the Oklahoma City Public Schools who have been matched with Upward Bound students on ACT scores and sex.

While the Upward Bound Program experienced a high percentage of dropouts during the 1972 academic year, this situation seems to have corrected itself and the dropout percentage dropped from 25.00 per cent for the 1972 academic year to 1.724 per cent for the 1973 academic year.

One point should be made concerning the difference in the number of dropouts experienced by the Upward Bound 1972 and 1973 groups. At least part of the difference would be attributed to the racial composition of the two groups. Dropouts among American Indians have traditionally run high in secondary educational institutions. This trend was substantiated by the dropout rates experienced by the Upward Bound 1972 program. Sixteen Indian students enrolled in the program and ten dropped out either during or after the first semester. This number constitutes over 70 per cent of the total number of 14 dropouts. On the other hand, the Upward Bound 1973 group had only twenty-nine (29) Indian students (see appendix J), but none dropped out of the program.

#### Secondary Findings

Data collected from the confidential questionnaires were not used in testing the hypotheses but were used to make a more thorough explanation of the results. The questionnaire data is presented in the four following sections:

(1) Personal Data -- race, sex, marital status, and birth order; (2) Biographical Data -- living arrangements, hours worked (if any), financial aid arrangements, and whether the students' family received public assistance or not; (3) Educational Data -- major interest in high school coursework, number of students in their high school class, and ACT scores; (4) Occupational and Educational History of the student's family -- occupation of father and mother, educational level of father and mother, and the number of brothers and sisters who have attended colleges or universities. Each of these sections of questionnaire data is presented in this part of the results. Each section is presented with the appropriate tables and descriptive statistics. A summary of the secondary findings is presented at the end of the last section and the questionnaire data are related to the hypothesis findings in the final chapter.

#### Personal Data of the Three Participating Groups

The first area of comparison of the questionnaire data was the area of Personal Data. This included the race, sex, marital status and birth order of the three groups. The data reported by each of the groups is presented in Appendices H through L and indicate two significant differences between the non-Upward Bound students and the Upward Bound students -- race and marital status. An inspection of Appendix H will show that the two Upward Bound groups are composed almost entirely of blacks and American Indians while the non-Upward Bound group is composed primarily of whites. The differences between the numbers shown for each group were significant ( $\chi^2 = 132.24$ ,  $df = 4$ ;  $p < .001$ ). This difference in racial composition is an important factor since it is primarily responsible for the differences noted throughout the rest of the questionnaire data.



### Biographical Data of the Three Participating Groups

The biographical data presented in Appendices H through J indicates three significant differences among the three groups. These differences were between the numbers of Upward Bound and non-Upward Bound students who lived in public housing. There were significantly more Upward Bound than non-Upward Bound students who lived in campus housing. ( $\chi^2 = 12.29$ ,  $df = 1$ ;  $p < .05$ ); (2) between the number of hours worked by the Upward Bound and non-Upward Bound students who were employed (Upward Bound 1972;  $\bar{X} = 15.85$ ; Upward Bound 1973;  $\bar{X} = 17.84$ ; non-Upward Bound;  $\bar{X} = 22.07$ ). However, it should be noted that the percentage of students who were working was slightly more than fifty per cent (50.02 per cent); (3) between the number of Upward Bound and non-Upward Bound students who were receiving public assistance from the government. There were significantly more Upward Bound students receiving public assistance ( $\chi^2 = 75.30$ ;  $df = 4$ ;  $p < .001$ ). These were the only significant differences noted among the biographical data reported by the three participating groups.

### Occupational and Educational History of Students' Families

The final section of the confidential questionnaire was designed to determine the occupational level of the participants' parents as well as their educational level. Additional questions were also asked to determine the number of brothers and/or sisters who had attended colleges or universities.

A significantly greater number of the non-Upward Bound students' fathers and mothers attained higher educational levels than Upward Bound students' parents. (See Appendices H through J). There were no significant differences found between the occupational levels of Upward Bound parents and non-Upward

Bound parents.

Synthesis of Hypotheses Results and Secondary Findings

The results of testing the four hypotheses stated in Chapter II showed that the Upward Bound 1973 students achieved higher grade-point averages for their first semester of work than a group of Upward Bound 1972 students and a group of non-Upward Bound students. Non-Upward Bound students all had been matched with the Upward Bound 1973 group on composite ACT scores and sex.

The other hypotheses compared the dropout rates of the Upward Bound and non-Upward Bound students and the dropout rate of the Upward Bound 1973 students and the Upward Bound 1972 students. The results of these two hypotheses showed that the Upward Bound 1973 students had significantly lower dropout rates than either the Upward Bound 1972 students or the non-Upward Bound students.

The analysis of the secondary (questionnaire) data showed several significant differences between the Upward Bound and non-Upward Bound students but very few, if any, differences between the two Upward Bound groups.

The major point to be made for the synthesis of the hypotheses results and the secondary findings is simply this: While the non-Upward Bound students who participated in the study possessed all the biographical and social attributes which are generally considered to be conducive to obtaining a post-secondary education after completing high school such as well-educated parents, higher socioeconomic status, etc., the high-risk students enrolled in the Upward Bound program were able to maintain comparable grade-point averages with the non-Upward Bound groups. This is not to say that the usual indicators of success

is college and high school are not valid. Special Service Programs such as Upward Bound which provide tutorial services, individual counseling and guidance, financial aid, etc. to "deserving" students can be an effective substitute for students who have not had the privilege of being reared by well-educated and affluent parents, attending high schools which have well-rounded and progressive curricula, or being afforded the generalized opportunities which are available to whites but are conspicuously withdrawn from minority groups. The individual attention given to students through the Upward Bound Program has been more than effective in assisting high-risk, capable students to obtain college degrees after high school graduation. A further expansion of the conclusions drawn from the statistical results displayed in this Chapter is presented in the Conclusions section of Chapter V.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND IMPLICATIONS FOR FURTHER RESEARCH

#### Summary

The purpose of this study was to compare the grade-point averages and dropout rates of a group of randomly chosen high school students in the Oklahoma City Public Schools with the grade-point averages and dropout rates of high-risk, minority group students who were attending Oklahoma City Public Schools during the same period of time. It had been established earlier that the overall effectiveness of the Upward Bound Program at the University of Oklahoma could be determined by a statistical comparison of grade-point averages and dropout rates of students enrolled in the program for the 1972 and 1973 academic years and for students who were not enrolled in the program during that same time, but who had been matched with the Upward Bound 1973 students on composite ACT scores and sex.

First-semester, second-semester, and cumulative grade point averages were computed as measures of academic progress for 55 non-Upward Bound students, 55 Upward Bound 1972 students, and 55 Upward Bound 1973 students. Dropout rates were also determined for each of the three groups along with several biographical measures being taken on a Confidential Questionnaire (Appendix B).

The data collected were used to test four hypotheses concerning the first-semester, second semester, and cumulative GPA's, and the dropout rates experienced by each of the groups. The first hypothesis was a comparison of the

dropout rates (percentages) of these two groups. The second hypothesis was a comparison of the GPA's observed for the non-Upward Bound students and the Upward Bound students. The third hypothesis was a comparison of the biographical data reported by these two groups. The fourth hypothesis was a comparison of the dropout rates of the 1972 Upward Bound group and the 1973 Upward Bound group.

The results obtained in comparing these various measures are presented in Tables 4.1 through 4.3 of Chapter IV. A summary of the results obtained in the hypotheses testing procedures showed that the Upward Bound 1973 group had a lower dropout percentage than either the Upward Bound 1972 group or the non-Upward Bound group. The Upward Bound 1973 students also showed a significantly higher GPA for their first semester of work than either the non-Upward Bound or Upward Bound 1972 groups.

The generalized conclusions drawn from these results are presented in this chapter of the dissertation along with several implications for further research studies. The final section of the chapter is devoted to concluding remarks about the possible benefits of the study results and incorporation of the findings into the present Special Services Programs at the University of Oklahoma.

#### Conclusions Drawn from Hypotheses Results

The conclusions presented in the following section are a direct and logical implication of the results obtained in testing the four hypotheses. In other words, the conclusions are generalized explanations of the results obtained from testing each of the hypotheses. It should further be noted that the researcher has carefully avoided drawing conclusions which cannot be substantiated by the data presented in the body of the research paper. While there are many

manner but using different populations of students, (2) studies which would be conducted in a similar manner but using different criteria for determining the success of high school students, and (3) studies which would be conducted in a similar manner but which would use different variables and/or conditions. Specific implications for further research are in the following sections.

The first possibility for future research efforts would be to compare the data from a group of non-Upward Bound participants who have been carefully matched with the Upward Bound participants on such factors as race, age, socioeconomic status, etc. In the present study, there was a wide discrepancy in the numbers of persons representing the different races in the Upward Bound and non-Upward Bound groups. Results of the literature search and the comparisons made on the secondary data suggest that the participants' race does make a difference in success in high school.

A second possibility for future research would be to establish different criteria for determining success in high school. Other possible measures of success in high school would be to have each student make ratings of his peers in several different academic, social, and personal areas. While these measures are less defensible than grade-point averages, they could give a more realistic appraisal of the participants' actual success in high school.

