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## GRADUATE COLLEGE

# A STUDY OF THE PERSONALITY DIFFERENCES BETWEEN PARTICIPATORS AND NON-PARTICIPATORS IN ADULT EDUCATION PROGRAMS IN THE PRISON SYSTEM OF OKLAHOMA 

A DISSERTATION<br>SUBMITTED TO THE GRADUATE FACULTY<br>in partial fulfillment of the requirements for the degree of<br>DOCTOR OF EDUCATION

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JACK D. COTTRELL
Norman, Oklahoma
1974

A STUDY OF THE PERSONALITY DIFFERENCES BEIWEEN PARTICIPATORS AND NON-PARTICIPATORS IN ADULT EDUCATION PROGRAMS IN THE PRISON SYSTEM OF OKLAHOMA


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A STUDY OF THE PERSONALITY DIFFERENCES BETWEEN PARTICIPATORS AND NON-PARTICIPATORS IN ADULT EDUCATION PROGRAMS IN THE PRISON SYSTEM OF OKLAHOMA

## CHAPTER I

## INTRODUCTION

When dealing with any complex situation, which must be understood and perhaps modified, a first step is to observe limited aspects of the situation and systematically record the observations. However, observations require the careful use of measuring instruments which must be specialized as well as applied properly, if results are to be meaningful.

The field of adult education is complex. In it are found all kinds of people and all kinds of non-personal factors, many and diverse =elationships among its elements, and a state of continual change. It is sometimes felt that no man and no part of man's environment are entirely free of implications for adult education.

Instruments for measuring man and his surroundings leave much to be desired. For example, in physical engineering it is an axiom that no measurement aside from mere counting of units is or can be perfect. However, it can be improved.

Maintaining accuracy of the simplest standards of measurement of height and length requires frequent international gatherings of national experts in Washington and Geneva to define and protect standards. By comparison, instruments designed for measuring human characteristics often seem crude and their application indifferent. In this paper it will be contended that adult education is a composite of many elements of the tangible and intangible. Therefore, it cannot be said in sweeping style that this or that is true of adult education. It can only be said that available evidence indicates that a certain observation has been made with respect to a small, partially homogeneous segment of the adult education complex, and, within limits of falliability of the measuring instrument, a truth is being approached.

## Background and Need for This Study

Because of the increasingly important role that adult education programs are playing in the life of a community, it is important to know whether all who could conceivably benefit are being adequately served. To state that adult education is an area of increasing importance in modern society will not startle anyone who has even a casual knowledge of the bulging enrollments in adult education programs throughout the United States.

Adult educators have indicated a strong suspicion that the challenge is not being fully met. Johnstone found in a study for the National Opinion Research Center that some

24,810,000 adults participated in adult education programs during 1962. ${ }^{l}$ While the National Opinion Research Center figures are far below the 50 million estimate given by practitioners, they are far above the 9,212,000 figure estimated by the Bureau of the Census in October, 1957. Differences between the NORC and Bureau of the Census estimates are accounted for by differing definitions of adult education. The Census was far more restrictive in its definition, limiting adult education participation to classes and group meetings, and eliminating independent study, educational television, correspondence courses, and on-the-job training; NORC included all participation. Although the NORC study is ten years old, it was the last comprehensive and factual picture of the extent and nature of participation in adult education in the United States. For many of those who try to avail themselves of opportunities in existing adult education programs, satisfaction is by no means assured. It is estimated that onehalf of those who commence adult education programs withdraw from the program before completing the activity. ${ }^{2}$

Knowledge of the total enrollments of adult education programs in the United States today is almost non-existent.
${ }^{1}$ John Johnstone and Ramon J. Rivera, Volunteers for Learning: A Study of Educational Pursuits of American Adults (Chicago, Illinois: Aldine, 1965), p. 45.
${ }^{2}$ Stephen R. Deane, "A Psychological Description of Adults who have Participated in Selected Activities" (unpublished Ph.D. dissertation, University of Maryland, 1949), p. 11 .

Figures for the nation and figures for even one city that are clear and meaningful are difficult to obtain. Morse A. Cartwright, a former director of the American Association of Adult Education, estimated 14,881,500 participants in 1924 and 22,311,000 in 1934.3 Paul Essert of Columbia University claimed 29,000,000 in 1950, 4 and Malcolm Knowles caiculated almost $50,000,000$ were in adult education in 1955. ${ }^{5}$ These authors all admit that their figures may be in error, but feel they are the best estimates possible, previous to the NORC study.

Many testify to the confusion with respect to research in the field of adult education. Edmund deS. Brunner wrote in 1959:

Any examination in research in adult education reveals a rather chaotic situation. A few pertinent areas, such as adult learning, have been explored far more thoroughly than others. Some have received almost no research attention. Where any considerable body of effective research is available other than in the field of methods, typically it has been conducted not by adult educators, but by social scientists who had available a considerable body of theory, generalizations, and methodologies developed by their disciplines which could be applied to the problems of
${ }^{3}$ Morse A. Cartwright, Ten Years of Adult Education, (New York: The MacMillan Co., 1935), cited by Edmund deS. Brunner, David S. Wilder, Corrinne Kirchner and John S. Newberry, An Overview of Adult Education Research (Chicago: Adult Education Association of the U.S.A., 1959), p. 2.
${ }^{4}$ Paul Essert, Creative Leadership of Adult Education (New York: Prentice Hall, 1951), p. 40.
${ }^{5}$ Mal zolm Knowles, "Adult Education in the United States," Adult Education, Vol. V, No. 2 (Winter, 1955), p. 121.
adult education. Thus the movement has benefited much from the work of psychologists and to a considerable but lesser extent, from that of social psychologists and sociologists.

Brunner also contends that what has been done in adult education in research has been chiefly "descriptive studies which record, sometimes with satisfactory detail and analysis, the experiences, successes, and mistakes of a single program or of a total effort in a single community or area" or, "studies of local situations used for building programs appropriate to the people and locality studied." ${ }^{7}$ Brunner warns that in such cases improper generalizations must be avoided.

The 1948 Handbook of Adult Education of the United
States contains five hundred pages and includes more than fifty contributors without mentioning research, except briefiy in connection with government research organizations wich have little to do with adult education directly. ${ }^{8}$

The 1970 Handbook of Adult Education devotes an entire chapter to research in adult education. Research began to appear, not in great quantity nor with any consistent quality, but it took root as an adjunct to the developing programs of

[^0]graduate study. ${ }^{9}$
A review of the research efforts reported in the Adult Education journal, covering the period from 1963 through 1966, indicated increased emphasis on such functions of adult education as evaluation, program planning, and methods and techniques. ${ }^{10}$

Research has contributed to the understanding of behavior in many ways. Information concerning the individual adult, such as inis ability to learn, his motivation, interests, educational level, and even his socio-economic status, is available. There are techniques for manipulating him. He can be raught to do certain things by himself. Relationships and dependencies among these factors are also known. However, if the additional fact is given that this adult being studied is a participator in an adult education activity, research reveals little more, personality-wise, about him. It may be guessed that he is more intelligent, or more ambitious, or more lonely, or more free to go out nights. Other stereotyped attitudes adult educators hav, about their clientele may be inferred, but nothing is known through measurement.

The observations drawn from this paper may conclude that if a certain person is a participator in a certain type
${ }^{9}$ Robert M. Smith, George Aker, and J.R. Kidd, eds., Handbook of Adult Education (London: The MacMillan Co., 1970).
${ }^{10}$ Thiede Wilson and Others, "Research and Investigations in Adult Education," Adult Education, (1963-1966).
of activity then it follows that he, within given statistical limits, certainly is different from, or similar to, a given person of a non-participating group. It is important to know this if adult educators are to provide more satisfactions for the participator and entice, as they feel they should, the non-participator into the fold. A discussion of what research specifically has to contribute toward the understanding of adult personality has been developed more fully in the section devoted to the review of the literature. It is sufficient to say here that there seems to be a lack of the kind of research which this paper hopes to provide.

Robert Plummer found in a study he made of participators in a certain adult education program that the chief method of learning about the e:istence of the program was through a friend. This method was more significant than any other commonly used by promoters of adult education. ${ }^{l l}$ Other evidence that promotion of adult programs is through acquaintanceship and word of mouth includes a study by Stephen Deane. He wrote:

It is apparent ...... that very few persons seek adult education courses entirely on their own initiative. Most frequently they are told about the courses by friends or relatives. In many of the answers the respondents indicated that he was talked into attending by some neighbor who was hesitant to go alone. ${ }^{12}$

[^1]It may be reasoned from this that acquaintances of a group of participators in adult education are members of the non-participating group on which the most effective known promotional device is being focused. This group is of interest to the adult educator because members of it are in a position to be drawn into adult education an l he may scon be dealing with them as class members. But they are of interest in this study not only for this reason but also because, being acquaintances in a restricted environment with certain common experiences, they are in many ways like the participating group. Therefore, whatever diff?rences are found will possibly be relevant to a participation pattern.

What little has been done in the study of participators was done without comparison to non-participator groups. Probably this is true because the participators have k-on considered a fairly easy group to reach through actual classes attended whereas non-participators are scattered, heterogeneous and harder to identify and sample. There is even some doubt that accurate information, especially in psychological areas, can be obtained through classroom surveys of participators. Such questioning of the validity of responses may lead one to doubt results.

Also to be considered in discussing the need for this study is the value of measuring the personality differences of the two groups. If it is assumed that more or less persistent personality factors are at least partly responsible
for adult behavior, it becomes evident that the modifying of this behavior by taking personality factors into account is within the province of the adult educator. More on this subject will be discussed in the section on penology and adult education. There is almost nothing in adult education research identifying personality characteristics of participators in adult programs. There are certain personality differentiations for men compared to women and younger adults compared to older adults, but not for participators compared to non-participators. ${ }^{13}$

It is apparent that adult education has had a rapid nationwide growth. It can also be stated that our society is most demanding on the individual mentally and emotionally. According to Wilber Hallenbeck:

People have a sense of frustration. They realize they are surrounded by controls and forces with which they cannot cope. Bigness and remoteness put the forces which mold their lives beyond their reach. Nothing is more disillusioning or disheartening than to realize that one can do nothing about the things which affect his life. 14

Malcolm S. MacLean comments:
We have moved from the isolated calm of farm lands to the turmoil of great cities: from the majority of children and young folk to a preponderance of oldsters: from the soft sounds of bird calls, bellowing
${ }^{13}$ Raymond B. Cattell, David Saunders, and G. Stice, Handbook for Sixteen Personality Factor Questionnaire (Champaign, Illinois: Institute for Personality and Ability Testing, 1962), p. 8.

14 Wilber C. Hallenbeck, "Participation in Public Affairs," Adult Education, Vol. II, No. 1 (October, 1951), p. 65.
cattle and splashing streams to the roar of a million motors, and jangling of a billion bells, the scream of fire, police and ambulance sirens; and from the safety of intimate knowledge of a few friendly neighbors to the insecurity of ignorance, hostility or indifference of many masses of folks jammed in slums, theatres, claustrophobic apartment cells. Under the impact of these accumulations of noise, movement, machines, and people, disintergration sets in. Solid cores of value crumble, conflicts replace stability and bewilderment overcomes understanding. 15

If mental and emotional health is to be maintained and America is to escape the dire future so many predict, forces must be encouraged which oppose the threatened dissolution. An even broader, more effective adult education program may be one of these beneficient forces. But no plan of action can hope to be effective without measurement and understanding of the specific elements involved. This paper is planned to provide some of these measurements and contribute toward better understanding.

Bernice Neugarten wrote:
One of our problems lies in the fact that we are ${ }_{16}$ as yet without sufficient systematic data on adults.

The failure of the American correctional system to respond to changing social patterns has brought it to a critical point in its history. The large scale use of drugs at all age and socio-economic levels and the dramatic increase

[^2]in non-traditional political activism have added new dimensions to the definition of crime. Specifically, three deficiencies account for the accelerating demise of the penal system: the inability of correctional institutions to bring about behavioral change in drug offenders, to deal effectively with new types of political activists, and to prepare traditional offenders to accept appropriate societal roles. Indeed, the words "penal" and "correctional" are themselves indicative of the failure to see the problem as one of education and socialization rather than of confinement and punishment. Incarceration rather than treatment is the imbedded theme. ${ }^{17}$

If the dominant criminological theory of the time is psychiatrically oriented, then it may be necessary to analyze the personality of the deviant and develop a treatment program that will restore him to normalcy. If a sociological explanation is accepted, then the deviant must go through a process of relearning; he must leave hehind the ways of crime and make an adjustment to the normal lawabiding society. Either theory emphasizes the needs of a program of adult education that will meet the individual needs and differences of the inmates.

## Statement of the Problem

The problem for this research is: (1) Are there
17 Philip A. Fey and Robert W. Gleason, "A Community Goes Behind Bars," Adult Leadership, Vol. 22, No. 6, (December, 1973), p. 196.
significant differences in certain personality factors among participators and non-participators in the Oklahoma Prison System as measured by the California Psychological Inventory? (2) Are there significant differences in certain non-personality factors among participators and non-participators in the Oklahoma Prison System as measured by the "Adult Education Data Questionnaire?"

## Purpose of the Study

This study is concerned with the measurement of personality factors of inmates of the prison system of the State of Oklahoma who have participated in adult education activities during their period or periods of incarceration. Also measured are the personality factors of inmates of the prison system who have not participated in any activity which could be considered adult education. The two groups seem to have similar characteristics, with the only major difference being the active participation of one group in the adult education program.

The personality characteristics of participators are extremely important to the adult educator because he is working with these people and it is their educational needs which are to be met. Almost equally important are the personality characteristics of the non-participator because it is this person whom the adult educator desires to attract into the program. Since the participants and non-participants seem to have similar backgrounds and present environments, it is
expected that non-participants may be encouraged to use adult education programs by making appeals to their differing personality factors.

Assuming there is a reasonable accuracy of the measuring instrument and its careful application, the findings can contribute to understanding in several ways. A trustworthy measure of a small part of the participating population and similar measure of a related non-participating group will result. This will be another step toward the measure of all factors in adult education research. It is probable that certain immediate benefits can be derived from using the results of this study of these restricted groups.

## The Hypotheses

In formulating hypotheses for this study, the researcher was motivated by the following considerations:

1. Knowledge of the personality factors of any group of participators in adult education programs will help in improving that portion of adult education.
2. That knowledge of the personality factors of $a$ group of non-participators who are similar to the participators will help in devising methods to attract and provide proper educational opportunities for the non-participator.
3. A comparison of the personality factors of the two groups will make the personality factor measure of each more meaningful.
4. Knowledge of certain non-personality factors of the two groups measured with comparisons to each other and to personality factors will make more meaningful the personality factors.

The hypotheses are as follows:

$$
\begin{aligned}
\mathrm{H}_{01}- & \text { There are no statistically significant } \\
& \text { differences between participants and non- } \\
& \text { participants on certain personality factors } \\
& \text { as measured by the California Psychologi- } \\
& \text { cal Inventory by Harrison G. Gough. } \\
\mathrm{H}_{022}- & \text { There are no statistically significant dif- } \\
& \text { ferences between participants and non- } \\
& \text { participants on certain non-personality } \\
& \text { factors as measured by the "Adult Educa- } \\
& \text { tion Data Questionnaire." }
\end{aligned}
$$

Definition of Terms

1. Personality Factors: Those factors measured by the California Psychological Inventory.
2. Non-personality Factors: Those factors measured by the "Adult Education Data Questionnaire."

## Iimitations of this Study

This was an attempt to measure the personality factors of a group of inmates in the Oklahoma State Prison System who have participated in adult programs and activities offered at the prison and the personality factors of a similar group
of inmates who have not participated in any adult programs at the prison or elsewhere.

An "Adult Education Data Questionnaire" was administered to each inmate in order to gather data that was considered as non-personality factors. It is recognized that this method of gathering information is vulnerable in certain ways:

1. Some men may falsify answers because they do not feel sure of the anonymity of their responses.
2. Participators may be more williiig to assist in the study and therefore may provide answers they feel are desired, even if not completely true.
3. Some may participate in order to get out of doing something else and not answer what they really feel.
4. Some may be indifferent and give answers that may be extreme and not completely accurate.
5. Some may not participate because they do not want to be bothered. Their absence from this study may create a bias on the basis of their non-participation.
6. This is an attitudinal study in part and as such probably less dependable than a factual study.
7. The degree of inaccuracy cannot be fully measured. Some limited estimation will be attempted in the statistical analysis.

## Basic Assumptions of this Study

1. The eighteen personality factors described in the

California Psychological Inventory comprise meaningful class－ ification of personality factors．

2．The California Psychological Inventory，when properly used，measures the stated elements of personality．

3．Participators responここれ 亡iuthfuily to the ques－ tions on the California Psychological Inventory．

4．Non－participators responded truthfully to the questions on the California Psychological Inventory．

5．The groups studied are an important segment of the adult population．

6．Results of the California Psychological Inventory and＂Adult Education Data Questionnaire＂can be used to im－ prove adult education programs and encourage greater partici－ pation．

## Importance of this study

This study is an attempt to add to participator stud－ ies these heretofore neglected factors．It is designed to examine personality factors of a certain population and re－ late this information to adult education programs．The area delineated for observation is necessarily limited，but it is hoped it will point the way for similar studies to continue until a body of knowledge has been assembled that will put adult education on a firmer scientific basis than it now en－ joys．

Adult education has grown so fast in recent years that adult educators have been busy merely trying to satisfy
insistent demands. The satisfaction of those demands has been on a trial and error basis. The groups which have endured have been judged to be effective and right for reasons unknown. The groups which have fallen by the wayside have been judged ineffective, often for reasons unknown.

Further, groups accommodated in adult education have generally been those which clamored the loudest for attention and little attempt has been made to consider the out groups. It is quite possible that institutionalized adult education programs, such as the one in the Oklahoma State Prison System, have been serving a limited group of adults and have been unable to reach successfully, large groups of potential students. This is inadequate education.

Appraisals of adults taken with a view of increasing the effectiveness and services of adult education programs have largely been limited to the measuring of only the participators and the measuring of factual and descriptive features. However easy and useful this has been in the past, it is not sufficient because it has neglected the non-participators who are harder to reach and neglected the important personality factors on which so much human direction depends, both for the non-participator and the participator.

Organization of the Study
This study is organized into five chapters. The introductory chapter presents the background and need for the
study, purpose of the study, hypotheses, definition of terms, limitations, basic assumptions, importance and organization of the study. Chapter Two is devoted to a review of research and literature and penology and adult education. Chapter Three presents the instruments, sampling procedures and data collecting procedure. Chapter Four is devoted to the presentation and analysis of the data. A summary of the study, findings, conclusions and recommendations are presented in Chapter Five.

## CHAPTER II

## REVIEW OF RELATED RESEARCH AND LITERATURE

This chapter will first review literature on adult participation, and secondly personality factors in relation to participation.

James S. Plant wrote that in the nineteenth century people were considered on the basis of their accomplishments and therefore, a person's acts tended to be equated with his personality. Later the person involved in the act received greater emphasis, and so personality came to be regarded as a person behaving. Finally, he believed, each person and his behavior came to be thought of as part of a cultural pattern and so personality, without an understanding of the cultural whole, was meaningless. ${ }^{18}$

Coolie Verner and John Newberry have stated that: "The nature of participation in organized adult education has been studied less thoroughly than any other aspect." 19 Brunner and his associates comment on the "paucity and limited
${ }^{18}$ James S. Plant, Personality and Cultural Pattern (New York: The Commonwealth Fund, 1937), pp. 1-25.
${ }^{19}$ Coolie Verner and John Newberry, "The Nature of Adult Participation," Adult Education, Vol. VIII, No. 4 (Summer, 1950), p. 68.
scope of research on participation in adult education." They also contend that there have been two basic approaches in the study of participation: The approaches are stated as:

1. Study of the characteristics of participants in particular institutions or types of institutional programs, and
2. Sample of a population or area to determine differences between participants and non-participants in various types of adult education - most of these studies are descriptive. 20

The adult education survey undertaken by the Los
Angeles City School District is a good example of a descriptive study. The study revealed that participants in the city program were born in eight or nine different countries, ranging in age from eighteen to sixty-nine years, with the largest percentage in the thirties. Forty-one and one-naif percent were male and fifty-eight and one-half percent female. Sixtythree percent were married and sixty-eight percent attended college. The total questionnaire included similar statistics in these areas:

```
    citizenship
    voting status
    number of years in California
    ownership of home
    personal property tax
    children in school
    distance from home to school
    method of transportation
    reasons for attending adult school
    opinions on improving the adult school experience
    rating of adult school classes
```

    20 Brunner, An Overview of Adult Education Research,
    98. 

pp. 90-98.

```
attitude toward tuition for adult school
attitude toward taxation for adult school
annual family income
employment status21
```

There is no attempt to measure the non-participants in the district. There is no reference to figures descriptive of the population as a whole. To an adult education worker these figures are interesting and to the school people they could be useful, but there is much to be done before this report could be considered complete.

A descriptive study of characteristics of adult participants completed by Verner and Newberry uses five headings:

## sex

age
education level
economic status
occupational group
This study has two important improvements over the aforementioned study of Los Angeles: figures in each category for the general population are also presented and the adult education program is divided into several subgroups:
public schools junior college university extension private correspondence Great Books home demonstration ${ }^{22}$

The general population figures include both the
${ }^{21}$ Los Angeles City Board of Education, "The Informational Report on Adult Education to the City of Los Angeles City Board of Education," (Los Angeles: December, 1959), p. 10 .
${ }^{22}$ Verner and Newberry, "Adult Participation," p. 70.
participators and non-participators and consequently comparisons are between participator and general population and not between participator and non-participator.

George Baxter Smith's study on the characteristics of adults participating in adult education activities compares those adults who completed home study courses at Columbia University with those adults who enrolled in the home study courses but did not complete the course or courses. Smith discovers what appears to have been discovered several times the tendency is for those who have the highest amount of regular education to enroll and complete the program. He shows evidence that those adults with vocctionally oriented goals are also more apt to enroll and complete adult education home courses. When classified according to age, adults beyond forty years of age complete more courses than younger people. This study makes no attempt to examine other personality or psychological factors. ${ }^{23}$

Another noteworthy descriptive study of participation in adult education activities is that of John Holden. This study was completed in collaboration with the Bureau of Census and the United States Department of Education. It was designed primarily to find:
${ }^{23}$ George Baxter Smith, "Purposes and Conditions Affecting the Nature and Extent of Participation of Adults in Courses in the Home Study Department of Columbia University, 1925-1932," Contributions to Education, No. 663 (New York: Bureau of Publications, Teachers College, Columbia University, 1935), pp. 16-23.
the nature of the participation the number of participants
characteristics as to age
characteristics as to previnus education
characteristics as to occupation
This survey estimates that in 1957 eight million persons enrolled in adult education programs. It was found that the types of activities having the greatest enrollment were trade, business, and technical classes. These accounted for nearly one-third of the total. The next largest groups were general education classes and civic and public affairs classes. Home and family living and recreational skills classes followed in that order.

Some comments on this survey should be made. Holden states it is a start in the direction of developing a scientific measure of the adult education population. It certainly suggests a limited and selected participation. No attempts have been made to examine psychological or personality characteristics except what may be deduced from some of the categcries established. He concludes his article with the following:

If adult education is to help meet the challenge of the present and foreseeable future, we should have more complete statistics on adult education on the local, state and national levels classified by personal, social, and economic factors. 24

Marvin Sitts completed a study with women in adult education classes. He made a comparison of participators and
${ }^{24}$ John Holden, "A Survey of Participation in Adult Education Classes," Adult Leadership, Vol. VI (April, 1958), pp. 101-103.
non-participators by having each participator bring a friend to her home, and interviewing both the women. He asked questions and used a personaliさy questionnaire in order to gather data about both personality and non-personality factors. This process was time-consuming, since he used a population of two hundred women. The time taken to complete each interview amounted to approximately one hour. All the women who were considered participants had completed a series of three consecutive courses in sewing offered by the Flint, Michigan adult education program. He was interested in both personality and non-personality differences between the participators and non-participators of the program. His findings indicated the pariicipants were brighter and more aggressive and in addition had larger incomes than the non-participants. ${ }^{25}$

Harvey Hershey in a study of inmates at the State Prison of Southern Michigan was concerned with the differences and similarities between participators and non-participators. The participators were those inmates who had participated in the adult education program of the academic school and the non-participators had never participated in any adult education activity. Differences and similarities considered were
${ }^{25}$ Marvin Sitts, "A Study of the Personality Differences Between a Group of Women who had Participated in Sewing Classes in an Adult Education Program and a Group of Their Friends and Neighbors who had not Participated in an Adult Education Program," (unpublished Ph.D. dissertation, Michigan State University, i960), pp. 78-82.
those as defined by the Sixteen Personality Factor Questionnaire and non-personality factors obtained in a survey.

The class participators were found to be significantly more rigid, undependable, and conventional than the non-participator while the non-participators were more easy-going, conscientious, and imaginative than the participators.

No significant differences were found on the non-personality factors: age, education, prison record, extent of participation in adult education programs, and military service record. 26

Henry Godfrey Scharles, Jr. concluded from a study he conducted that personality needs do influence the decision to participate in iearning activities. He found also, that personality needs influenced the extent of involvement and degree of achievement. 27

Literature that is related directly to measurement of personality factors of adults participating in adult education courses is limited in quantity. The majority of studies of adult participators have dealt with factors which are termed in this paper as non-personality factors. They have agreed, with few exceptions, that a typical participator is a somewhat

Harvey Hershey, "Adult Education and Personality of Inmates of the State Prison of Southern Michigan," (unpublished Ph.D. dissertation, Michigan State University, 1966), pp. 88-90.
${ }^{27}$ Henry Godfrey Scharles, Jr., "The Relationship of Selected Personality Needs to Participation, Drop-out, and Achievement Among Adult Learners," (unpublished doctoral dissertation, Florida State University, 1967), pp. 67-68.
older person, but not retired; he is in the higher socio-economic level; he has a broad participation pattern; and he is better educated than the non-participator.