A final possibility for further research efforts would be to compare the results reported by the Upward Bound 1972 and Upward Bound 1973 groups with the results reported by comparable programs throughout the United States. Comparisons could be made by dropout rates, GPA's, or certain biographical measures according to the type of information sought by the researcher. This would not only improve the individual programs but would maximize the educational

Upward Bound 1973 Program. It was further concluded that the following improvements in the Upward Bound Program were conducive to a much higher retention rate for the Upward Bound 1972 program than for the Upward Bound 1973 program:

1. Improved tutorial program: There was a limited number of well-qualified tutors for the Upward Bound 1972 Program, but there were many more qualified personnel to choose from when the Upward Bound 1973 staff was chosen.
2. Improved administrative procedures: Even though the budget was reduced from the Upward Bound 1972 Program to the Upward Bound 1973 Program, the reassignment of duties proved to be much more efficient and effective for the Program.
3. Improved orientation procedures: The Upward Bound 1973 students were required to attend special orientation meetings held at their respective high schools. However, the Upward Bound 1972 students were not required to attend these meetings.
4. Staff experience: The first year of the Upward Bound Program at the University of Oklahoma gave the Upward Bound staff a wealth of experience which was very beneficial in conducting the second year of the Upward Bound Program.

#### Implications for Further Research

Through the conduct of the present study, many more questions arose than were answered by the results obtained. Most of these questions, if developed properly, could result in worthwhile research efforts in the future. An attempt to classify the implications for future research efforts resulted in three general categories: (1) studies which would be conducted in a similar

speculative inferences which would easily be made from the results presented, such inferences cannot be graded as conclusions since they cannot be supported by the results obtained in the study. The conclusions which would be logically drawn and empirically supported from the results of testing the four hypotheses were as follows:

1. From the results of testing hypothesis number one, presented in Table 4.1, it was concluded that there was a significantly higher percentage of the non-Upward Bound group of students who dropped out of high school during the 1972 academic year than the percentage of Upward Bound students during that same period of time. It was further concluded that the services offered by the Upward Bound Program were effective in preventing the dropout of enrollees.

2. From the results of testing hypothesis number two, presented in Table 4.2, it was concluded that there was a significant difference in the academic achievement of the Upward Bound 1972 and non-Upward Bound students who participated in the study for the first semester of the study. It was further concluded that the services offered by the Upward Bound Program were effective aids to the predominantly black and Indian enrollment of the Upward Bound Program. It was further concluded that most, if not all, of the differences observed between the various biographical measures taken on the Upward Bound and non-Upward Bound participants could be attributed to the predominantly white nature of the non-Upward Bound group and the predominantly black and Indian nature of the two Upward Bound groups.

3. From the results of testing hypotheses three and four presented in Table 4.3, it was concluded that there was a significant difference in the percentage of dropouts experienced by the Upward Bound 1972 program and the



opportunities of the program participants.

#### Concluding Remarks

This study was a comparison of the grade-point averages and dropout rates of three different groups of high school students in the Oklahoma City Public Schools. One of these groups, the Upward Bound 1972 students, attended classes during the 1972 academic year. The other two groups, the Upward Bound 1973 participants and the non-Upward Bound students, were enrolled for the 1973 academic year. Results of the comparisons showed that the Upward Bound 1973 students had the lowest dropout percentages, and the highest first-semester grade-point averages of the three groups.

The researcher feels that the overall purpose and results should be reiterated to avoid any misinterpretation or over-generalization of the findings. While these results are most encouraging, they should be generalized to other programs of this nature with extreme caution unless the race, sex, socioeconomic status, and ACT scores of the two groups are comparable.

Every researcher anticipates that his research efforts will serve as a catalyst for further studies in a particular area or discipline. If the results obtained in this study are instrumental in promoting such research efforts, the ultimate result would no doubt be a significant improvement in preparing high school students from disadvantaged backgrounds for post-secondary education. In any case, if this study is instrumental in promoting such improvements, it will have served its purpose well.

## BIBLIOGRAPHY

### Books

- American Psychological Asso., Today's Educational Programs for Culturally Deprived Children, St. Louis: Seventh Division of School Psychologists Annual Professional Institute of the American Psychological Assoc., 1962.
- Beinstock, Herbert, Realities of the Job Market for the High School Dropout, New York: Vintage Books, 1972.
- Campbell, D. T. and Stanley, J. C., Experimental and Quasi-Experimental Designs for Research, New York: McGraw-Hill Company, 1963.
- Chandler, B. J., Education in Urban Society, New York: Dodd, Meade, 1962.
- Charters, W. W. and Gaye, N. C., eds., Readings in the Social Psychology of Education.
- Cliff, Virgil, Anderson, Archibald W., and Hullfish, H. Gordon, eds., Negro Education in America; Its Adequacy, Problems and Needs, New York: Harper and Brothers, 1962.
- Conant, James B., Slums and Suburbs, New York: McGraw-Hill, 1961.
- Education and Disadvantaged America, Educational Policies Commission, Washington, D.C.
- Ferguson, George A., Statistical Analysis in Psychology and Education, 2nd ed., New York: McGraw-Hill Book Company, 1966.
- Herzog, Elizabeth, and Sudia, Cecilia, Boys in Fatherless Families, U.S. Dept. of Health, Education, and Welfare, Office of Child Development, Children's Bureau, Washington, D.C., 1970.
- Hunter, David R., The Slums: Challenge and Response, New York: Macmillan, 1964.
- Isenberg, Irwin, The Drive Against Illiteracy, Volume 36, Number 5 of the Reference Shelf Series, New York: H. W. Wilson Co., 1964.
- Kerlinger, Fred N., Foundations of Behaviors Research, New York: Holt, Rinehart, and Winston, Inc., 1966.

- Kirk, Roger, Experimental Design: Procedures for the Behavioral Sciences, Belmont, California: Brooks/Cole Publishing.
- Klopf, Gordon J. and Laster, Israel A., ed., Integrating the Urban School, New York: Teachers College, Columbia University, 1963.
- Komareusky, Mirra, Blue Collar Marriage, New York: Random House, 1964.
- Lichter, Solomon, et al., The Dropouts, New York: Free Press of Glencoe, 1962.
- McQueen, Mildred, Identifying and Helping Dropouts, Chicago: Science Research Associates, 1961.
- Marcus, Lloyd, The Treatment of Minorities in Secondary School Textbooks, New York: Anti-Defamation League, 1961.
- Morgan, James N. and others, Income and Welfare in the United States, New York: McGraw-Hill Book Co., Inc., 1972.
- Orshansky, Mollie, Children of the Poor, Cambridge: Wesley Publishing Co., 1970.
- Passow, A. Harry, ed., Education in Depressed Areas, New York: Bureau of Publications, Teacher's College, Columbia University, 1963.
- Rainwater, Lee, Behind Ghetto Walls: Life in a Federal Slum, Chicago: Aldine, 1972.
- Reissman, Frank, The Culturally Deprived Child, New York: Harper and Brothers, 1962.
- Schreiber, Daniel, Profile of the School Dropout, Toronto: Random House of Canada Limited, 1968.
- Sexton, Patricia, Education and Income; Inequalities in our Public School, New York: Viking Press, 1961.
- U.S. Dept. of Health, Education and Welfare Division, Application Information and Program Manual (An Office of Education Program Administration Manual, 1974-1975), Revised, September, 1973.
- Welfare Administration, Bureau of Family Services, Division of Program Statistics and Analysis, Characteristics of Families Receiving Aid to Families with Dependent Children, 1973.

Articles and Periodicals

- Hyman, Herbert, and Reed, John Shelton, "Black Matriarchy Reconsidered: Evidence from Secondary Analysis of Sample Surveys", Public Opinion Quarterly, 33.
- Klineberg, Otto, "Negro-White Differences in Intelligence Test Performance: A New Look at an Old Problem", (1973).
- Mugge, Robert H., "Aid to Families with Dependent Children: Initial Finding of the 1971 Report on the Characteristics of Recipients", Social Security Bulletin, (1973).
- Senior, Clarence, "Newcomers, Strangers, and Schools", The School Dropout (1971) p. 112.
- Student, "Errors of Routine Analysis", Biometrika, 19 (1927), 151-64.

Reports, Data, and Tabulations

- Data obtained from J. Edgar Hoover, Crime in the United States, Washington, D.C.: Federal Bureau of Investigation, July, 1964.
- Derived from tabulations of Current Population Survey (March, 1972) by the Bureau of the Census for the Social Security Administration.
- Kennedy, Robert F., Report to his New York Constituents, Washington, D.C., 1967.
- Kennedy, Robert F., Testimony, Senate Finance Committee, 1967.
- "Final Report to the Honorable Frank P. Zeidler, Mayor, City of Milwaukee" Milwaukee: Study Committee on Social Problems in the Inner Core of the City, 1960.

## APPENDICES

## APPENDIX A

1

### HISTORIC OVERVIEW OF UPWARD BOUND PROJECTS

#### A. GENERAL

Upward Bound is a precollege preparatory program designed to generate the skills and motivation necessary for success in education beyond high school among young people from low income backgrounds and inadequate secondary school preparation.

Projects must include arrangements to assure cooperation among one or more institutions of higher education and one or more secondary schools. They must include a curriculum designed to develop creative thinking, effective expression, and positive attitudes toward learning needed for post-secondary educational success; necessary health services; comprehensive counseling services; and such recreational and cultural and group activities as the Project Director determines may be appropriate.