Several of the authors quoted have advocated measurements of personality factors, non-personality factors, and cultural and environmental factors in general. It is not surprising that almost nothing has been done in an effort to measure these qualities in adult education projects.

A study by Abraham Kaplan of socio-economic relationships is another attempt to investigate participation of adults in adult education activities. This is not an attempt to measure personality factors, but a study of certain nonpersonality characteristics. He wrote:

In general, residents of areas of higher socioeconomic status participated to a greater degree and in a larger number of educational activities than residents of lower status areas. 28

High rank correlations were obtained between amount of education and extent of participation as well as between economic status and participation. There did not appear to be a very high correlation between place of birth (native or foreign-born) and participation. Regarding attitude Kaplan comments:
... it was apparent that there were many persons who did not participate because of a feeling of 'not

28
Abraham A. Kaplan, "Socio-Economic Circumstances and Adult Participation in Certain Cultural and Educational Activities," Contributions to Education, No. 889 (New York: Bureau of Publications, Teachers College, Columbia University, 1943), p. 142.
belonging', or not feeling welcome, or because of a conviction that their particular problems were not being considered or would not be given a favorable hearing. 29

George M. Beal stresses the inadequacy of mere measurement of age, class and income categories, the usual considerations in studies of participation. He suggests more attention to "dynamic factors". By this he refers to a student's participation in group decision-making and to his attitudes of responsibility toward group actions and group values. ${ }^{30}$

## Penology and Adult Education

The value of studying a selected group is not necessarily measured by the group's rolationship to the whole field of which it is a part, but in this case the selection of prison inmates pinpoints a sigrificant and easily identifiable part of the whole field of adult education. Findings regarding prison inmates as participants (or non-participants) in adult education cannot be applied to participants in general except in very limited ways. Inmates do, however, make up a large part of adult education participants, and must be taken into account in every public consideration of the field as a whole.

Societal reactions to crime are expressed through our
${ }^{29}$ Ibid., p. 68.
${ }^{30}$ George M. Beal, "Addition Hypothesis in Participation Research," Rural Sociology, Vol. XXI, No. 1-4 (1956), p. 249 .
penal systems. It seems only logical that if the causes of deviancy were known, they would be reflected in the procedures used for reformation and penal practice. If a crime is committed by someone with relatively low intelligence due partly to lack of formal schooling, then the natural task of the penal institution is to educate and train him so that he can earn his living by some trade, increase his scope of knowledge and not make the same mistake again.

Nearly forty years ago, Austin MacCormick pointed out that "education of prisoners is fundamentally a problem of adult education" and that "the penal institution should make use of all that is known about the education of adults."3l

In 1965, the average number of offenders under correctional authority was about 1.3 million. (Projections show an expected increase of more than half a million by 1975.) Two-thirds of the total number were "community based" - that is, they were on probation or on parole. Of the more than 425,000 incarcerated offenders, about one-sixth were in institutions primarily for juveniles. Nearly 363,000 were adult prisoners. ${ }^{32}$ From these figures you can see that the task for adult education becomes very important.

Penal practice can be seen as a continuum from
31 Austin MacCormick, The Education of Adult Prisoners (New York: National Society of Penal Institutions, 1931), p. 9.
${ }^{32}$ Mason H. Atwood, "Some Other Institutions," in Handbook of Adult Education, ed. by Robert M. Smith, George Aker, and J.R. Kidd (London: The MacMillan Company, 1970), p. 373.
punishment through treatment. Punishment suggests that there is intentional infliction of pain by the corporate group of which the individual is a member. It is assumed that the administration of pain will produce some good on the part of the offender and restore the balance upset by the crime to the social system. When a philosophy of treatment is established the offender is looked upon as someone who is ill and in need of a considerable amount of help and attention. We cannot punish him for being sick; all we can do is facilitate his recovery. It has been said that the primary goal of corrections is just that - correction - and that in modern correctional institutions there is a major commitment to rehabilitation. ${ }^{33}$

Edwin Sutherland and Donald Cressey suggest three general problems in the area of crime control and related punitive policies. ${ }^{34}$ First, there is a problem of efficiency; can crime be better controlled through the use of punitive policies, or by treatment method? A reduction in the crime rate is one indication of efficiency of the system. This may be expressed by fewer people committing crimes and a lower rate of recidivism.
${ }^{33}$ Joint Commission on Correctional Manpower and Training, Research in Correctional Rehabilitation (Washington, D.C.: Joint Commission on Correctional Manpower and Training, 1967), p. 42.
${ }^{34}$ Edwin H. Sutherland and Donald R. Cressey, Principles of Criminology (Chicago: J.B. Lippincott Company, 5th edition, 1955), pp. 254-255.

Second, there is the problem of relating correction methods to our existing store of knowledge about crime causation. Society may be unwilling to implement a given method because it is inconsistent with cultural values and expectations. Our penal goals in most modern institutions are rehabilitation and treatment, rather than the intentional infliction of suffering, hardship or pain.

Third, we have a problem of variations in punitive policies and methods of crime control. The reasons for this may be found by examination of the moral standards of different societies, their degree of cultural and economic development and the nature and severity of the crime itself.

Imprisonment is almost a universal form of punishment imposed upon felons in the United States today. ${ }^{35}$ It is hoped that while the individual is confined to the correctional institution, he will benefit from the program of reformation. With the increasing trend toward treatment, the inmate is examined in terms of his individual needs, with a program designed to help satisfy those needs and return him to society as quickly as possible. However, the penal institutions have a multitude of functions, with their major responsibility being to protect society from its convicted criminals. Because of this, the treatment process sometimes must take a back seat to maintenance of security, custody, and discipline within
${ }^{35}$ Ibid., p. 292.
prison walls.
In the United States today we have a society which believes that even the most serious disorders can be cured. Growing out of this trend toward individualized treatment has emerged our most modern institutions. It is believed by many clinicians that if an inmate is to benefit from his experience in prison, a program must be developed for him in accordance with his needs.

With this most recent philosophy in mind, clinicians believe that individualized treatment needed to benefit inmates exists in many and various forms. This paper is concerned with the educational aspects of treatment. Because of the age of the individual confined to the institutions used in this study, the educational treatment will be referred to as adult education.

In conclusion, it is contended that these groups are of sufficient size and importance to make this study worthwhile even though it is a specialized group and conclusions reached about it cannot be generalized to include all adult education participators everywhere.

## DESIGN OF THE STUDY

The purpose of this study was to examine personality and non-personality factors of a certain population and relate this information to adult education programs. Answers to the following questions were sought:

1. Are there significant differences in certain personality factors among participators and nonparticipators in the Oklahoma prison system as measured by the California Psychological Inventory?
2. Are there significant differences in certain nonpersonality factors among participators and nonparticipators in the Oklahoma prison system as measured by the "Adult Education Data Questionnaire?"

The problem of the study required the testing of two hypotheses. The following null hypotheses were developed:
$\mathrm{H}_{0} 1$ - There are no statistically significant differences between participants and non-participants on certain personality factors as measured by the California Psychological Inventory by Harrison G. Gough.
$\mathrm{H}_{0} 2$ - There are no statistically significant differences between participants and non-participants on certain non-personality factors as measured by the "Adult Education Data Questionnaire."

The California Psychological Inventory
A questionnaire suitable for measuring the personality factors of a group of adults who had enrolled in a specified adult education program as well as those of a similar group who were not enrolled had to meet certain requirements. It had to be of sufficient length to cover an acceptable range of personality areas, but it also had to be brief enough to be administered in the relatively short period that the subjects would be able to spend in their involvement in the research. It had to be accompanied by sufficient descriptive material to enable the investigator to judge its reliability, validity, and general design. The questionnaire had to be suitable for adults, and in particular for the non-college men who were expected to make up a great majority of the population. Also desirable was a norm for male prison inmates. Of the questionnaires examined, the California Psychological Inventory seemed best for use in this study for several reasons. First, the division of personality into eighteen factors seemed to cover the area more fully than would fewer divisions. A norm for male prison inmates also accompanied the test manual. Also the reported reliability coefficients range from .49 to .87 with a median of .80 .

Benjamin Kleinmuntz wrote that "the CPI is already well on its way to becoming one of the best, if not the best, personality-measuring instruments of its kind." 36

Anne Anastasi hails it as "one of the best personality inventories currently available," noting that "its technical development is of a high order, and it has been subjected to extensive research and continuous improvement." 37

Another favorable group of features of the California Psychological Inventory is associated with the questions themselves. First, there is a comparatively large number of questions. They appear to apply better to the group of men under study since there are few questions that would invite the response, "These do not have anything to do with me." And finally, the language used is within the reading comprehension level of the inmates.

Finally, a group of miscellaneous desirable features of Gough's inventory include an estimated seventy-five to ninety minutes for administering, which was believed right in light of methods to be followed. Although no built-in lie detector was used, it was expected that enough rapport could be established with subjects to minimize tendencies to lie or give random answers. The personality factors considered in
${ }^{36}$ Benjamin Kleinmuntz, Personality Measurement: An Introduction (Homeward, Illinois: Dorsey Press, 1967), F. 98.

37
Anne Anastasi, Psychological Testing (New York: MacMillan Company, 1968), p. 448.

Gough's inventory are shown in Table 1.

TABLE 1
CONTINUUM REPRESENTATION OF PERSONALITY FACTORS 38

| Factor | Continuum |
| :---: | :---: |
| Do | Aggressive, confident........ Retiring, inhibited |
| Cs | Ambitious, active............ Apathetic, shy |
| Sy | Outgoing, enterprising....... Awkward, conventional |
| Sp | Clever, enthusiastic......... Deliberate, patient |
| Sa | Outspoken, demanding......... Methodical, conservative |
| Wb | Energetic, alert............. Leisurely, cautious |
| Re | Responsible, thorough........ Immature, moody |
| So | Serious, honest............... Defensive, resentful |
| Sc | Calm, patient................. Impulsive, shrewd |
| To | Quick, tolerant.............. Suspicious, wary |
| Gi | Co-operative, helpful........ Inhibited, aloof |
| Cm | Dependable, reliable......... Changeable, disorderly |
| Ac | Capable, efficient........... Coarse, stubborn |
| Ai | Mature, dominant............. Anxious, dull |
| Ie | clear-thinking, intelligent.. Easygoing, shallow |
| Py | spontaneous, perceptive...... Apathetic, peaceable |
| Fx | Insightful, informal......... Guarded, rigid |
| Fe | Appreciative, gentle........ Outgoing, hard-headed |

On page 94 of the appendix is a copy of the California Psychological Inventory used in this study.

The Adult Education Data Questionnaire
The second instrument used was a fact sheet and questionnaire designed by this researcher to reveal a number of non-personality facts as well as the past record of adult activities of the groups examined. With the assistance of other

[^3]graduate students, the researcher produced what was felt to be a series of items that would provide the necessary information needed to compare the two groups in the best possible manner.

The "Adult Education Data Questionnaire" constructed contained eighteen questions designed to cover several general areas. They are:
age
recidivism
previous occupation
education
type of crime
military service record
marital and family status
participation in adult education programs
geographical background
The data survey sheet was used to establish the extent of similarities or differences between the participating and non-participating groups in non-personality areas. Also it seemed reasonable that a knowledge of such areas would make more understanding any personality differences.

## Sampling Procedures

The sample was obtained from the general population confined to the Regional Community Treatment Center at Lexington, Oklahoma. Permission was granted by the Deputy Director of Corrections and the Superintendent of the Regional Comunity Treatment Center. The researcher visited the center on several occasions and administered the "Adult Education Data Questionnaire" and the California Psychological Inventory.

No more than twenty-five inmates were tested at one time.
One hundred and fifty inmates were tested. Seventyseven were classified as participators and seventy-three as non-participators. Those inmates who had participated in adult education activities within the past year were considered participators. Inmates who had never participated in any adult education activity were considered non-participators. Inmates who were not now attending adult ciasses but who had attended any such activities, in the prison or elsewhere, during the past five years were not considered in the study.

In order to obtain matched pairs of inmates, information from the "Adult Education Data Questionnaire" was used. The inmates were compared on the basis of age, education, recidivism and length of sentence. The only difference being participation in adult education programs.

Thirty matched pairs of inmates were selected by this process. (Table 2). In all thirty pairs a perfect match was achieved.

Confidentiality was guaranteed to the inmates, although they were asked to put their number on the answer sheets. Most placed their names also. The inmates were told that the researcher was comparing the groups and not individuals. Several inmates appeared interested in the results and were promised a profile sheet of their scores.