#### B. HISTORY OF PROGRAMS

Begun on a national basis in June 1966, Upward Bound programs were supported by the Office of Economic Opportunity for the first year at 215 colleges, universities, and residential secondary schools. These academic institutions in 47 states, the Virgin Island, Puerto Rico, and Guam, in turn committed them-

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U.S. Dept. of Health, Education and Welfare, Education Division, Application Information and Program Manual (An Office of Education Program Administration Manual, 1974-1975) Revised September, 1973.

selves to serve 20,000 youngsters, most of whom had completed the 10th and 11th grades.

By 1968, approximately 300 institutions were participating in the program, in every state in the country, serving 26,000 students -- many of whom were returning after previous enrollment in Upward Bound.

The typical Upward Bound program was offered by an educational institution combining secondary school and college teachers as faculty, making use of the physical facilities of a college campus for the students, and utilizing the experience and energies of college and university students as tutors.

Almost all Upward Bound students were residents on college, university, and secondary school campuses for six to eight weeks in the summer. During the academic year, the Upward Bound institutions continued to meet the students through classes on Saturdays, tutorial sessions during the week, and periodic cultural enrichment programs. In administering these programs, academic institutions have used a wide variety of teaching techniques.

Although it is not possible to list all of the attributes of a successful Upward Bound program, certain characteristics have appeared common to the effective motivation and education of Upward Bound students. These include:

1. Development of significant working relationships among secondary schools, colleges and universities, and the community at large.
2. Involvement of teachers who are committed to the goals of Upward Bound.
3. Provision for close and substantial individual student-teacher

contact both in the summer and the academic year.

4. Effective use of college and university students at tutor-counselors both in the summer and in the academic year.

5. Involvement of many resource and paraprofessional persons from the local communities.

6. Willingness on the part of all of the staff to engage the students as partners in learning.

7. An important emphasis on educational goals other than the strictly academic, including activities designed to develop abilities to organize, to persuade, and to cooperate.

8. Recognition by the sponsoring institution of this unusual chance to increase its skills in teaching students.

9. Acceptance of Upward Bound as an opportunity to select and prepare low-income students, especially from the local community, for admission to the host institution.

10. The presence of a Project Director, or his assistant working with the program on a full-time basis throughout the year.

11. Recognition of Upward Bound as a full-year program including a summer component, usually residential, and a well-developed academic year program including weekly contact with each student by a member of the program staff.

12. Enrollment of a sizable cluster of students from a few secondary schools rather than an enrollment of a handful of students from a large number of schools.



## II. THE APPLICANT AGENCIES

Institutions of higher education, combination of institutions of higher education, and, in exceptional cases, secondary schools, and post-secondary educational institutions accredited by a state, with the capability of providing residential facilities for the summer phase of a full year Upward Bound project, are eligible to apply for an Upward Bound grant.

A combination of two or more institutions of higher education must provide that clear administrative responsibility rests with a single institution, or in a public or private nonprofit agency established by the combination of institutions as the agency responsible for the administration of the program.

## III. THE UPWARD BOUND STUDENT

### A. TARGET GROUP

The primary criteria for the selection of an Upward Bound student are two: (1) he must meet the poverty criteria established in appendix A, and (2) he should be able to be characterized by the project staff as an "academic risk" for college education; that is, his lack of educational preparation and/or underachievement in high school is such that he would not have considered enrollment, or would not have been likely to have gained admission to, and successfully pursued an academic career at a 2-or-4-year college without the benefits of an Upward Bound program.

The Upward Bound student, then, is a young person with academic potential constrained by his poverty background, and one for whom conventional education has had little relevance. The student is likely to be apathetic or even hostile to education--unable to release his real talent. He is likely to

have shunned academic achievement or even adequacy because he has not participated meaningfully in an educational experience.

Generally, the potential that the student possesses does not show in traditional educational measurements, such as standardized test scores or grades, but may be discovered more readily through the intuitive judgments of those people who know him. The Upward Bound boy or girl is one for whom a college education may become possible if the student is given experience and instructions designed to build on the strengths which the student possesses.

#### B. SERVICE FOCUS

Upward Bound will focus on students completing the 10th and 11th grades. However, for areas or among particular groups of students where severe dropout rates at an earlier age are alarming, Upward Bound will consider proposals reflecting the need for intervention at the end of the eighth-and-ninth grade levels. Upward Bound proposals, however, should not be limited to one grade level, nor should programs be submitted covering too wide a grade spectrum. Initially, programs should be designed to include a minimum of two grade levels, excluding the bridge component; that is, the summer following graduation from high school.

The Office of Education (OE) wishes to make it entirely clear that, once a program begins, institutions must be prepared to continue to work with Upward Bound students through the summer following the secondary school years. OE believes that institutions which contemplate recruiting students who have just graduated from high school and enrolling them for only one summer do not

have sufficient time to work with the type of student for which Upward Bound is designed. Exceptions to this policy may be made in cases of recent marginal graduates who after several years have decided to attempt a college education, and of Job Corps enrollees who upon completion of the General Education Development Test (GED) might be prepared to undertake a college career.

#### C. RECRUITMENT

An applicant institution will be expected to use a wide variety of recruitment sources. Individual classroom teachers, guidance officers, school principals, and high school students are natural sources for referrals. However, recruitment should not be limited to referrals from secondary schools only. In many instances, the youngster who can benefit from Upward Bound may be found only after careful and thorough direct and personal canvassing of the pockets of poverty in both urban and rural settings. OE will require the applicant to submit evidence that it sought students through a varied recruitment program including, but not limited to, referrals from present Upward Bound Community Action personnel, VISTA volunteers, Neighborhood Youth Corps, juvenile court officers, settlement house workers, and church leaders. To make further education possible for Job Corps members who can benefit from Upward Bound, OE has arranged that they may participate in the program and continue their education. OE urges applicants to contact nearby Job Corps centers as sources for Upward Bound students.

#### D. SELECTION

Students selected for Upward Bound shall be those who have potential

for success in a 2-or-4-year college, but whose lack of educational preparation and/or underachievement would seem to preclude their acceptance and success in such an institution.

Recommendations from persons who know the applicant (such as classroom teachers) and intuitive judgments by these and other persons are as important for selection as patterns of grades and test scores. While a moderate amount of testing after admission to an Upward Bound project is permissible, testing for admission is discouraged. It is very important that all candidates be personally interviewed by the Project Director and/or some members of the Upward Bound staff prior to admission into the program. In the final analysis, the Upward Bound Director and his staff are responsible for effective recruitment strategies and for a wise selection of Upward Bound students. Recruitment and selection cannot be delegated.

Because OE wishes to serve as many families as possible, it is recommended that, ordinarily, no more than two students be enrolled in a project from the same immediate family at the same time.

Applicant institutions should make it possible for individual students to make application to an Upward Bound program, as the mere formality of institutional recommendations may dissuade applicants from seriously considering an Upward Bound program.

#### E. GENERAL AREA OF SERVICES

It is important that colleges with Upward Bound programs work closely with the secondary schools from which the students come. A project in an urban or metropolitan area should, therefore, generally serve areas which are not more

than 50 miles from the campus. Exceptions to this general principle will be considered, however, for programs serving remote and highly scattered rural populations. While many projects may serve more than one community, an attempt to serve too many and/or too distant communities often reduces opportunities for a significant group of students to come from any single high school and, consequently, makes academic year efforts much less effective. Having a sizable cluster of students returning to a single school, then, is very important. Both in the summer and in the academic year, a cluster of students should gain a common core of experience to share with one another and with their school classmates. OE expects that rural programs, however, by virtue of the small and dispersed secondary schools which they serve, would adapt the student cluster idea to recruit students from general areas rather than specific schools. Secondary school staff from sending schools should, whenever possible, be used in a teaching, tutorial, or counseling capacity during the entire period of the program--summer as well as academic year.

#### F. HEALTH

Academic institutions are required to provide necessary health services for Upward Bound students, many of whom have not previously had sufficient care, resulting in a negative effect on their attitudes toward and capacity for learning. OE expects that grantees will arrange for or provide diagnostic services for new students, which will produce information on the medical and dental needs of Upward Bound students. Enrollees who have medical or dental deficiencies which significantly affect their performance as Upward Bound students should be promptly treated.

Project Directors should arrange to have on file a medical consent form duly signed by the student's parent(s) or guardian. This form should be locally developed. It is suggested that the language of this consent form be comprehensive, including preventive, corrective, routine, and emergency medical and dental services for the entire period the student is enrolled in Upward Bound.

If the institution normally provides health services for its student body on payment of a fee, such fee may be included in the budget. Institutions, however, can expect health costs to be noticeably higher for Upward Bound students than those normally encountered among college students. Applicants are responsible for making and carrying out agreements in university medical school facilities, in the community, or under local, State and Federal law. For example, arrangements should be made such as comprehensive neighborhood health centers, health clinics, multiservice centers, or title XIX of the Social Security Act (Medicaid). OE should be considered the last dollar source of funds for health services, other than those normally provided to students.

#### G. COMPOSITION OF STUDENT GROUP SELECTED

Projects should include students of various backgrounds, reflecting the whole poverty community to be served by the Upward Bound Project. Consequently, in compliance with Title VI of the Civil Rights Acts of 1964, all Upward Bound programs shall enroll students from the target population without regard to racial or ethnic origin. Those institutions which currently administer an Upward Bound program which recruit students and/or teaching staff of a single ethnic or racial background must present an acceptable and documented timetable

for the full compliance of the program with the above Act.