MATCHED PAIRS OF INMATES

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Pair $\quad$Question- <br> naire No. | Age in | Highest | Length of |  |
|  | Grade | Sentence <br> in Years |  |  |


| 1 np | 1 | under 21 | 12 | $1-3$ | first-timer |
| :--- | ---: | :---: | :---: | :---: | :--- |
| 1 p | 43 | under 21 | 12 | $1-3$ | first-timer |
| 2 np | 2 | $21-25$ | $10-11$ | $1-3$ | first-timer |
| 2 p | 27 | $21-25$ | $10-11$ | $1-3$ | first-timer |
| 3 np | 5 | under 21 | $10-11$ | $1-3$ | first-timer |
| 3 p | 18 | under 21 | $10-11$ | $1-3$ | first-timer |
| 4 np | 7 | under 21 | $7-9$ | $4-5$ | first-timer |
| 4 p | 16 | under 21 | $7-9$ | $4-5$ | first-timer |
| 5 np | 64 | under 21 | $10-11$ | $1-3$ | first-timer |
| 5 p | 19 | under 21 | $10-11$ | $1-3$ | first-timer |
| 6 np | 72 | $21-25$ | 12 | $1-3$ | first-timer |
| 6 p | 46 | $21-25$ | 12 | $1-3$ | first-timer |
| 7 np | 12 | under 21 | $7-9$ | $1-3$ | first-timer |
| 7 p | 6 | under 21 | $7-9$ | $1-3$ | first-timer |
| 8 np | 13 | under 21 | 11 | $1-3$ | recidivist |
| 8 p | 9 | under 21 | 11 | $1-3$ | recidivist |
| 9 np | 69 | under 21 | $7-9$ | $1-3$ | first-timer |
| 9 p | 22 | under 21 | $7-9$ | $1-3$ | first-timer |
| 10 np | 16 | $36-40$ | $7-9$ | $4-5$ | recidivist |
| 10 p | 48 | $36-40$ | $7-9$ | $4-5$ | recidivist |
| 11 np | 58 | under 21 | $10-11$ | $1-3$ | first-timer |
| 11 p | 75 | under 21 | $10-11$ | $1-3$ | first-timer |
| 12 np | 18 | $21-25$ | $10-11$ | $1-3$ | first-timer |
| 12 p | 34 | $21-25$ | $10-11$ | $1-3$ | first-timer |
| 13 np | 60 | $21-25$ | $10-11$ | $4-5$ | recidivist |
| 13 p | 20 | $21-25$ | $10-11$ | $4-5$ | recidivist |
| 14 np | 22 | $21-25$ | $10-11$ | $1-3$ | recidivist |
| 14 p | 67 | $21-25$ | $10-11$ | $1-3$ | recidivist |

TABLE 2--continued

| Pair | Questionnaire No. | Age in Years | Highest Grade Level | Length of Sentence in Years | Recidivism |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15 np | 23 | 21-25 | 10-11 | 1-3 | Recidivist |
| 15 p | 54 | 21-25 | 10-11 | 1-3 | Recidivist |
| 16 np | 25 | 26-30 | 10-11 | 1-3 | first-timer |
| 16 p | 50 | 26-30 | 10-11 | 1-3 | first-timer |
| 17 np | 28 | 36-40 | 10-11 | 1-3 | recidivist |
| 17 p | 71 | 36-40 | 10-11 | 1-3 | recidivist |
| 18 np | 29 | 21-25 | 12 | 1-3 | first-timer |
| 18 p | 41 | 21-25 | 12 | 1-3 | first-timer |
| 19 np | 30 | under 21 | 10-11 | 4-5 | first-timer |
| 19 p | 25 | under 21 | 10-11 | 4-5 | first-timer |
| 20 np | 31 | 21-25 | 10-11 | 1-3 | first-timer |
| 20 p | 36 | 21-25 | 10-11 | 1-3 | first-timer |
| 2.1 np | 32 | under 21 | 10-11 | 1-3 | recidivist |
| 21 p | 28 | under 21 | 10-11 | 1-3 | recidivist |
| 22 np | 35 | 26-30 | 7-9 | 1-3 | recidivist |
| 22 p | 17 | 26-30 | 7-9 | 1-3 | recidivist |
| 23 np | 36 | 31-35 | 10-11 | over 10 | first-timer |
| 23 p | 13 | 31-35 | 10-11 | over 10 | first-timer |
| 24 np | 54 | under 21 | 10-11 | 1-3 | first-timer |
| 24 p | 59 | under 21 | 10-11 | 1-3 | first-timer |
| 25 np | 42 | 21-25 | 10-11 | 4-5 | recidivist |
| 25 p | 63 | 21-25 | 10-11 | 4-5 | recidivist |
| 26 np | 46 | 31-35 | 12 | 4-5 | recidivist |
| 26 p | 40 | 31-35 | 12 | 4-5 | recidivist |
| 27 np | 47 | 26-30 | 10-11 | 4-5 | recidivist |
| 27 p | 52 | 26-30 | 10-11 | 4-5 | recidivist |
| 28 np | 49 | 21-25 | 7-9 | 4-5 | recidivist |
| 28 p | 23 | 21-25 | 7-9 | 4-5 | recidivist |
| 29 np | 50 | 31-35 | 10-11 | 1-3 | recidivist |
| 29 p | 8 | 31-35 | 10-11 | 1-3 | recidivist |
| 30 np | 53 | 21-25 | 12 | 1-3 | first-timer |
| 30 p | 38 | 21-25 | 12 | 1-3 | first-timer |

## Procedure for Analysis of the Data

The scores of the matched pairs of inmates on the California Psychological Inventory were treated first. They were presented graphically, using superimposed graphs. In this way the personality factor scores of the participators were compared with the non-participators and the given norms. Also a t-score characteristic was computed and evaluated so that a possible significant difference between participators and non-participators on the eighteen factors could be determined.

The responses on the "Adult Education Data Questionnaire" were then examined. The information used in matching the samples is presented first. Next is a computation of other comparable information obtained by using the remaining questions in the survey. In cases involving comparative statistical information the chi-square was applied, and the level of significance of the difference between participator and non-participator was determined. In cases where no differences are obvious, the use of the chi-square was omitted. Tables are used to present information and graphs are used to emphasize skewed distributions.

An attempt was made to measure the accuracy of the responses of both the participators and non-participators by comparing questionnaires with the official prison records of the inmates. This information is reported with the stated responses of the inmates and the relationship of the two were
examined by chi-square.
Fifty names in each group were examined and reported upon as to agreement between the stated response and the official prison record on questions relating to age, education, recidivism and length of sentence.

In order to determine if the sample groups are representative of the total prison population, additional inmates were checked by means of prison records regarding age, education, recidivism and length of sentence. Thirty inmates randomly selected, by picking inmates whose number ended in an even number, from the classlists of present adult education classlists were checked in the prison records. Thirty inmates whose number ended with an even number and had never participated in an adult education activity were also used. A chisquare was applied in order to determine any significant levels of difference between the two participator groups. The same procedure was followed in determining possible differences between the two non-participator groups.

The acceptable level of significance is the five percent level. This will apply to both the t-ratio and the chisquare.

## ANALYSIS OF THE DATA

Part A: Report on the results of the California Psychological Inventory

Subjects for this study were thirty matched pairs of inmates from the Regional Treatment Center at Lexington, Oklahoma. Each matched pair included an inmate who had participated in adult education classes or training activities at the prison and one who had not participated in any such adult education program. The inmates in each pair were similar in age, education, recidivism and length of sentence. The inventory was administered at the same time as the "Adult Education Data Questionnaire." These instruments were both administered during a period from July, 1973 through September, 1973. Arrangements for the use of inmates in this study were made through the Oklahoma state Department of Corrections and the Superintendent's office at the Regional Treatment Center. The results of the California Psychological Inventory are contained in the following eighteen graphs. The scores used are raw scores. The solid line in each graph represents the participator, and the broken line represents the non-participator.

GRAPH I

- PARTICIPATORS
-- NON-PARTICIPATORS


Raw Score
Scale Do

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale Cs

- PARTICIPATORS
-     - NON-PARTICIPATORS


Raw Score
Scale Sy

## - PARTICIPATORS <br> --- NON-PARTICIPATORS



Raw Score
Scale Sp
46

GRAPH V

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale Sa

- PARTICIPATORS
--- NON-PART ICIPATORS


Raw Score
Scale Wb

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale Re

GRAPH VIII

- PARTICIPATORS
-- - NON-PARTICIPATORS


Raw Score
Scale So

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale Sc

GRAPH X

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale To

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale Gi

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale Cm

- PARTICIPATORS
-- NON-PARTICIPATORS


Raw Score
Scale Ac

- PARTICIPATORS
-- NON-PARTICIPATORS


Raw Score
Scale AI

- PARTICIPATORS
--- NON-PARTICIPATORS


Raw Score
Scale le

- PARTICIPATORS
-- NON-PARTICIPATORS


Raw Score
Scale Py

## - PARTICIPATORS <br> --- NON-PART ICIPATORS



## Raw Score <br> Scale Fx

GRAPH XVIII

- PARTICIPATORS
--- NON-PART ICIPATORS


Raw Score
Scale Fe

Since the two groups are independent, Fisher's t-test can be applied to test the difference between the means of the two groups. All computations for Fisher's t-test were completed with the use of a Craig electronic calculator.

The formula used to compute Fisher's t-test was:

$$
\tau=\frac{\left(\bar{x}_{1}-\bar{x}_{2}\right)-\left(\mu_{1}-\mu_{2}\right)^{39}}{\sqrt{\frac{s^{2}}{n_{1}}+\frac{s^{2}}{n_{2}}}}
$$

In order to check the level of significance of $t$, $a$ table of values of $t$ at the five percent level of significance was consulted. A $t$ of 2.0021 or larger was necessary to infer a significant difference at the five percent level. 40

When all computations had been completed, all figures were computed a second time in order to eliminate any errors in mathematical computation. The t-values are indicated in Table 3.
${ }^{39}$ Vivian Gourevitch, Statistical Methods: A ProblemSolving Approach (Boston: Allyn and Bacon, 1965), p. 230. ${ }^{40}$ Ibid., p. 293.

TABLE 3
T-VALUES AND DIRECTIONS OF MEANS OF INDIVIDUAL SCALES ON THE CALIFORNIA PSYCHOLOGICAL INVENTORY

| Scale | Direction of Means | Value of $t$ |
| :---: | :---: | :---: |
| Do | $\mathrm{P}>\mathrm{NP}$ | 2.93* |
| Cs | $\mathrm{P}>\mathrm{NP}$ | 2.17* |
| Sy | $\mathrm{P}>\mathrm{NP}$ | 3.10* |
| Sp | $\mathrm{P}>\mathrm{NP}$ | 1.23 |
| Sa | $\mathrm{P}>\mathrm{NP}$ | 1.36 |
| Wb | $P>N P$ | 2.11* |
| Re | $\mathrm{P}>\mathrm{NP}$ | 2.27* |
| So | $\mathrm{P}>\mathrm{NP}$ | 2.21* |
| Sc | $\mathrm{P}<\mathrm{NP}$ | . 031 |
| To | $\mathrm{P}>\mathrm{NP}$ | 1.89 |
| Gi | $\mathrm{P}>\mathrm{NP}$ | . 829 |
| Cm | $\mathrm{P}>\mathrm{NP}$ | 1.58 |
| Ac | $\mathrm{P}>\mathrm{NP}$ | 1.84 |
| Ai | $\mathrm{P}>\mathrm{NP}$ | . 54 |
| Ie | $\mathrm{P}>\mathrm{NP}$ | 2.17* |
| Py | $\mathrm{P}>\mathrm{NP}$ | 1.93 |
| Fx | $\mathrm{P}<\mathrm{NP}$ | . 92 |
| Fe | $\mathrm{P}<\mathrm{NP}$ | . 62 |

Legend: < = is less than
> = is greater than
P = Participator NP = Non-participator
*Statistically significant

Thus on the basis of the t-ratio, it is seen that scales Do, Cs, Sy, Wb, Re, So and Ie have means that are significantly different at the five percent level. In other words, the class participators are statistically significantly more confident, ambitious, outgoing, energetic, responsible, serious and efficient than the non-participators.

Summary of the Results of the
California Psychological Inventory
Results of the California Psychological Inventory indicated that the participators and non-participators:

1. are significantly different at the five percent levei of significance on the scores for scales Do, Cs, Sy, $\mathrm{Wb}, \mathrm{Re}, \mathrm{So}$ and Ie.
2. have scores which tend to be most alike on scales $\mathrm{Sc}, \mathrm{Ai}, \mathrm{Fx}$ and Fe .

Part B: Report on Results of the "Adult Education Data Questionnaire"

Each inmate included in this survey completed an "Adult Education Data Questionnaire." This sheet contained eighteen questions related to the inmate's age, extent of participation in adult education activities, education, mobility, family life, military service record, prison record and previous occupation. These elements, although related to personaIity, are not personality characteristics as defined by the California Psychological Inventory. It was anticipated that a measure of these elements, which will be referred to as "non-personality factors," would be necessary in the determination of the validity of the hypothesis of this study.

A comparison of a similar group of inmates who did not participate in this study was obtained through use of prison records. This comparison will be reported along with survey data on the inmates who were used in the study. The items compared were age, education, recidivism and length of sentence.