The Upward Bound Branch requires that the chief administrators of the host institution and the Upward Bound Project Director work cooperatively with appropriate secondary school officials and responsible community representatives in this compliance.

In every instance, the Division of Student Assistance, Special Services Branch, will require appropriate documentation of all efforts to achieve this compliance.

#### IV. COMMUNITY INVOLVEMENT

In order to develop an effective relationship with the target group and with the community being served by an Upward Bound program, it is necessary to mobilize a wide variety of community resources.

The Project Director and his staff shall take the initiative in creating the mechanisms which are designed to allow and encourage community participation. They must show evidence of having accomplished a program of community involvement through supplementary activities. Committee(s), when formed, shall meet a minimum of four times per year. The means of selecting committee members will be established by the Project Director and their term of office will coincide with the current grant period.

##### A. MOBILIZATION OF COMMUNITY RESOURCES

The Upward Bound student and his family are part of the wider community which daily affects their lives. An overall study should be made to identify interested and concerned groups and individuals in the area to involve them

in the process of the project's development and implementation. A Community Resources Committee may be organized to include representatives from high schools, welfare agencies, Neighborhood Youth Corps, college faculties, college student bodies, Community Action Agencies, and Model Cities programs, as well as community leaders and residents who themselves meet the income criteria.

The function of this group may include:

1. Assisting in the mobilization of resources in support of Upward Bound activities.
2. Serving as a liaison to public and private agencies.
3. Recruiting volunteer services from individuals, institutions, and agencies.
4. Examining and seeking solutions for other problems confronting the students and their families such as housing, welfare, medical-dental, transportation, employment, legal and social problems.
5. Advising the host institution on issues that are confronting the project.

#### B. PARENT PARTICIPATION

It is very important for parents to have a clear understanding of the goals of Upward Bound and be supportive of their children's participation in it. Likewise, it is important for parents to have an opportunity to participate as a group. Accordingly, the Project Director shall have the responsibility for developing the organizational structure to allow and motivate active participation by Upward Bound parents. This may be accomplished through



the formation of a Parent Advisory Board, which would function independently or exist as an autonomous entity within a larger Community Resources Committee.

Participation of Upward Bound parents in the program may include the following:

1. Assisting the development and giving approval to the application before it is submitted. Parents should be encouraged to make written comments on any aspect of the program design or operation as a part of the grant application to OE.

2. Initiating suggestions and ideas for program improvements.

3. Assisting in expanding the influence of Upward Bound into other community functions and institutions.

4. Generating ideas and activities to stimulate necessary changes in educational institutions which are trying to serve the needs of the Upward Bound students.

#### C. ACADEMIC GUIDANCE AND PARTICIPATION

Special efforts should be made to develop meaningful and productive learning experiences for Upward Bound students. The Project Director may wish to seek guidance from and participation of the academic community--college as well as secondary school personnel--through the creation of an Academic Advisory Group which would function independently or exist as an autonomous entity within a larger Community Resources Committee. Such a group may, for example, consist of college faculty members, counselors, secondary school teachers, high school principals, and college students. It should be as broadly representative of the

academic community as possible.

The function of the Academic Advisory Group may include:

1. Assisting with the development and reviewing of the curriculum content and direction.
2. Participating in and giving leadership to program evaluation.
3. Serving as a liaison between the Upward Bound instructional staff and the academic institutions served by the program.
4. Assisting in the development of project applications.
5. Promoting positive attitudes on campus at all levels toward the program.

## V. THE ACADEMIC INSTITUTION

### A. INSTITUTIONAL COMMITMENT

In administering an Upward Bound grant, an academic institution should bear in mind the basic prerequisite of the Office of Education in this program, i.e.--to provide an effective educational route out of poverty for underachieving students. Upward Bound programs are not to be thought of as "summer schools" merely complementing regular academic school programs, but rather as programs in which basic academic attitudes are developed in a setting of close and informal teacher-student contact. Institutions should show a willingness to explore the use of creative and innovative educational techniques rather than to rely merely upon traditional attitudes, standard materials, and teaching methods often found in the classrooms from which the students come. A genuine commitment to Upward Bound's experimental attitudes on the part of an

academic institution's administration and faculty is, therefore, essential. To demonstrate this commitment, in proposing an Upward Bound program, an applicant should provide for the following:

#### CAMPUS FACILITIES AND SERVICES

The physical facilities of an institution for Upward Bound (classrooms, dormitories, informal lounges, swimming pools, gymnasiums, recreation rooms, and offices for staff members, etc.) should be provided in the same quality and availability as they are for the regular faculty and student body. Campus services such as health centers and all student activities, etc., should likewise be so provided. Sharing of the facilities and subsequent communication between the regular staff and student body and the Upward Bound staff and student body have a positive educational effect and should be encouraged. In this regard, OE will not allow special on-campus practices or identification which discriminate against Upward Bound students.

#### STAFF

An Upward Bound staff should consist of people with demonstrated sensitivity to and respect for the kinds of students to be enrolled in Upward Bound. Staff members should also be sensitive to the needs of the families of Upward Bound students and knowledgeable of community resources to help meet these needs. An institution should demonstrate its own commitment to Upward Bound by including members of its regular teaching faculty in the Upward Bound teaching staff. In its proposal an applicant must show the intended ethnic/

racial composition of all aspects of the staff including teachers, tutor-counselors, and paraprofessionals. The staff composition should reflect the ethnic/racial composition of the student body.

While staff continuity is important, OE hopes that Upward Bound will have the widest possible impact upon college and secondary school teaching. OE therefore suggests that each year the sponsoring institution considers selecting some new staff member for the Upward Bound program.

#### SECONDARY SCHOOL-COLLEGE RELATIONS

An institution of higher education should indicate the nature and extent of its cooperation with secondary schools not only by the inclusion of secondary school personnel on the committee(s) set up for the program, but also by the development of continuing cooperation and active involvement with secondary school personnel, particularly in the academic year phase of the Upward Bound program.

#### COLLEGE ADMISSION OF THE UPWARD BOUND STUDENT AT THE APPLICANT INSTITUTION

It is expected that a host institution will admit and enroll a significant number of Upward Bound students from its own program as well as Upward Bound students from other programs with substantial financial aid.

#### GUIDANCE ON POST-SECONDARY EDUCATION

The applicant institution should provide the Upward Bound Project Director with advice on the types of financial aid it will provide Upward Bound

students enrolled at the host institution, and help in providing information on institutions and sources of financial aid that are available for students who do not enroll at the host institution.

#### B. RESIDENTIAL PROGRAMS

Because past programs indicate particular benefits of on-campus residence, OE will give preference to Upward Bound proposals that involve residential summer programs. Non-residential programs will, however, be considered.

#### C. ACADEMIC INSTITUTIONS AND RELIGIOUS ACTIVITIES

Upward Bound projects must be conducted on a completely non-sectarian basis. Projects will be subject to the grant conditions prohibiting the teaching of religion, religious proselytization, required religious worship, or any selection of students on the basis of religion.

### VI. THE UPWARD BOUND PROGRAM

An Upward Bound proposal should be designed to include two separate, but interrelated components: (1) a summer component, usually 6 to 8 weeks of intensive academic and personal development through a residential program at the applicant institution, and (2) an academic year component usually designed for weekly contact with students either on campus or in student centers designed to serve dispersed student populations.

In preparing the work program, applicants should remember that OE

considers each of these components equal in importance. They should likewise realize that a successful program requires an innovative curriculum, group-cultural recreational activities, a comprehensive counseling program, and a staff that is flexible in both attitude and approach in all phases of the program.

#### A. CURRICULUM

The educational goals of Upward Bound are to help the student to develop critical thinking, effective expression, and positive attitudes toward learning. While creating a climate for the student to become excited about learning, Upward Bound projects must provide a variety of channels for the expression of his educational interests. The most important such channel is the classroom, for it is there that the student will develop confidence in educational pursuits. The Upward Bound curriculum should attempt to incorporate good aspects of traditional courses and methods and, at the same time, attempt to encourage creative and innovative educational techniques. Projects are most effective when the Project Director and his staff are free to develop their own curriculum, though they should always seek recommendations on this from such sources as the Academic Advisory Group, parents, and students.

#### B. EXTRACURRICULAR GOALS

Applicants shall propose, in addition to academic components, activities which will enhance the personal effectiveness of the students and provide opportunities for the application of learning experiences to life ex-

periences. Such activities might include self-government, a student newspaper, student services to others (tutoring younger school pupils or other neighborhood activities).

Cultural programs, including field trips to important historic, artistic, or cultural places in nearby areas, shall be a part of every project.

Recreational and physical activities should be part of every Upward Bound project. Team activities (soccer, softball, etc.) should be augmented by individual recreational or physical activities (swimming, tennis, chess, etc.) to provide introduction to lifelong recreational pursuits.

### C. COUNSELING

If Upward Bound is to help students adopt and effectively translate positive educational experiences, the project should provide personal, academic, and vocational counseling. There also needs to be a liaison relationship with local high school counselors to inform them about the services and counseling which the Upward Bound students are receiving. Counselors on the Upward Bound staff should be aware of and have information available on all types of post-secondary education, especially a wide variety of colleges and universities. Counseling toward college obviously implies much individual contact between staff and students to discuss the student's personal and educational goals. Staff counselors should assist students in every way to select, apply, and follow through on college placement.