The accuracy of the responses was also checked by reference to the official prison records. All the inmates checked in the records had completed the questionnaires as part of the selection of the matched pairs for the study. The results of this reliability check will be included with the results of the "Adult Education Data Questionnaire."

Age
Table 4 is designed to show the age groups of adult education participators and non-participators. The mean age for the non-participators is 23.9 years and the mean age for the participators is 24.4 years, making a difference in mean ages of .5 years.

TABLE 4
AGE OF INMATES

| Age | Participators | Non-participators |
| :--- | :---: | :---: |
| under 21 | 11 | 11 |
| $21-25$ | 11 | 11 |
| $26-30$ | 3 | 3 |
| $31-35$ | 3 | 3 |
| $36-40$ | 2 | 2 |
| $41-50$ | 0 | 0 |

The table of ages seems to indicate a preponderance of inmates in the under twenty-one to twenty-five age range, seventy-three percent of the participators and non-participators. Two superimposed graphs emphasize this distribution (Graph XIX). However, the skewed form of the graph suggests that tests based on a normal distribution assumption might be
unreliable. Therefore, a test was used which would compare frequency distributions without regard to the form of the distribution.

The chi-square technique was applied to compare all non-personality distributions where applicable. A chi-square of zero would be the result of applying the test to the groups. This is expected as age was a criteria of matching. Therefore we may assume no significant difference in the observed age distribution between the two groups of subjects.

A similar group of inmates randomly selected (by selecting the first thirty participants and non-participants whose prison numbers ended in an even number) did not differ significantly from the matched sample group. The average age of the participators of this group was 24.0 compared to 24.4 for the sample group. The difference in the participator groups is . 4 years. The non-participators of the representative group averaged 24.2 years compared to 23.9 years for the matched sample, the difference between the two groups being only . 3 of a year.

A check of the official records of the inmates who participated in the original study reveals that a total of 2 inmates out of one hundred-fifty gave their age as different from the official record. The one and one-half percent of inmates that falsified their records is not significant statistically.

AGE OF REPRESENTATIVE GROUP OF INMATES

| Age | Participators | Non-participators |
| :--- | :---: | ---: |
| under 21 | 10 | 11 |
| $21-25$ | 12 | 10 |
| $26-30$ | 4 | 2 |
| $31-35$ | 2 | 4 |
| $36-40$ | 2 | 3 |

## Education

There were three questions in the "Adult Education Data Questionnaire" related to education.

Question two asked, "What was the last grade or year you finished in regular public school?" The results are indicated in Table 6 and Graph XX. The grade leveis of the participator and non-participator groups are identical as this area was one of those used to match pairs. Eighty-three percent of the participators and non-participators did not finish high school. The average grade completed is 10.2 for the participator and 10.43 for the non-participator. This is a difference of . 23.

Since the groups are identical, a chi-square of zero would be found.

In the randomly selected representative group, the average grade level of the participators was 10.06 compared to 10.2 for tiose in the present sample. The difference of . 14 of a grade level is not significant as indicated by a chisquare of 1.426.

TABLE 6
HIGHEST GRADE FINISHED IN SCHOOL

| Grade level | Participators | Non-participators |
| :---: | :---: | :---: |
| $7-9$ | 6 | 6 |
| $10-11$ | 19 | 19 |
| 12, college, <br> non-graduate | 5 | 5 |

TABLE 7
GRADE LEVEL OF REPRESENTATIVE GROUP OF INMATES

| Grade level | Participators | Non-participators |
| :--- | :---: | :---: |
| under 6 | 1 | 1 |
| $7-9$ | 4 | 5 |
| $10-11$ | 20 | 18 |
| 12, college, |  |  |
| non-graduate | 5 | 5 |
| college graduate | 0 | 1 |

In comparison with the non-participator groups, the representative group averaged 10.26 grades, while the study group averaged 10.43. The difference in the non-participator group is .17 of a grade, which is not significant as indicated by a chi-square of 2.1182 .

From the sample group that was checked with the official prison records, only one inmate indicated a grade level that did not correspond to the records.

Question seventeen was, "If you did not finish high school, have you passed the G.E.D.?" In the study group seven participators and five non-participators had passed the G.E.D.


Those in the non-participator group had passed the test without participating in an organized activity.

Question sixteen asked, "What type of adult education program have you participated in?" Twenty of those inmates in the study group were attending or had attended the prison Academic School at Lexington or McAlester, Oklahoma; ten had attended or were attending a vocational-technical school at Lexington or Stringtown, Oklahoma.

## Prison record

A series of questions was devised for the purpose of eliciting information regarding length of sentence, offenses committed and frequency of confinement in a penal institution.

Question three asked, "What is the length of the sentence you are now serving?" Responses are presented in Table 8 and Graph XXI. Seventy percent of both groups of inmates have been committed for a period of from one to three years. This indicates that seven-tenths of the inmates involved in this study have time which could be devoted to an adult education activity.

TABLE 8
LENGTH OF PRESENT SENTENCE

|  | Participators | Non-participators |
| :--- | :---: | :---: |
| $1-3$ years | 21 | 21 |
| $4-5$ | 8 | 8 |
| $6-10$ | 0 | 0 |
| over 10 | 1 | 1 |



The representative group of participants and non-participants did not differ much from the study group. Table 9 indicates the distribution of inmates and their length of sentence. A chi-square of 2.5 for the participator group and 2.73 for the non-participator group is not significant.

TABLE 9
LENGTH OF SENTENCE OF REPRESENTATIVE GROUP

|  | Participants | Non-participants |
| :--- | :---: | :---: |
| $1-3$ years | 19 | 18 |
| $4-5$ | 7 | 8 |
| $6-10$ | 2 | 2 |
| over 10 | 2 | 2 |

Question four asked, "How much time have you served on this sentence?" Responses are presented in Table 10 and Graph XXII. Eighty percent of the participators have been in the State Prison System of Oklahoma for a period of less than three years. Seventy-seven percent of the non-participators have been confined in the system for a period of less than three years on the present sentence.

A chi-square value of 1.356 does not indicate a significant difference at the five percent level.

TABLE 10
CONSECUTIVE TIME IN THE STATE PRISON SYSTEM OF OKLAHOMA

|  | Participators | Non-participators |
| :--- | :---: | ---: |
| less than l year | 18 | 16 |
| $1-3$ | 6 | 7 |
| $4-5$ | 3 | 4 |
| $6-10$ | 2 | 3 |
| over 10 | 1 | 0 |

The types of offenses and the number of inmates committed for each offense are presented in Table 11.

TABLE 11
TYPE OF OFFENSE LEADING TO CONVICTION OF INMATES

| Offense | Participator | Non-participator |
| :--- | :---: | :--- |
| Second degree burglary | 12 | 7 |
| Auto theft | 1 | 6 |
| Grand larceny | 4 | 3 |
| Narcotics, sale and | 6 | 4 |
| possession of | 2 | 1 |
| Concealing stolen property | 2 | 1 |
| Pointing a deadly weapon | 0 | 1 |
| Rape | 0 | 1 |
| Carrying firearms | 0 | 1 |
| Assault and battery with | 0 | 1 |
| a deadly weapon | 0 | 0 |
| Attempted robbery | 1 | 0 |
| Indecent exposure | 1 | 4 |
| Bogus checks | 3 |  |
| Forgery |  |  |

Recidivism
Question six asked, "Are you a first timer?" Fortythree percent of both groups indicated they were serving at

## GRAPH XXII

CONSECUTIVE TIME IN THE STATE PRISON SYSTEM OF OKLAHOMA

least a second sentence in a penal instiiution. Since this was an area used to match pairs, the responses were the same. This information is indicated in Table l2. The prison records indicated that none of the inmates tested lied on this question.

TABLE 12
RECIDIVISM

|  | Participator | Non-participator |
| :--- | :---: | :---: |
| First-timer | 17 | 17 |
| More than first-timer | 13 | 13 |

The repre ientative group of participators and non-participators did not differ much from the study group. Table 13 indicates the number of recidivists. A chi-square of . 62 for the participator group and .26 for the non-participator group were well below any significant figure.

TABLE 13
RECIDIVISM OF REPRESENTATIVE GROUP OF INMATES

|  | Participator | Non-participator |
| :--- | :---: | :---: |
| First-timer | 14 | 15 |
| More than first-timer | 16 | 15 |

## Military service

Questions eight and nine, regarding service in the armed forces, were asked because many men above the age of eighteen have been in the service. Sixty-three percent of
both groups were never in any branch of military service. (Table 14). The inmates who were in some branch of the service and the name of the branch are indicated in Table 15.

TABLE 14
NUMBER OF INMATES IN THE MILITARY SERVICE

|  | Participator | Non-participator |
| :--- | :---: | :---: |
| Military service | 11 | 11 |
| No military service | 19 | 19 |

TABLE 15
BRANCHES OF MILITARY SERVICE

|  | Participators | Non-participators |
| :--- | :---: | :---: |
| Army | 5 | 7 |
| Marines | 5 | 2 |
| Navy | 0 | 1 |
| Air Force | 1 | 1 |

Family
Answers to questions regarding marital status indicated that only forty-three percent of the participators and thirty-three percent of the non-participators were married at the time of the study, as indicated in Table 16 . A chisquare of .64 fails to indicate a difference of any significance.

Responses regarding the number of children indicate that forty-seven percent of the participators and thirty

TABLE 16

## PRESENT MARITAL STATUS

Participators Non-participators

| Married | 13 | 10 |
| :--- | :--- | :--- |
| Not married | 17 | 20 |

percent of the non-participators had families. The number of inmates with families and the number of children of each of these inmates are indicated in Table 17 and Table 18. An evaluation of the responses to the two questions pertaining to the family situation indicates much instability in marital relationships. Applying a chi-square, the value of 1.76 indicates no significant difference.

TABLE 17

## NUMBER OF INMATES HAVING CHILDREN

|  | Participators | Non-participators |
| :--- | :---: | :---: |
| Has one or more children | 14 | 9 |
| Has no children | 16 | 21 |

Mobility
Questions thirteen and fourteen were concerned with the mobility of the inmates. Question thirteen asked, "What state were you born in?" Sixty-seven percent of the participators and sixty-three percent of the non-participators were born in Oklahoma. Table 19 presents the place of birth of

TABLE 18
NUMBER OF CHILDREN OF INMATES

| Number of children | Participators | Non-participators |
| :---: | :---: | :---: |
| 0 | 16 | 21 |
| 1 | 6 | 3 |
| 2 | 3 | 2 |
| 3 | 5 | 2 |
| 4 | 0 | 1 |
| 5 | 0 | 1 |

each of the inmates in the study.

TABLE 19
STATE OF BIRTH

|  | Participators | Non-Participators |
| :--- | :---: | ---: |
| Oklahoma | 20 | 19 |
| Louisiana | 2 | 0 |
| Texas | 2 | 3 |
| Tennessee | 1 | 0 |
| California | 3 | 3 |
| North Carolina | 1 | 0 |
| Virginia | 1 | 0 |
| Arkansas | 0 | 2 |
| Minnesota | 0 | 1 |
| Colorado | 0 | 1 |
| Indiana | 0 | 1 |

Question fourteen asked, "Of what state were you a resident when you were committed?" Ninety-seven percent of the participators and ninety percent of the non-participators lived in the State of Oklahoma at the time of their incarceration. Table 20 indicates the states in which the inmates resided befure being committed to the state prison.

It did not appear necessary to compute a test of significant differences regarding the state of residence or state of birth, as in each case, those born in Oklahoma or from Oklahoma were in a great majority.

TABLE 20
STATE OF RESIDENCE BEFORE CONVICTION

|  | Participators | Non-participators |
| :--- | :---: | :---: |
| Oklahoma | 29 | 27 |
| Texas | 1 | 1 |
| Missouri | 0 | 2 |
|  |  |  |
|  |  |  |
|  |  |  |

Question eighteen asked, "What was your previous occupation?" The responses to this question were, of course, varied. A comparison is indicated in Table 21.

Summary of Responses to the "Adult
Education Data Questionnaire"
The participators and non-participators were not significantly different in any specific elements of the non-personality area. The "Adult Education Data Questionnaire" contained eighteen questions and observations; there were no questions in which a significant difference appeared.

Findings in the non-personality area of this study generally conform to the findings of the related studies indicated in the review of the literature. One outstanding disagreement is in the area of education. Other studies
imply that of the populations measured, the participators are the better educated. In these studies the educational levels are very similar, as indicated by the years of regular school attended. Therefore, it is assumed that the two groups being measured are similar.

TABLE 21
PREVIOUS OCCUPATION

|  | Participators | Non-participators |
| :--- | :--- | :--- |
| Truck driver | 7 | 2 |
| Grocery clerk | 2 | 1 |
| Carpet cleaner | 1 | 0 |
| Heavy equipment operator | 2 | 2 |
| Carpenter | 2 | 1 |
| Student | 2 | 1 |
| Construction | 1 | 2 |
| Mechanic | 2 | 3 |
| Laborer | 3 | 4 |
| Brick mason | 1 | 0 |
| Lawn mower repair | 1 | 0 |
| Military service | 1 | 1 |
| Musician | 1 | 0 |
| Electrician | 1 | 0 |
| Auto salvage | 1 | 0 |
| Hospital technician | 1 | 0 |
| Carpet layer | 1 | 0 |
| Cook | 0 | 1 |
| Dishwasher | 0 | 1 |
| Rodeo cowboy | 0 | 1 |
| Welder | 0 | 1 |
| Butcher | 0 | 1 |
| Bus driver | 0 | 1 |
| Termite exterminator | 0 | 1 |
| Barber | 0 | 1 |
| Baker | 0 | 1 |
| Artist | 0 | 1 |
| None | 0 | 2 |
|  |  |  |

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## Summary

This study was concerned with the determination of differences and similarities between those inmates of the State Prison System of Oklahoma who had participated in the adult education program of the Academic School or the Vocational School and another group of inmates who had never participated in any adult education activity. Differences and similarities considered were those in personality factors as defined by the California Psychological Inventory and in specified non-personality areas as defined by items on the "Adult Education Data Questionnaire" designed by this researcher.

Inmates were asked to complete the "Adult Education Data Questionnaire" and the California Psychological Inventory.

The sample of one hundred and fifty prisoners was obtained from the general population of inmates confined to the Regional Community Treatment Center. Inmates who indicated participation in an adult education program in the past year were considered participators. Inmates who indicated no participation in adult activities were considered non-participators. Inmates who had participated in adult education but not
within the past year were not considered in the study.
Thirty matched pairs of inmates were defined on the basis of the items concerning age, education, recidivism and length of sentence, the only difference being that one inmate had participated in an adult education program at the prison and the other fad not been involved.

Information gathered through the use of the California Psychological Inventory concerned the respondent's personality in eighteen areas grouped by the following continua: aggressive - retiring, ambitious - shy, outgoing - awkward, clever deliberate, outspoken - conservative, energetic - cautious, responsible - immature, serious - defensive, calm - impulsive, tolerant - suspicious, co-operative - aloof, dependable - disorderly, capable - stubborn, mature - dull, intelligent - shallow, perceptive - apathetic, informal - rigid and gentle masculine.

The participators were found to be significantly more aggressive, ambitious, outgoing, energetic, responsible, serious and intelligent than the non-participators. The non-participators were more retiring, shy, awkward, cautious, immature, defensive and shallow than the participators.

It was found that there was a statistically significant difference between the participators in the study and the norm given for male prison inmates on the Do scale (aggressive - retiring), Sy scale (outgoing - awkward), Sp scale (clever deliberate), Wb scale (energetic - cautious), To scale
(tolerant - suspicious), Ac scale (capable - stubborn), Ai scale (mature - dull), and Py scale (perceptive - apathetic). The participator group had a higher mean score in each case. There were no significant differences between the non-participators and the norm for male prison inmates on any scale.

Both the participators and non-participators were similar to the general male prison inmate on these continua: outspoken - conservative, calm - impulsive, co-operative aloof, informal - rigid and gentle - masculine. The mean score in each of these cases was similar to the mean score of the norm group provided by the author of the inventory.

Eight non-personality factors were considered in this part of the survey. These were: age, education, prison record, extent of participation in adult programs, family iife, mobility, military service record and previous occupation. In none of these eight areas were there significant differences.

Eighteen questions and observations were designed to reveal the inmates' condition with respect to the eight nonpersonality factors. Of the eighteen questions, there were no significant differences on any indicated by chi-square.

A comparison of thirty similar inmate participators and thirty non-participators, who were not part of the matched pairs in this study, did not indicate any significant difference in non-personality factors between the two participator groups or the two non-participator groups. The inmates used in the comparison were selected randomly from the inmates
tested.
By checking the prison files, a reliability check was run on all inmates tested. This check of the reliability failed to reveal any differences at an acceptable level of significance.

## Conclusions

The findings of this study appear to reject the first hypothesis of this study with the qualifications noted.

Hypothesis 1: There are no statistically significant differences between participants and nonparticipants on certain personality scales as measured by the California Psychological Inventory by Harrison G. Gough.

1. From the investigation it appears that the participants were significantly different at the five percent level from the non-participants in scores on scale Do, which designates the continuum aggressive - retiring; on scale Cs, which designates the continuum ambitious - shy; on scale Sy, which designates the continuum outgoing - awkward; on scale Wb , which designates the continuum energetic - cautious; on scale Re, which designates the continuum responsible - immature; on scale So, which designates the continuum serious - defensive; and on scale Ie, which designates the continuum intelligent shallow. When compared to the non-participators, the participators tended toward the aggressive end of the Do scale, the ambitious end of the Cs scale, the outgoing end of the Sy scale, the energetic end of the $W b$ scale, the responsible end of the Re scale, the serious end of the So scale, and the
intelligent end of the Ie scale.
2. When compared to the non-participator, a participator in this study may be described as a person having leadership potential and initiative, having personal scope and breadth of interests, being competitive and forward, being productive and active, being conscientious and dependable, being responsible, and being alert and well informed. 41
3. When compared with the participator, the non-participator in this study may be described as a person being slow in thought and action, being restricted in outlook and interests, being suggestible and overly influenced by others reactions and opinions, being constricted in thought and action, being influenced by personal bias, spite and dogmatism, and lacking in self-direction and self-discipline. ${ }^{42}$
4. On this basis, the non-participator may not want to get involved in an adult education program. Although he might begin a class, he may become dissatisfied and terminate when he feels the results are not worth his efforts.

The findings of this study appear to support the second hypothesis of this study.

Hypothesis 2: There are no statistically significant differences between participants and nonparticipants on certain non-personality factors as measured by the "Adult Education Data Questionnaire.
${ }^{41}$ Gough, Manual for California Psychological Inventory, pp. 10-11.

42 Ibid., p. 11.
5. It can be said that this hypothesis is fully supported since differences were not found at any acceptable level of significance. The small differences found, being insignificant, could not create enough difference in the total "Adult Education Data Questionnaire" to indicate that the participator and non-participator groups were not similar.

## Recommendations

The worker in adult education has two basic responsibilities. First, he must acquaint people with the opportunities available through adult education. Second, he must adequately provide for the needs of people once they have become participators. These two responsibilities will each have to be considered in the light of results of the analysis of the California Psychological Inventory and "Adult Education Data Questionnaire".

The first four scales that showed a significant difference between the participator and non-participator were dominance, capacity for status, sociability and sense of well being. These four scales belong to Class $I$, which measures poise, ascendancy, self-assurance and interpersonal adequacy. On all four scales the participators scored significantly higher than the non-participators.

1. Persons with low scores on these four scales do not easily become involved with other persons, do not identify with other people and are not skilled in managing human relations. A logical approach to attracting the non-participator
would be to change the operation of the class. To make the program attractive, the adult educator must provide the means of dealing with the individual on an individual basis. Once the individual takes an active interest in his role in the instructional environment, the attention may then be focused on teamwork, or in this case, the group.

The next two scales that showed a significant difference between the participator and non-participator were responsibility and socialization. These two scales belong to Class II, which measures socialization, maturity, responsibility and intrapersonal structuring of values.
2. The means of the non-participator were below those of the participator. Special interest in a program or activity along with other personality factors may be a reason for the more dependable inmate to enter an activity. The inmate may also be doing what he feels is the lesser of two evils when he participates on this basis. Additional research with other participator groups in the personality area of socialization would be of interest and value to adult educators.

The last scale that showed a significant difference between the participators and non-participators was intellectual efficiency.
3. The means of the non-participator were below those of the participator. To attract the cautious or shallow person requires the establishment of a program similar to the one suggested for the Class I scales. In most cases the cautious
person will not want to conform to the patterns that are being set for him. The adult educator may have to sell his program to this person so that the inmate does not feel he is being indoctrinated, as the inmate tends to be stereotyped in thinking.
4. These data further suggest that this investigation can only be viewed as an initial exploratory attempt to measure a small but important segment of the population not participating in adult education classes. If similar methods could be used on other populations of participators and nonparticipators; eventually a body of knowledge could be secured which would enable the adult educator to know and serve better an ever-increasing number of people.

## BIBLIOGRAPHY

## Books

Anastasi, Anne. Psychological Testing. 3rd ed. London: The MacMillan Company, Collier-MacMillan Limited, 1968.

Atwood, Mason H. "Some Other Institutions." Handbook of Adult Education. Edited by Robert M. Smith, George Aker and J.R. Kidd. London: The MacMillan Company, 1970.

Baughman, E. Earl, and Welsh, George Schlager. Personality: A Behavioral Science. Englewood Cliffs: Prentice-Hall, Inc., 1962.

Brunner, Edmund deS.; Wilder, David S.; Kirchner, Corrine; and Newberry, John S. An Overview of Adult Education Research. Chicago: Adult Education Association of the U.S.A., 1959.

Cartwright, Morse A. Ten Years of Adult Education. New York: The MacMillan Company, 1935. Cited Brunner, Edmund deS.; Wilder, David S.; Kirchner, Corrine; and Newberry, John S. An Overview of Adult Education Research. Chicago: Adult Education Association of the U.S.A., 1959.

Cattell, Raymond B.; Saunders, David; and Stice, G. Handbook for Sixteen Personality Factor Questionnaire. Champaign, Illinois: Institute for Personality and Ability Testing, 1962.

Ely, Mary, ed. Handbook of Adult Education in the United States. New York: Institute of Adult Education, 1948.

Essert, Paul. Creative Leadership of Adult Education. New York: Prentice-Hall, 1951.

Fisher, Ronald A. Statistical Methods for Research Workers. Edinburgh: Oliver and Boyd Ltd., 1958.

Gough, Harrison G. Manual for California Psychological Inventory. Palo Alto: Consulting Psychologists Press Inc., 1969.

Johnstone, John, and Rivera, Ramon J. Volunteers for Learning: A Study of Educational pursuits of American Adults. Chicago: Aldine, 1965.

Kleinmuntz, Benjamin. Personality Measurement: An Introduction. Homeward, Illinois: Dorsey Press, 1967.

Krech, David; Crutchfield, Richard S.; and Ballachey, Egerton L. Individual in Society. New York: McGraw-Hill Book Company, Inc., 1962.

Lcs Angeles City Board of Education. The Informational Report on Adult Education to the City of Los Angeles City Board of Education. Los Angeles: Board of Education, 1959.

MacCormick, Austin. The Education of Adult Prisoners. New York: National Society of Penal Institutions, 1931.

McClelland, David C. Personality. New York: Wiliiam Sloane Associates, 1951.

Neugarten, Bernice L. "Adult Personality: Toward a Psychology of the Life Cycle." Middle Age and Aging. Edited by Bernice L. Neugarten. Chicago: University of Chicago Press, 1968.

Plant, James S. Personality and Cultural Pattern. New York: The Commonwealth Fund, 1937.

Research in Correctional Rehabilitation. Washington D.C.: Joint Commission on Correctional Manpower and Training, 1967.

Runquiest, Edward A. "Personality Tests and Prediction." Handbook of Applied Psychology. Edited by Douglas Fryer and Edwin R. Henry. New York: Rinehart and Company, 1950.

Smith, Robert M; Aker, George; and Kidd, J.R., eds. Handbook of Adult tiucation. London: The MacMillan Company, 1970.

Sutherland, Edwin H., and Cressey, Donald R. Principles of Criminology. Chicago: J.B. Lippincott Company 5th edition, 1955.

Traxler, Arthur. Techniques of Guidance. New York: Harper and Bros., 1957.

## Periodicals

Beal, George M. "Addition Hypothesis in Participation Research." Rural Sociology, XXI, No. l-4 (1956), 245-250.

Fey, Philip A., and Gleason, Robert W. "A Community Goes Behind Bars." Adult Leadership, 22, No. 6 (December, 1973), 196-198.

Hallenbeck, Wilber C. "Participation in Public Affairs." Adult Education, II, NO. 1 (October, 1951), 65-67.

Holden, John. "A Survey of Participation in Adult Education Classes." Adult Leadership, II (April, 1958), l01-103.

Kaplan, Abraham A. "Socio-Economic Circumstances and Adult Participation in Certain Cultural and Educational Activities." Contributions to Education, No. 889 (1943), 67-143.

Knowles, Malcolm. "Adult Education in the United States." Adult Education, V, No. 2 (Winter, 1955), 120-122.

Plummer, Robert H. "An Experiment in Counseling." Adult Education, IX, No. 1 (Autumn, 1958), 33-36.

Smith, George Baxter. "Purposes and Conditions Affecting the Nature and Extent of Participation of Adults in Courses in the Home Study Department of Columbia University, 1925-1932." Contributions to Education, No. 663 (1935), 15-99.

Verner, Coolie, and Newberry, John. "The Nature of Adult Participation." Adult Education, VIII, No. 4 (Summer, 1950), 67-72.

Wilson, Thiede, et al. "Research and Investigations in Adult Education." Adult Education, (19631966).

## Unpublished Materials

Cohen, Jerome B. "Differential Correctional Treatment Programs and Modifications of Self-Image." Unpublished Ph.D. dissertation, Michigan State University, 1964.