Often informal meetings of individuals and groups provide the most

effective counseling structure. The goal of these meetings should be to support students in discovering and developing personal and academic self-direction.

Students who require personal psychological counseling more intensive than the project can provide should be referred to appropriate professionals.

#### D. BRIDGE SUMMER

The bridge summer refers to the summer following an Upward Bound student's graduation from high school. A student is considered an Upward Bound bridge student only if he is participating in the Upward Bound summer component at the applicant institution or if he is attending summer college courses at another chosen institution with the approval of the Upward Bound program. Students who are working full time during the bridge summer are not to be counted as Upward Bound bridge students although the project staff has the responsibility of maintaining contact with these students and of seeing that these students are placed in college and receive financial assistance.

The Project staff should investigate and follow through on ways to establish curriculum, extracurricular goals, and counseling activities specifically designed for bridge students.

Every effort should be made to intensify the bridge student's skills and motivation needed for coping with the college experience which lies immediately ahead. The Project Director should make every effort to see that college credit is given for successful completion of such courses.



#### E. SUMMER PROGRAM AND JOBS

The Office of Education expects the Upward Bound summer program to require the student's full time participation. It may be necessary, however, for some students to work part time in the summer. In such cases, it is strongly recommended that the student be employed on campus. When a student is working on a part-time basis, the Project Director should make every effort to see that such work does not interfere with the purposes of Upward Bound, especially the student's participation in the academic program.

The question of summer employment may be particularly applicable to the potential bridge students. These students often feel that their most important need is meeting the college expenses which lie immediately ahead. They may even feel that they must work full time. The Project Director must determine on an individual basis whether this is a wise course of action. If a potential bridge student does choose full-time summer employment, the project staff is still expected to maintain regular contact with the student even though he or she is no longer formally an Upward Bound student. Project Directors will be required to provide documentation of the nature of these contacts.

#### F. STAFF

The institution sponsoring the project must make a positive effort to include in its leadership and among its staff membership persons reflecting the distribution of racial and ethnic backgrounds of the students in the project.

Upward Bound graduates are placed in appropriate colleges and universities. This may well be the Project Director's last official responsibility to an Upward Bound student, but it is possibly his most important one. At all times, the Project Director must act in the student's best interests and place the student at an institution commensurate with the abilities of the student to succeed in his or her educational endeavors.

#### TEACHING STAFF

The teaching staff must include both college and secondary school faculty. Teachers should be selected on the basis of experience with an understanding of the types of students to be enrolled in Upward Bound projects. At least one-third of the Upward Bound staff should be members of the regular teaching faculty of the proposing institution. At least one-third should be regular teachers in the secondary schools. Wherever possible, these secondary schools should be the same as those which the Upward Bound students attend during the academic year. For private secondary school applicants, at least one-third of the teaching staff must be drawn from their institution, and at least one-third from other sending schools. Staff may include an Assistant Project Director, specialists in such fields as art, drama, film, reading, speech, or recreation, on a full or part-time basis. Applicants should bear in mind the special contributions in certain areas which can be made by Peace Corps returnees, VISTA volunteers, undergraduate and graduate students, youth workers, and the like appropriate staff should be available to work with students

## PROJECT DIRECTOR

The Project Director must be a regular member of the proposing academic institution's faculty with faculty status at the institution unless alternate conditions are approved in writing by the Upward Bound Grants Officer. The Project Director should be integrally involved in both the planning and the implementation of the project. Whenever possible, the Project Director should be a person who has had experience with the type of students to be enrolled in the Upward Bound project. In all cases, he should be a person with demonstrated sensitivity to and respect for the Upward Bound students. The Project Director has the responsibility to determine the program content and to make the necessary decisions regarding the appropriateness of costs to carry out the program. Since the Project Director has these program and administrative responsibilities, OE requires that the Project Director be employed full time during both the summer and academic year phases. In exceptional cases, this requirement may be waived, but only by written approval of the Program Officer. In any case, administration would be vested in a full time professional person during the entire grant period. A full time person is particularly important for programs which have high school seniors during the academic year. Someone is needed to assist these students in filling out applications for admission and/or scholarship requests, writing recommendations, and making appropriate personal contacts whenever necessary.

It is especially important that the Project Director sees that

who may have in the past reacted negatively to conventional social and/or educational environments. Neighborhood or youth workers who have experience in working with such youngsters may serve as dormitory counselors or as dormitory heads.

The ratio of students to staff in both the summer and academic year should be appropriate to the special needs of the particular project and its students. Such ratios should evolve from a clear understanding of the nature of an Upward Bound class where maximum student participation is of importance and where class-student-teacher interchange may be in marked contrast to the normal school experience. In the highly personal atmosphere of the Upward Bound program lies the key to the educational experience which the project is designed to generate.

Provision should be made for teaching staff (as well as other staff) orientation prior to the student's arrival on campus. Budget requests for financing such orientation up to a maximum of five days immediately prior to the beginning of the program may be included in proposals. Proposals may also include provisions for specialized consultants where necessary.

The teaching faculty of an Upward Bound program should be replaced at an average of one-fourth annually.

#### TUTOR-COUNSELORS

Each Upward Bound program should include tutor-counselors who are students from within and/or without the sponsoring institution. Previous pro-

grams indicate the importance of tutor-counselors with special ability to establish rapport with Upward Bound students. Frequently, tutor-counselors from ethnic or racial groups representative of the Upward Bound students were more easily able to establish this rapport.

Tutor-counselors should live in the dormitories with the students. While OE would discourage the practice, tutor-counselors may be permitted to take one course at the institution's own summer session.

Applicant academic institutions are encouraged to employ students as tutor-counselors who are eligible for work-study funds under the Higher Education Act, as amended. Upward Bound funds may be used as the grantee's local work-study share for students working in Upward Bound. Under the most recent amendments to the Higher Education Act, the local share should be at least 20 per cent. The Project Director should discuss the availability of work-study funds with the appropriate persons directly involved in administering work-study funds at the institutions of higher education at which potential work-study tutor-counselors have been admitted or enrolled.

#### OTHER SUPPORTING STAFF

Particular attention should be focused on the inclusion of para-professionals as staff members for both the summer program and the academic year. Their insights and skills in planning and implementing services to the Upward Bound student and his family may be particularly helpful. Persons who are low-income residents of the students' community, especially parents of the

Upward Bound students, can be invaluable resources serving as family liaison workers, house parents, teacher aids, and recruitment resources. Community Action Agencies (CAA's) as well as the Community Resources Committee should be prominent sources for the nomination of such persons.

#### VII. RELATIONSHIPS WITH OTHER PROGRAMS

Efforts should be made by the academic institution to coordinate Upward Bound with appropriate private and public funded programs existing both on and off campus. Programs which may possibly be coordinated with Upward Bound are, for example: programs under Title I of the Elementary and Secondary Education Act of 1965, as amended; Job Corps; Teacher Corps; the High School Equivalency Program; Career Opportunities Program; Neighborhood Youth Corps; Model Cities. Each institution should be knowledgeable of these programs, what their functions are, and how they might establish cooperative endeavors with them. Although Upward Bound is no longer part of the Community Action Program, local academic institutions are encouraged to see that the CAA's are involved in coordinating the Upward Bound project with other local antipoverty projects and in identifying potential Upward Bound students.

APPENDIX B

CONFIDENTIAL SURVEY QUESTIONNAIRE

1. Birth Order:

1st 2nd 3rd 4th 5th 6th 7th 8th

2. Sex:

M F

3. Resident of Oklahoma:

Yes No

4. Have you been employed while attending high school?

Yes No

5. Ethnic Background:

- 1. Afro-American
- 2. Spanish
- 3. Native American
- 4. Oriental American
- 5. Caucasian

6. Have you ever received assistance from the State of Oklahoma?

Yes No

7. Parents' Occupation:

- A. Mother: \_\_\_\_\_
- B. Father: \_\_\_\_\_

8. Educational level of parents (circle the last year completed):

- A. Mother 1 2 3 4 5 6 7 8 9 10 11 12  
College \_\_\_\_\_
- B. Father 1 2 3 4 5 6 7 8 9 10 11 12  
College \_\_\_\_\_

9. Number of brothers and sisters who finished high school:

\_\_\_\_\_ brothers \_\_\_\_\_ sisters

10. Number of brothers and sisters who attended college:

\_\_\_\_\_ brothers \_\_\_\_\_ sisters

## APPENDIX B Continued

11. Indicate whether or not you had a brother or sister attend college:

Yes    No

12. Year you graduated from high school:

19\_\_\_\_

13. Size of high school graduating class:

Approximately \_\_\_\_\_

14. High School Rank:

Approximately \_\_\_\_\_

15. Composit ACT score (if known):

\_\_\_\_\_

16. STEP score (if known):

\_\_\_\_\_

17. SCAT score (if known):

\_\_\_\_\_

18. High School Grade-Point Average:

\_\_\_\_\_

19. Type of high school major program:

- A. College preparatory
- B. General
- C. Vocational

20. Give the number of classmates who have dropped out of high school:

\_\_\_\_\_ (approximately)



APPENDIX C

Dear

It is my sincere hope that you will consider this research worthy of your thought and time and participate through the completion of the enclosed questionnaire.