Deane, Stephen K . "A Psychological Description of Adults who have Participated in Selected Activities." Unpublished Ph.D. dissertation, University of Maryland, 1949.

Hershey, Harvey. "Adult Education and Personality of Inmates of the State Prison of Southern Michigan." Unpublished Ph.D. dissertation, Michigan State University, 1966.

MacLean, Malcolm S. "Learning to Live with Atomic Energy." Paper presented at the Institute on Atomic Energy, University of California, Los Angeles, May, 1947.

Scharles, Henry Godfred, Jr. "The Relationship of Selected Personality Needs to Participation, Drop-out, and Achievement Among Adult Learners." Unpuioiishea Eā.D. dissertation, Florida State University, 1967.

Sitts, Marvin. "A Study of the Personality Differences Between a Group of Women who had Participated in Sewing Classes in an Adult Education Frogram and a Group of Their Friends and Neighbors who had not Participated in an Adult Education Program." Unpublished Ph.D. dissertation, Michigan State University, 1960.

## APPENDIX A

THE CALIFORNIA PSYCHOLOGICAL INVENTORY

## REPRODUCED BY SPECIAI PERMISSION <br> from <br> CALIFORNIA PSYCHOLOGICAL INVENTORY

by
HARRISON G. GOUGH, Ph.D.
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1. I enjoy social gatherings just to be with people.
2. The only interesting part of the newspaper is the "funnies."
3. I looked up to my father as an ideal man.
4. A person needs to "show off" a little now and then.
5. Our thinking would be a lot better off if we would just forget about words like "probably," "approximately," and "perhaps."
6. I have a very strong desire to be a success in the world.
7. When in a group of people I usually do what the others want rather than make suggestions.
8. I liked "Alice in Wonderland" by Lewis Carroll.
9. I usually go to the movies more than once a week.
10. Some people exaggerate their troubles in order to get sympathy.
11. People can pretty easily change me even though I thought that my mind was already made up on a subject.
12. I often feel that I made a wrong choice in my occupation.
13. I am very slow in making up my mind.
14. I always follow the rule: business before pleasure.
15. Several times a week I feel as if something dreadful is about to happen.
16. There's no use in doing things for people; you only find that you get it in the neck in the long run.
17. I would like to be a journalist.
18. A person who doesn't vote is not a good citizen.
19. I think I would like the work of a building contractor.
20. I have had very peculiar and strange experiences.
21. My daily life is full of things that keep me interested.
22. When a person "pads" his income tax report so as to get out of some of his taxes, it is just as bad as stealing money from the government.
23. In most ways the poor man is better off than the rich man.
24. I always like to keep my things neat and tidy and in good order.
25. Clever, sarcastic people make me feel very uncomfortable.
26. It's a good thing to know people in the right places so you can get traffic tags, and such things, taken care of.
27. It makes me feel like a failure when I hear of the success of someone I know well.
28. I think I would like the work of a dress designer.
29. I am often said to be hotheaded.
30. I gossip a little at times.
31. I doubt whether I would make a good leader.
32. I tend to be on my guard with people who are somewhat more friendly than I had expected.
33. Usually I would prefer to work with women.
34. There are a few people who just cannot be trusted.
35. I become quite irritated when I see someone spit on the sidewalk.
36. When I was going to school I played hooky quite often.
37. I have very few fears compared to my friends.
38. It is hard for me to start a conversation with strangers.
39. I must admit that I enjoy playing practical jokes on people.
40. I get very nervous if I think that someone is watching me.
41. For most questions there is just one right answer, once a person is able to get all the facts.
42. I sometimes pretend to know more than I really do.
43. It's no use worrying my head about public affairs; I can't do anything about them anyhow.
44. Sometimes I feel like smashing things.
45. As a child I used to be able to go to my parents with my problems.
46. I think I would like the work of a school teacher.
47. Women should not be allowed to drink in cocktail bars.
48. Most people would tell a lie if they could gain by it.
49. When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing.
50. I seem to be about as capable and smart as most others around me.
51. Every family owes it to the city to keep their sidewalks cleared in the winter and their lawn mowed in the summer.
52. I usually take an active part in the entertainment at parties.
53. I think I would enjoy having duthority over other people.
54. I find it hard to keep my mind on a task or job.
55. Some of my family have quick tempers.
56. I hate to be interrupted when I am working on something.
57. I have sometimes stayed away from another person because I feared doing or saying something that I might regret afterwards.
58. I get very tense and anxious when I think other people are disapproving of me.
59. The trouble with many people is that they don't take things seriously enough.
60. I have often met people who were supposed to be experts who were no better than I.
61. I liked school.
62. I think Lincoln was greater than W/ashing. ton.
63. It is always a good thing to be frank.
64. A windstorm terrifies me.
65. I think I would like the work of a clerk in a large department store.
66. Sumetimes I feel like swearing.
67. I feel sure that there is only one true religion.
68. I am embarrassed by dirty stories.
69. I would disapprove of anyone's drinking to the point of intoxication at a party.
70. Sometimes I cross the street just to avoid meeting someone.
71. I get excited very easily.
72. I used to keep a diary.
73. Maybe some minority groups do get rough treatment, but it's no business of mine.
74. It is very hard for me to tell anyone about myself.
75. We ought to worry about our own country and let the rest of the world take care of itself.
76. I often feel as if the world was just passing me by.
77. W'hen I get bored I like to stir up some excitement.
78. I like to boast about my achievements every now and then.
79. I am afraid of deep water.
80. There have been times when I have been very angry.
81. I must admit I often try to get my own way regardless of what others may want.
82. I think I would like the work of a garage mechanic.
83. I usually feel nervous and ill at ease at a formal dance or party.
84. I have at one time or another in my life tried my hand at writing poetry.
85. I don't like to undertake any project unless I have a pretty good idea as to how it will turn out.
86. Most of the arguments or quarrels I get into are over maters of principle.
s. I like adventure stories better than romantic stories.
87. I do not like to see people carclessly dressed.
88. Once a week or oftener ! feel suddenly hot all over, without apparent cause.
89. As long as a person votes every four years, he has done his duty as a citizen.
90. Sometimes I think of things too bad to talk about.
91. People often expect too much of me.
92. I would do almost anything on a dare.

9-4. W'ith things going as they are, it's pretty hard to keep up hope of amounting to something.
95. The idea of doing research appeals to me.
96. I take a rather serious attitude toward ethical and moral issues.
97. I would like the joh of a foreign correspondent for a newspaper.
98. People today have forgotten how to feel properly ashaned of themselves.

99 . I cannot keep myind on one thing.
100. I prefer a shower to a bathrub.
101. I must admit that I often do as little work as I can get by with.
102. I like to be the center of attention.
103. I like to listen to symphony orchestra concerts on the radio.
104. I would like to see a bullfight in Spain.
105. I am fascinated by fire.
106. The average person is not able to appreciate art and music very well.
107. I can be friendly with people who do things which I consider wrong.
108. I have no dread of going into a room by myself where other people have already gathered and are talking.
109. I get pretty discouraged sometimes.
110. The thought of being in an automobile accident is very frightening to me.
111. When in a group of people I have trouble thinking of the right things to talk about.
112. I set a high standard for myself and I feel others should do the same.
113. School teachers complain a lot about their pay, but it seems to me that they get as much as they deserve.
114. At times I feel like picking a fist fight with someone.
115. Sometimes I have the same dream over and over.
116. It is annoying to listen to a lecturer who cannot seem to make up his mind as to what he really believes.
117. I don' b blame anyone for trying to grab all he can get in this world.
118. I believe we are made better by the trials and hardships of life.
119. Planning one's activities in advance is very likely to take most of the fun out of life.
120. I do not always tell the truth.
121. I was a slow learner in school.
122. I like puetry.
123. I think 1 am stricter about right and wrong than most people.
124. I am likely not to speak to people until they speak to me.
125. There is something wrong with a person who can't take orders without getting angry or resentful.
126. I do not dread seeing a doctor about a sickness or injury.
127. I always try to consider the other fellow's feelings before $I$ do something.
128. It takes a lot of argument to convince most people of the truth.
129. I think I would like to drive a racing car.
130. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world."
131. One of my aims in life is to accomplish something that would make my mother proud of me.
132. I fall in and out of love rather easily.
133. I feel as good now as I ever have.
13.4. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of thing.
135. I wake up fresh and rested mose mornings.
136. Most people make friends because friends are likely to be useful to them.
137. I winh I were not bothered by thoughts about sex.
138. I seldom or never have dizzy spells.
139. It is all right to get around the law if you don't actually break it.
140. I enjoy hearing lectures on world affairs.
141. Parents are much too easy on their children nowadays.
112. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
143. I like to be with a crowd who play jokes on one another.
144. I am somewhat afraid of the dark.
145. I have a tendency to give up easily when I meet difficult problems.
146. I would like to wear expensive clothes.
147. I certainly feel useless at times.
148. I believe women should have as much sexual freedom as men.
149. I consider a matter from every standpoint before I make a decision.
150. Criticism or scolding makes me very uncomfortable.
151. I have strange and peculiar thoughts.
152. I read at least ten beoks a year.
153. If I am not feeling well I am somewhat cross and grouchy.
154. I like tall women.
155. A person should adapt his ideas and his behavior to the group that happens to be with him at the time.
156. I hardly ever get excited or thrilled.
157. I have the wanderlust and am never happy unless I am roaming or traveling about.
158. I frequently notice my hand shakes when I try to do something.
159. I feel nervous if I have to meet a lot of people.
160. I would like to hear a great singer in an opera.
161. I am sometimes cross and grouchy without any good reason.
162. Every citizen should take the time to find out about national affairs, even if it means giving up some personal pleasures.
163. I like parties and socials.
164. My parents have often disapproved of my friends.
165. I do not mind taking orders and being told what to do.
166. In school I always looked far ahead in planning what courses to take.
167. I shouid like to belong to several clubs or lodges.
168. My home life was always happy.
169. Teachers often expect too much work from the students.
170. I often act on the spur of the moment without stopping to think.
171. I think $I$ could do better than most of the present politicians if $I$ were in office.
172. I do not have a great fear of snakes.
173. My way of doing things is apt to be misunderstood by others.
174. I never make judgments about people until I am sure of the facts.
175. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
176. I commonly wonder what hidden reason another person may have for doing something nice for me.
177. I am certainly lacking in self-confidence.
178. Most people are secretly pleased when someone else gets into trouble.
179. When I work on a conmittee I like to take charge of things.
180. My parents have generally let me make my own decisions.
181. I always tried to make the best school grades that I could.
182. I would rather go without something than ask for a favor.
183. Sometimes I feel as if I must injure either myself or someone else.
184. I have had more than my share of things to worry about.
185. I often do whatever makes me feel cheerful here and now, even at the cost of some distant goal.

18G. I usually don't like to talk much unless I am with people I know very well.
187. I am inclined to take things hard.
188. I am quite often not in on the gossip and talk of the group I belong to.
189. In school my marks in deportment were quite regularly bad.
190. Only a fool would ever vote to increase his own taxes.
191. I can remember "playing sick" to get out of something.
192. When I meet a stranger I often think that he is better than I am.
193. I would be ashamed not to use my privilege of voting.
194. I like to keep people guessing what I'm going to do next.
195. The most important things to me are my duties to my job and to my fellowman.
196. I think I would like to fight in a boxing match sometime.
197. Once in a while I laugh at a dirty joke.
198. Before I do something I try to consider how my friends will react to it.
199. I would like to be a soldier.
200. In a group of people I would not be embarrassed to be called upon to start a discussion or give an opinion about something I know well.
201. I have no patience with people who believe there is only one true religion.
202. If given the chance I would make a good leader of people.
203. When things go wrong I sometimes blame the other fellow.
204. I like to plan a home study schedule and then follow it.
205. I enjoy a race or game better when I bet on it.
206. I have often found people jealous of my good ideas, just because they had not thought of them first.
207. Sometimes at elections I vote for men about whom I know very little.
208. I like to go to parties and other affairs where there is lots of loud fun.
209. Most people are honest chiefly through fear of being caught.
210. I very much like hunting.
211. I have frequently found myself, when alone, pondering such abstract problems as freewill, evil, etc.
212. I have never been in trouble with the law.
213. It makes me angry when I hear of someone who has been wrongly prevented from voting.
214. In school I was sometimes sent to the principal for cutting up.
215. I would like to write a technical book.
216. At times I have worn myself out by undertaking too much.
217. I think I would like the work of a librarian.
218. I love to go to dances.
219. Most people inwardly distike putting themselves out to help other people.
220. I feel uneasy indoors.
221. People have a real duty to take care of their aged parents, even if it mtans making some pretty big sacrifices.
222. I would like to belong to a discussion and study club.
223. I keep out of trouble at all costs.
224. I usually expect to succeed in things I do.
225. People pretend to care more about one another than tiey really do.
226. Most people worry too much about sex.