It is very important that you be included in the study. Please be assured that your answers will be kept completely confidential. No one outside me will be able to identify specific persons. All findings will be reported in aggregate form.

This is a small and select sampling; therefore, your response is critical if this study is to have any meaning. Please return the questionnaire at your earliest convenience, but prior to Sept. 1, 1974.

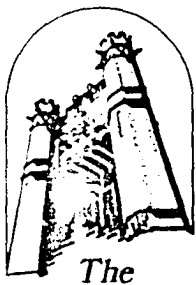
This study is being conducted in partial fulfillment of the requirements for the Doctorate of Philosophy at Oklahoma University. Your help and cooperation in making this study a success will be greatly appreciated.

Enclosed is a self-addressed envelope for forwarding this questionnaire.

Yours truly,

Benjamin F. Hart, Jr.  
2520 Wildwood Lane  
Norman, Oklahoma 73069

BFH/skm



*The*  
*University of Oklahoma*

650 Parrington Oval Norman, Oklahoma 73069

APPENDIX D

Upward Bound  
Oklahomans for  
Equal Educational Opportunity

March 13, 1975

Mr. Matt Taylor  
Program Officer  
Department of Health, Education  
and Welfare  
1114 Commerce Street  
Dallas, Texas 75202

Dear Matt:

I am a doctoral candidate at the University of Oklahoma. I would like permission to use some of the general material that is printed in our HEW Upward Bound Program Manual. This manual includes revisions and corrections dated April 16, 1974.

I am cognizant of the fact that some material put out by HEW is confidential, but I assure you I am only speaking of that general information found in our program manuals.

I await a response from you at your earliest convenience because my deadline is Friday, March 21, 1975 at 10:00 a.m. Please rush me a reply.

Yours truly,

Benjamin F. Hart, Jr.  
Assistant Director

BFH/skm

## APPENDIX E

## 1ST and 2ND SEMESTER AND CUMULATIVE GPA OF UB 1972 STUDENTS

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
1.	1.54	3.00	2.27
2.	3.14	2.21	2.67
3.	1.64	2.20	1.92
4.	2.33	1.75	2.04
5.	2.30	1.29	1.79
6.	2.00	2.25	2.14
7.	3.25	2.64	2.94
8.	1.39	1.00	1.19
9.	2.79	3.50	3.14
10.	2.77	3.10	2.93
11.	2.92	3.00	2.96
12.	2.29	2.67	2.48
13.	2.50	1.58	2.04
14.	0.86	1.46	1.16
15.	2.00	2.43	2.21
16.	1.07	1.69	1.38
17.	2.00	2.38	2.19
18.	2.29	2.36	2.32
19.	2.33	1.45	1.89

## APPENDIX E Continued

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
20.	2.25	3.00	2.62
21.	1.67	2.15	1.91
22.	1.75	2.07	1.91
23.	1.57	1.13	1.35
24.	2.00	1.88	1.94
25.	2.75	2.00	2.37
26.	2.29	2.33	2.31
27.	2.71	2.29	2.50
28.	2.00	2.60	2.30
29.	2.75	2.49	2.62
30.	2.00	2.09	2.04
31.	1.13	1.67	1.40
32.	2.38	1.94	2.16
33.	2.00	2.00	2.00
34.	2.00	1.00	1.50
35.	1.27	2.00	1.63
36.	1.29	1.00	1.14
37.	2.30	3.23	2.76
38.	2.33	2.93	2.63

## APPENDIX E Continued

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
39.	1.92	2.31	2.11
40.	1.12	----	----
41.	0.46	----	----
42.	0.46	----	----
43.	1.71	0.54	1.12
44.	1.00	1.75	1.37
45.	1.75	2.45	2.10
46.	2.33	2.00	2.16
47.	2.42	4.00	3.21
48.	2.25	2.00	2.12
49.	3.09	3.80	3.44
50.	2.80	2.62	2.71
51.	1.69	0.92	1.30
52.	2.21	2.60	2.40
53.	2.00	2.44	2.22
54.	1.80	2.75	2.27
55.	3.00	1.86	2.43

APPENDIX F

GPA RECORDED FOR 1973 UPWARD BOUND STUDENTS

Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
1.	2.75	1.79	2.27
2.	1.75	2.54	2.14
3.	2.00	2.14	2.07
4.	2.67	3.15	2.91
5.	2.23	1.82	2.02
6.	2.00	0.50	1.25
7.	0.82	1.82	1.32
8.	1.67	2.00	1.83
9.	1.43	1.36	1.39
10.	2.63	2.30	2.46
11.	2.88	1.46	2.17
12.	1.17	1.00	1.08
13.	2.57	1.93	2.25
14.	2.00	1.67	1.83
15.	4.00	3.04	3.52
16.	2.50	2.00	2.25
17.	2.30	2.90	2.60
18.	2.50	2.62	2.56

## APPENDIX F Continued

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
19.	1.86	1.40	1.63
20.	2.75	1.10	1.92
21.	2.33	2.00	2.16
22.	2.33	2.33	2.33
23.	2.00	2.00	2.00
24.	3.17	2.14	2.65
25.	1.50	1.64	1.57
26.	2.50	2.54	2.27
27.	3.00	1.75	2.37
28.	2.50	2.14	2.32
29.	2.67	1.14	1.90
30.	1.67	0.64	1.15
31.	3.00	3.25	3.12
32.	1.58	2.08	1.83
33.	2.00	2.00	2.00
34.	2.00	2.57	2.28
35.	2.00	1.50	1.75
36.	1.71	0.54	1.12

## APPENDIX F Continued

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
37.	1.00	1.75	1.37
38.	1.75	2.45	2.10
39.	1.50	1.15	1.32
40.	2.33	2.00	2.16
41.	2.42	4.00	3.21
42.	2.25	2.00	2.12
43.	3.09	3.80	3.44
44.	1.59	2.70	2.14
45.	2.50	0.80	1.65
46.	2.06	2.54	2.30
47.	2.20	0.75	1.47
48.	0.90	0.64	0.77
49.	3.26	3.54	3.40
50.	1.17	1.00	1.08
51.	2.57	1.93	2.25
52.	2.63	2.30	2.49
53.	1.43	1.36	1.42
54.	2.00	1.67	1.83
55.	2.30	2.90	2.85



## APPENDIX G

## 1ST AND 2ND SEMESTER AND CUMULATIVE GPA OF NON-UPWARD BOUND STUDENTS

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
1.	2.08	2.60	2.34
2.	2.07	3.17	2.62
3.	2.36	2.22	2.29
4.	1.09	2.15	1.62
5.	1.07	1.91	1.49
6.	1.75	1.64	1.69
7.	2.17	1.75	1.96
8.	2.00	2.13	2.06
9.	2.28	1.70	1.99
10.	1.75	2.57	2.16
11.	1.33	2.15	1.74
12.	1.50	2.00	1.75
13.	2.77	2.56	2.66
14.	2.50	2.27	2.38
15.	2.93	2.40	2.69
16.	1.50	2.33	1.91
17.	1.24	1.19	1.21
18.	2.20	2.58	2.39

## APPENDIX G Continued

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
19.	3.26	2.00	2.63
20.	2.21	2.07	2.14
21.	2.21	2.64	2.33
22.	2.93	2.36	2.64
23.	2.29	2.38	2.33
24.	1.65	2.13	1.89
25.	3.00	3.00	3.00
26.	2.08	2.14	2.11
27.	2.42	1.87	2.14
28.	2.50	2.00	2.25
29.	2.71	2.93	2.82
30.	2.25	1.67	1.96
31.	1.50	2.18	1.84
32.	2.50	2.27	2.38
33.	1.80	2.75	2.27
34.	0.82	1.82	1.32
35.	1.75	2.54	2.14
36.	2.23	1.82	2.02
37.	3.00	1.86	2.43

## APPENDIX G Continued

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Student Number	1st Sem. GPA	2nd Sem. GPA	Cumulative GPA
38.	1.86	1.40	1.63
39.	2.88	1.46	2.17
40.	1.67	2.00	1.83
41.	2.20	0.75	1.17
42.	2.50	0.80	1.65
43.	2.33	2.00	2.16
44.	1.17	1.00	1.08
45.	2.67	1.14	1.90
46.	3.17	2.14	2.65
47.	2.50	2.14	2.32
48.	3.00	3.25	3.12
49.	2.08	1.23	1.65
50.	2.77	2.56	2.66
51.	1.33	2.15	1.74
52.	1.07	1.91	1.49
53.	3.25	3.50	3.37
54.	1.15	0.27	0.71
55.	2.38	2.22	2.30

APPENDIX H

FREQUENCY DISTRIBUTIONS OF 1972 UPWARD BOUND STUDENTS

VARIABLE: BIRTH ORDER

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
2.00	3	5.4	5.4	5.4
3.00	6	10.7	10.7	16.1
4.00	4	7.1	7.1	23.2
5.00	14	25.0	25.0	48.2
6.00	10	17.9	17.9	66.1
7.00	10	17.9	17.9	83.9
8.00	9	16.1	16.1	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: SEX

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ. FREQ (PERCENT)
1.00	22	39.3	39.3	39.3
2.00	34	60.7	60.7	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: RESIDENT

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	55	98.2	98.2	98.2
2.00	1	1.8	1.8	100.0
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: EMPLOYED DURING HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	51	91.1	91.1	91.1
2.00	5	8.9	8.9	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: ETHNIC

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	25	44.6	44.6	44.6
2.00	31	55.4	55.4	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0



## APPENDIX H Continued

VARIABLE: RECEIVED ASSISTANCE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	1	1.8	1.8	1.8
1.00	51	91.1	91.1	92.9
2.00	4	7.1	7.1	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: MOTHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	56	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

## VARIABLE: FATHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	56	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

## VARIABLE: MOTHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
3.00	2	3.6	3.6	3.6
4.00	1	1.8	1.8	5.4
5.00	2	3.6	3.6	8.9
6.00	4	7.1	7.1	16.1
7.00	9	16.1	16.1	32.1
8.00	9	16.1	16.1	48.2
9.00	8	14.3	14.3	62.5
10.00	6	10.7	10.7	73.2
11.00	9	16.1	16.1	89.3
12.00	6	10.7	10.7	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

## VARIABLE: FATHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
3.00	2	3.6	3.6	3.6
4.00	2	3.6	3.6	7.1
5.00	3	5.4	5.4	12.5
6.00	3	5.4	5.4	17.9
8.00	4	7.1	7.1	25.0
9.00	14	25.0	25.0	50.0
10.00	8	14.3	14.3	64.3
11.00	9	16.1	16.1	80.4
12.00	11	19.6	19.6	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: BROTHER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	17	30.4	30.4	30.4
1.00	19	33.9	33.9	64.3
2.00	17	30.4	30.4	94.6
3.00	3	5.4	5.4	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: SISTER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	21	37.5	37.5	37.5
1.00	19	33.9	33.9	71.4
2.00	13	23.2	23.2	94.6
3.00	2	3.6	3.6	98.2
4.00	1	1.8	1.8	100.0
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

## VARIABLE: BROTHER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	50	89.3	89.3	89.3
1.00	5	8.9	8.9	98.2
2.00	1	1.8	1.8	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0



## APPENDIX H Continued

VARIABLE: SISTER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	50	89.3	89.3	89.3
1.00	5	8.9	8.9	98.2
2.00	1	1.8	1.8	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: 11A

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	45	80.4	80.4	80.4
1.00	5	8.9	8.9	89.3
2.00	4	7.1	7.1	96.4
3.00	2	3.6	3.6	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

## APPENDIX H Continued

VARIABLE: HIGH SCHOOL RANK

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	2	3.6	3.6	3.6
1.00	1	1.8	1.8	5.4
2.00	26	46.4	46.4	51.4
3.00	20	35.7	35.7	87.5
4.00	7	12.5	12.5	100.0
	-----	-----	-----	-----
TOTAL	56	100.0	100.0	100.0

APPENDIX I

FREQUENCY DISTRIBUTIONS OF 1972 NON-UPWARD BOUND STUDENTS

VARIABLE: BIRTH ORDER

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	1	1.8	1.8	1.8
2.00	3	5.5	5.5	7.3
3.00	5	9.1	9.1	16.4
4.00	5	9.1	9.1	25.5
5.00	14	25.5	25.5	50.9
6.00	13	23.6	23.6	74.5
7.00	6	10.9	10.9	85.5
8.00	8	14.5	14.5	100.0
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: SEX

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	27	49.1	49.1	49.1
2.00	28	50.9	50.9	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: RESIDENT

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	55	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: EMPLOYED DURING HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	42	76.4	76.4	76.4
2.00	13	23.6	23.6	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: ETHNIC

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	27	49.1	49.1	49.1
3.00	28	50.9	50.9	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0



## APPENDIX I Continued

VARIABLE: RECEIVED ASSISTANCE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	52	94.5	94.5	94.5
2.00	3	5.5	5.5	100.0
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: MOTHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	55	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: FATHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	55	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

## VARIABLE: MOTHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
4.00	3	5.5	5.5	5.5
5.00	5	9.1	9.1	14.5
6.00	5	9.1	9.1	23.6
7.00	10	18.2	18.2	41.8
8.00	3	5.5	5.5	47.3
9.00	10	18.2	18.2	65.5
10.00	9	16.4	16.4	81.8
11.00	8	14.5	14.5	96.4
12.00	2	3.6	3.6	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

## VARIABLE: FATHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
2.00	1	1.8	1.8	1.8
4.00	2	3.6	3.6	5.5
5.00	2	3.6	3.6	9.1
6.00	2	3.6	3.6	12.7
7.00	2	3.6	3.6	16.4
8.00	7	12.7	12.7	29.1
9.00	11	20.0	20.0	49.1
10.00	11	20.0	20.0	69.1
11.00	11	20.0	20.0	89.1
12.00	6	10.9	10.9	100.0
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: BROTHER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	18	32.7	32.7	32.7
1.00	27	49.1	49.1	81.8
2.00	8	14.5	14.5	96.4
3.00	2	3.6	3.6	100.0
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

## VARIABLE: SISTER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	18	32.7	32.7	32.7
1.00	26	47.3	47.3	80.0
2.00	10	18.2	18.2	98.2
3.00	1	1.8	1.8	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: BROTHER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	47	85.5	85.5	85.5
1.00	7	12.7	12.7	98.2
2.00	1	1.8	1.8	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0



## APPENDIX I Continued

VARIABLE: SISTER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	47	85.5	85.5	85.5
1.00	8	14.5	14.5	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: 11A

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	42	76.4	76.4	76.4
1.00	2	3.6	3.6	80.0
2.00	7	12.7	12.7	92.7
3.00	3	5.5	5.5	98.2
4.00	1	1.8	1.8	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX I Continued

VARIABLE: HIGH SCHOOL RANK

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	2	3.6	3.6	3.6
2.00	32	58.2	58.2	61.8
3.00	18	32.7	32.7	94.5
4.00	3	5.5	5.5	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

APPENDIX J

FREQUENCY DISTRIBUTIONS OF 1973 UPWARD BOUND STUDENTS

VARIABLE: BIRTH ORDER

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	1	1.8	1.8	1.8
3.00	3	5.5	5.5	7.3
4.00	2	3.6	3.6	10.9
5.00	9	16.4	16.4	27.3
6.00	16	20.1	20.1	56.4
7.00	14	25.5	25.5	81.8
8.00	10	18.2	18.2	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: SEX

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	22	40.0	40.0	40.0
2.00	33	60.0	60.0	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: RESIDENT

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	55	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: EMPLOYED DURING HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	39	70.9	70.9	70.9
2.00	16	29.1	29.1	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: ETHNIC

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	26	47.3	47.3	47.3
3.00	29	52.7	52.7	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0



## APPENDIX J Continued

## VARIABLE: RECEIVED ASSISTANCE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	38	69.1	69.1	69.1
2.00	17	30.9	30.9	100.0
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: MOTHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	55	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: FATHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	55	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

## VARIABLE: MOTHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	1	1.8	1.8	1.8
5.00	2	3.6	3.6	5.5
6.00	3	5.5	5.5	10.9
7.00	5	9.1	9.1	20.0
8.00	7	12.7	12.7	32.7
9.00	14	25.5	25.5	58.2
10.00	8	14.5	14.5	72.7
11.00	11	20.0	20.0	92.7
12.00	4	7.3	7.3	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

## VARIABLE: FATHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	1	1.8	1.8	1.8
2.00	1	1.8	1.8	3.6
5.00	1	1.8	1.8	5.5
6.00	1	1.8	1.8	7.3
7.00	2	3.6	3.6	10.9
8.00	2	3.6	3.6	14.5
9.00	10	18.2	18.2	32.7
10.00	6	10.9	10.9	43.6
11.00	17	30.9	30.9	74.5
12.00	14	25.5	25.5	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: BROTHER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	16	29.1	29.1	29.1
1.00	18	32.7	32.7	61.8
2.00	16	29.1	29.1	90.9
3.00	5	9.1	9.1	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: SISTER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	17	30.9	30.9	30.9
1.00	23	41.8	41.8	72.7
2.00	12	21.8	21.8	94.5
3.00	3	5.5	5.5	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: BROTHER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	45	81.8	81.8	81.8
1.00	8	14.5	14.5	96.4
2.00	2	3.6	3.6	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0



## APPENDIX J Continued

VARIABLE: SISTER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	49	89.1	89.1	89.1
1.00	6	10.9	10.9	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: 11A

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	41	74.5	74.5	74.5
1.00	5	9.1	9.1	83.6
2.00	5	9.1	9.1	92.7
3.00	4	7.3	7.3	100.0
TOTAL	55	100.0	100.0	100.0

## APPENDIX J Continued

VARIABLE: HIGH SCHOOL RANK

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	1	1.8	1.8	1.8
2.00	22	40.0	40.0	41.8
3.00	26	47.3	47.3	89.1
4.00	6	10.9	10.9	100.0
	-----	-----	-----	-----
TOTAL	55	100.0	100.0	100.0

APPENDIX K

STAT SHEET FOR 1972 UPWARD BOUND STUDENTS AND 1972 NON-UPWARD BOUND STUDENTS BY VARIABLE

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	* POOLED VARIANCE ESTIMATE		
				* T * VALUE	* DEGREES OF * FREEDOM	* 2-TAIL * PROB.
-----						
BIRTH ORDER				*		
GROUP 1	56	5.5714	1.746	*		
GROUP 2	55	6.1273	1.504	*	-1.80	109
				*		0.075
-----						
SEX				*		
GROUP 1	56	1.6071	0.493	*		
GROUP 2	55	1.6000	0.494	*	0.08	109
				*		0.939
-----						
RESIDENT				*		
GROUP 1	56	1.0179	0.134	*		
GROUP 2	55	1.0000	0.0	*	0.99	109
				*		0.324
-----						
EMPLOYED DURING HIGH SCHOOL				*		
GROUP 1	56	1.0893	0.288	*		
GROUP 2	55	1.2909	0.458	*	-2.78	109
				*		0.006
-----						
ETHNIC				*		
GROUP 1	56	2.1071	1.033	*		
GROUP 2	55	2.0545	1.008	*	0.28	109
				*		0.783
-----						

APPENDIX K Continued

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	* POOLED VARIANCE ESTIMATE		
				* T * VALUE	* DEGREES OF * FREEDOM	* 2-TAIL * PROB.
RECEIVED ASSIST- ANCE						
GROUP 1	56	1.0536	0.297			
GROUP 2	55	1.3091	0.466	-3.45	109	0.001
MOTHER'S OCCUPATION						
GROUP 1	56	0.0	0.0			
GROUP 2	55	0.0	0.0	0.0	109	1.000
FATHER'S OCCUPATION						
GROUP 1	56	0.0	0.0			
GROUP 2	55	0.0	0.0	0.0	109	1.000
MOTHER'S EDUCATION						
GROUP 1	56	8.6071	2.325			
GROUP 2	55	8.9818	2.173	-0.88	109	0.383
FATHER'S EDUCATION						
GROUP 1	56	9.2143	2.492			
GROUP 2	55	9.9636	2.411	-1.61	109	0.110

APPENDIX K Continued

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	* POOLED VARIANCE ESTIMATE		
				* T * VALUE	* DEGREES OF * FREEDOM	* 2-TAIL * PROB.
-----						
BROTHER FINISHED HIGH SCHOOL				*		
GROUP 1	56	1.1071	0.121	*	-0.42	109
GROUP 2	55	1.1818	0.130	*		0.675
-----						
SISTER FINISHED HIGH SCHOOL				*		
GROUP 1	56	0.9821	0.963	*	-0.21	109
GROUP 2	55	1.0182	0.871	*		0.837
-----						
BROTHER FINISHED COLLEGE				*		
GROUP 1	56	0.1250	0.384	*	-1.11	109
GROUP 2	55	0.2182	0.498	*		0.272
-----						
SISTER FINISHED COLLEGE				*		
GROUP 1	56	0.1250	0.384	*	0.24	109
GROUP 2	55	0.1091	0.315	*		0.812
-----						

APPENDIX K Continued

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	* POOLED VARIANCE ESTIMATE *			
				* T VALUE *	* DEGREES OF FREEDOM *	* 2-TAIL PROB. *	
11A							
GROUP 1	56	0.3393	0.769	* -0.93 *	* 109 *	* 0.354 *	
GROUP 2	55	0.4909	0.940				
11 B							
GROUP 1	56	0.893	0.478	* -0.02 *	* 109 *	* 0.985 *	
GROUP 2	55	0.909	0.398				
11C							
GROUP 1	56	0.0536	0.401	* -0.01 *	* 109 *	* 0.990 *	
GROUP 2	55	0.0545	0.405				
11D							
GROUP 1	56	0.0	0.0	* 0.0 *	* 109 *	* 1.000 *	
GROUP 2	55	0.0	0.0				
YEAR GRADUATED							
GROUP 1	56	72.0000	0.0	* 0.0 *	* 109 *	* 1.000 *	
GROUP 2	55	72.0000	0.0				

APPENDIX K Continued

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	* POOLED VARIANCE ESTIMATE		
				* T * VALUE	* DEGREES OF * FREEDOM	* 2-TAIL * PROB.
-----						
SIZE OF SCHOOL				*		
GROUP 1	56	412.6606	82.626	*		
GROUP 2	55	429.4363	84.914	*	-1.05	109
				*		0.294
-----						
HIGH SCHOOL RANK				*		
GROUP 1	56	2.5179	0.874	*		
GROUP 2	55	2.6727	0.695	*	-1.03	109
				*		0.304
-----						
ACT SCORE				*		
GROUP 1	56	12.9464	3.289	*		
GROUP 2	55	13.1273	3.801	*	-0.27	109
				*		1.000
-----						
STEP SCORE				*		
GROUP 1	56	0.0	0.0	*		
GROUP 2	55	0.0	0.0	*	0.0	109
				*		1.000
-----						
SCAT SCORE				*		
GROUP 1	56	0.0	0.0	*		
GROUP 2	55	0.0	0.0	*	0.0	109
				*		1.000
-----						



APPENDIX L

FREQUENCY DISTRIBUTIONS OF TOTAL COMPOSITE SAMPLE

OF 1972 AND 1973 UPWARD BOUND STUDENTS AND 1972 NON-UPWARD BOUND STUDENTS

VARIABLE: BIRTH ORDER

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	2	1.2	1.2	1.2
2.00	6	3.6	3.6	4.8
3.00	14	8.4	8.4	13.3
4.00	11	6.6	6.6	19.9
5.00	37	22.3	22.3	42.2
6.00	39	23.5	23.5	65.7
7.00	30	18.1	18.1	83.7
8.00	27	16.3	16.3	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: SEX

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	71	42.8	42.8	42.8
2.00	95	57.2	57.2	100.0
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: RESIDENT

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	165	99.4	99.4	99.4
2.00	1	0.6	0.6	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: EMPLOYED DURING HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	132	79.5	79.5	79.5
2.00	34	20.5	20.5	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: ETHNIC

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	78	47.0	47.0	47.0
3.00	88	53.0	53.0	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

## VARIABLE: RECEIVED ASSISTANCE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	1	0.6	0.6	0.6
1.00	141	84.9	84.9	85.5
2.00	24	14.5	14.5	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

## VARIABLE: MOTHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	166	100.0	100.0	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: FATHER'S OCCUPATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	166	100.0	100.0	100.0
TOTAL	166	100.0	100.0	100.0



## APPENDIX L Continued

## VARIABLE: MOTHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	1	0.6	0.6	0.6
3.00	2	1.2	1.2	1.8
4.00	4	2.4	2.4	4.2
5.00	9	5.4	5.4	9.6
6.00	12	7.2	7.2	16.9
7.00	24	14.5	14.5	31.3
8.00	19	11.4	11.4	42.8
9.00	32	19.3	19.3	62.0
10.00	23	13.9	13.9	75.9
11.00	28	16.9	16.9	92.8
12.00	12	7.2	7.2	100.0
	-----	-----	-----	-----
	166	100.0	100.0	100.0

## APPENDIX L Continued

## VARIABLE: FATHER'S EDUCATION

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	1	0.6	0.6	0.6
2.00	2	1.2	1.2	1.8
3.00	2	1.2	1.2	3.0
4.00	4	2.4	2.4	5.4
5.00	6	3.6	3.6	9.0
6.00	6	3.6	3.6	12.7
7.00	4	2.4	2.4	15.1
8.00	13	7.8	7.8	22.9
9.00	35	21.1	21.1	44.0
10.00	25	15.1	15.1	59.0
11.00	37	22.3	22.3	81.3
12.00	31	18.7	18.7	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: BROTHER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	51	30.7	30.7	30.7
1.00	64	38.6	38.6	69.3
2.00	41	24.7	24.7	94.0
3.00	10	6.0	6.0	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: SISTER FINISHED HIGH SCHOOL

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	56	33.7	33.7	33.7
1.00	68	41.0	41.0	74.7
2.00	35	21.1	21.1	95.8
3.00	6	3.6	3.6	99.4
4.00	1	0.6	0.6	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: BROTHER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	142	85.5	85.5	85.5
1.00	20	12.0	12.0	97.6
2.00	4	2.4	2.4	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: SISTER FINISHED COLLEGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	146	88.0	88.0	88.0
1.00	19	11.4	11.4	99.4
2.00	1	0.6	0.6	100.0
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: 11A

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	128	77.1	77.1	77.1
1.00	12	7.2	7.2	84.3
2.00	16	9.6	9.6	94.0
3.00	9	5.4	5.4	99.4
4.00	1	0.6	0.6	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: 11B

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	159	95.8	95.8	95.8
1.00	2	1.2	1.2	97.0
2.00	4	2.4	2.4	99.4
3.00	1	0.6	0.6	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0



## APPENDIX L Continued

VARIABLE: 11C

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	162	97.6	97.6	97.6
1.00	2	1.2	1.2	98.8
3.00	2	1.2	1.2	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: 11D

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	164	98.8	98.8	98.8
2.00	2	1.2	1.2	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0

## APPENDIX L Continued

VARIABLE: HIGH SCHOOL RANK

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0.0	2	1.2	1.2	1.2
1.00	4	2.4	2.4	3.6
2.00	80	48.2	48.2	51.8
3.00	64	38.6	38.6	90.4
4.00	16	9.6	9.6	100.0
	-----	-----	-----	-----
TOTAL	166	100.0	100.0	100.0