22-. It is hard for me to find anything to talk about when I meet a new person.
228. I like to read about history.
229. I much prefer symmetry to asymmetry.
230. I would rather be a steady and dependable worker than a brilliant but unstable one.
231. I am apt to show off in some way if I get the chance.
232. Sometimes I feel that I am about to go to pieces.
233. A person does not need to worry about other people if only he looks afte: himself.
23.'. We ought to pay our elected officials better than we do.
235. I can honestly say that I do not really mind paying my taxes because I feel that's one of the things I can do for what 1 get from the community.
236. I am so touchy on some subjects that I can't talk about them.
237. The future is too uncertain for a person to make serious plans.
238. Sometimes I just can't seem to get going.
239. I like to talk before groups of people.
240. I would like to be a nurse.
241. The man who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it.
242. I am a good mixer.
243. I am often bothered by useless thoughts which keep running through my mind.
244. If I were a reporter I would like very much to report news of the theater.
245. Most of the time I feel happy.
246. I like to plan out my activities in advance.
247. When a man is with a woman he is usually thinking about things related to her sex.
248. I must admit that I have a bad temper, once I get angry.
249. I like mechanics magazines.
250. I must admit I find it very hard to work under strict rules and regulations.
251. I like large, noisy parties.
252. I sometimes feel that I am a burden to others.
253. W'hen prices are high you can't blame a person for getting all he can while the getting is good.
254. I have never deliberately told a lie.
255. Only a fool would try to change our American way of life.
256. I want to be an important person in the community.
257. I often feel as though I have done something wrong or wicked.
258. In school 1 found it very hard to talk before the class.

259 . I usually fed that life is worthwhile.
260. I always try to do at least a little better than what is expected of me.
261. We ought to let Liurope get out of its own mess; it made its bed, let it lie in it.
262. There have been a few times when I have been very mean to another person.
263. Lawbreakers are almost always caught and punished.
264. I would be very unhappy if I was not successful at something I had seriously started to do.
265. I dread the thought of an earthquake.
266. I think mont people would lie to get ahead.
$20^{-}$. I am a better talker than a listener.
268. At times I have been very anxious to get away from my family.
269. I like science.
270. I often lose my temper.
271. My parents were always very strict and stern with me.
272. I must admit I feel sort of scared when I move to a strange place.
273. I am bothered by people outside, on streetcars, in stores, etc., watching me.
274. I'm pretty sure I know how we can settle the international problems we face today.
275. Sometimes I rather enjoy going against the rule: and doing things I'm not supposed to.
276. I have very few quarrels with members of my family.
277. I have no fear of water.
278. If I get too much change in a store, I always give it back.
279. I often get disgusted with myself.
280. I enjoy many different kinds of play and recreation.
281. Society owes a lot more to the businessman and the manufacturer than it does to the artist and the professor.
282. A large number of peopie are guilty of bad sexual conduct.
283. I like to read about science.
284. It is hard for me to act natural when I am with new people.
285. I refuse to play some games because I am not good at them.
286. I have never done anything dangerous for the thrill of it.
287. I think I would like to belong to a singing club.
288. As a youngster I was suspended from school one or more times for cutting up.
289. There have been times when I have worried a lot about something that was not really important.
290. I have never been in trouble because of my sex behavior.
291. I think I would like to belong to a motorcycle club.
292. I used to like it very much when one of my papers was read to the class in school.
293. Every now and then I get into a bad mood, and no one can do anything to please me.
294. I feel that I have often been punished without cause.
295. I would be willing to give money myself in order to right a wrong, even though I was not mixed up in it in the first place.
296. I would like to be an actor on the stage or in the movies.
297. At times I have a strong urge to do something harmful or shocking.
298. I often get feelings like crawling, burning, tingling, or "going to sleep" in different parts of my body.
299. I don't seem to care what happens to me.
300. Police cars should be especially marked so that you can always see them coming.
301. I am afraid to be alone in the dark.
302. I have often gone against my parents' wishes.
303. We should cut down on our use of oil, if necessary, so that there will be plenty left for the people fifty or a hundred years from now.
304. When the community makes a decision, it is up to a person to help carry it out even if he had been against it.
305. I often wish people would be more definite about things.
306. I have nightmares every few nights.
307. If I am driving a car, I try to keep others from passing me.
308. I have a great deal of stomach trouble.
30). I have been af raid of things or people that 1 knew could not hurt me.
310. I would rather have people dislike me than look down on me.
311. I cannot do anything well.
312. Any man who is able and willing to work hard has a good chance of succeeding.
313. I hardly ever feel pain in the back of the neck.

SI-i. I must admit I try t' see what others think before I take a stand.
315. People should not have to pay taxes for the chools if they do not have children.
316. My parents wanted me to "make good" in the world.
317. I often think about how I look and what impression I am making upon others.
318. When I was a child I didn't care to be a member of a crowd or gang.
319. In a group, 1 usually take the responsibility for getting people introduced.
320. I would be willing to describe myself as a pretty "strong" personality.

321 . I almost never go to slecp.
322. I do not like to loan my things to people who are careless in the way they take care of them.
323. I have never done any heavy drinking.
324. Voting is nothing but a nuisance.
325. When I am feeling very happy and active, someone who is blue or low will spoil it all.
326. It is annoying to listen to a lecturer who cannot seem to make up his mind as to what he really believes.
327. I find it easy to "drop" or "break with" a friend.
328. I find that a well-ordered mode of life with regular hours is congenial to my temperament.
329. It is hard for me to sympathize with someone who is always doubting and unsure about things.
330. Everything tastes the same.
331. I often start things I never finish.
332. I could be perfectly happy without a single friend.
333. Education is more important than most people think.
334. I get nervous when I have to ask someone for a job.
335. There are times when I act like a coward.
336. Sometimes I used to feel that I would like to leave home.
337. Much of the time my head seems to hurt all over.
538. I never worry about my looks.
339. I have been in trouble one or more times because of my sex behavior.
340. Our thinking would be a lot better off if we would just forget about words like "probably," "approximately," and "perhaps."
3.i1. My people treat me more like a child than a grown-up.
342. Some peop!e exaggerate their troubles in order to get sympathy.

343 . In schoo! most teachers treated me fairly and honestly.
344. I am made nervous by certain animals.
345. I go out of my way to meet trouble rather than try to escape it.
346. I must admit I am a pretty fair talker.
347. I never make judgments about people until I ani sure of the facts.
348. I usually try to do what is expected of me, and to avoid criticism.
349. If a person is clever enough to cheat someone out of a large sum of money, he ought to be allowed to keep it.
350. A person should not be expected to do anything for his community unless he is paid for it.
351. Some of my family have habits that bother and annoy me very much.
352. I must admit I have no great desire to learn new things.
353. No one seems to understand me.
354. A strong person will be able to make up his mind even on the most difficult questions.
355. I have strong political opinions.
356. I seldom worry about my health.
357. For most questions there is just one right answer, once a person is able to get all the facts.
358. I dream frequently about things that are best kept to myself.
359. I think I am usually a leader in my group.
360. It is impossible for an honest man to get ahead in the world.
361. I like to have a place for everything and everything in its place.
362. I have never sen a vision.
363. I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer.
364. It bothers me when something unexpected interrupts my daily routine.
365. The future seems hopeless to me.
366. I never seem to get hungry.
367. My home life tas always very pleasant.
368. I have had no difficulty starting or holding my urine.
369. I seem to do things that I regret more often than other people do.
370. Disobedience to any government is never justified.
371. I would rather be a steady and dependable worker than a brilliant but unstable one.
372. I have reason for feeling jealous of one or more members of my family.
373. My table manners are not quite as good at home as when I am out in company.
374. I would never go out of my way to help another person if it meant giving up some personal pleasure.
375. There are certain people whom I dislike so much that I am inwardly pleased when they are catching it for something they have done.
376. I enjoy planning things, and deciding what each person should do.
377. Most of the arguments or quarrels I get into are over matters of principle.
378. I doubt if anyone is really happy.
379. I would rather not have very much responsibility for other people.
380. I am known as a hard and steady worker.
381. My mouth feels dry almost all the time.
382. Success is a matter of will power.
383. I usually have to stop and think before I act even in trifling matters.
384. Most people would be better off if they never went to school at all.
385. It is pretty easy for people to win arguments with me.
386. I know who is responsible for most of my troubles.
387. I don't like things to be uncertain and unpredictable.
388. When I am cornered I teli that portion of the truth which is not likely to hurt me.
389. I get pretty discouraged with the law when a smart lawyer gets a criminal free.
390. I have not lived the right kind of life.
391. I am quite a fast reader.
392. I daydream very little.
393. I have used alcohol excessively.
394. Even when I have gotten into trouble I was usually trying to do the right thing.
395. It is very important to me to have enough friends and social life.
396. I sometimes wanted to run away from home.
307. Once I have my mind made up I seldom change it.
398. Life usually hands me a pretty raw deal.
399. At times I have been so entertained by the cleverness of a crook that I have hoped he would get by with it.
400. I think I am stricter about right and wrong than most people.
401. Most young people get too much education.
402. I have had attacks in which I could not control my movements or speech, but in which I knew what was going on around me.
403. I have a natural talent for influencing people.
40.4. I am in favor of a very strict enforcement of all laws, no matter what the consequences.
405. People often talk about me behind my back.
406. I have one or more bad habits which are so strong that it is no use fighting against them.
407. I have had no difficulty in starting or holding my bowel movement.
408. I always see to it that my work is carefuily. planned and organized.
409. I would never play cards (poker) with a stranger.
410. I regard the right to speak my mind as very important.
411. I am bothered by acid stomach severai times a week.
412. I like to give orders and get things moving.
413. I get all the sympathy I should.
414. I do not read every editorial in the newspaper every day.
415. I have felt embarrassed over the type of work that one or more members of my family have done.
416. I don't think I'm quite as happy as others seem to be.
417. Any job is all right with me, so long as it pays well.
418. I am embarrassed with people I do not know well.
419. It often seems that my life has no meaning.
420. I used to steal sometimes when I was a youngster.
421. I don't really care whether people like me or dislike me.
422. I feel like giving up quickly when things go wrong.
423. If people had not had it in for me I would have been much more successful.
424. The one to whom I was most attached and whom 1 most admired as a child was a woman (mother, sister, aunt, or other woman).
425. I have often felt guilty because I have pretended to feel more sorry about something than I really was.
426. There have been times when 1 have been very angry.
427. There are a few people who just cannot be trusted.
428. My home as a child was less peaceful and quiet than those of most other people.
429. Fien the idea of giving a talk in public makes me afraid.
4.30. The things some of my family have done have frightened me.
131. As a youngster in school I used to give the teachers lots of trouble.
4.32. I am not afraid of picking up a disease or germs from doorknobs.
433. It is more important that a father be kind than that he be successful.
134. My skin seems to be unusually sensitive to touch.
435. If the pay was right I would like to travel with a circus or carnival.
436. I never cared much for school.
437. I am troubled by attacks of nausea and romiting.
438. I would have been more successful if people had given me a fair chance.
439. The members of my family were always very close to each other.
440. There are times when I have been discouraged.
411. I have often been frightened in the middle of the night.
4年. The trouble with many people is that they don't take thing seriously enough.
443. I'm not the type to be a political leader.
444. My parents never really understood me.
445. I would fight if someone tried to take my rights away.
446. I must admit that people sometimes disappoint me.
447. If I saw some children hurting another child, I am sure I would try to make them stop.
448. People seem naturally to turn to me when decisions have to be made.
449. Almost every day something happens to frighten me.
450. I get sort of annoyed with writers who go out of their way to use strange and unusual words.
451. I set a high standard for myself and I feel others should do the same.
452. I dislike to have to talk in front of a group of people.
453. I work under a great deal of tension.
454. My family has objected to the kind of work I do, or plan to do.
455. There seems to be a lump in my throat much of the time.
456. I have more trouble concentrating than others seem to have.
457. A person is better off if he doesn't trust anyone.
458. People who seem unsure and uncertain about things make me feel uncomfortable.
459. My sleep is fitful and disturbed.
460. A strong person doesn't show his emotions and feelings.
461. I: seems that people used to have more fun than they do now.
f62. Even though I am sure I am in the right, I usually give in because it is foolish to cause trouble.
463. It is hard for me just to sit still and relax.
464. From time to time I like to get completely away from work and anything that reminds me of it.
465. I must admit that I am a high-strung person.
466. I am a very ticklish person.
467. At times I think I am no good at all.
468. I like to eat my meals quickly and not spend a lot of time at the table visiting and talking.
469. I must admit that it makes me angry when other people interfere with my daily activity.
470. If a person doesn't get a few lucky breaks in life it just means that he hasn't been keeping his eyes open.
471. I sometimes feel that I do not deserve as good a life as I have.
472. I feel that I would be a much better person if I could gain more understanding of myself.
473. I cant really enjoy a rest or vacation unless I have earned ir by some hard work.
474. I sometimes tease animals.
475. I have a good appetite.
476. I had my own way as a child.
477. I get tired more easily than other people seem to.
478. I would be uncomfortable in anything other than fairly conventional dress.
479. I sweat very easily even on cool days.
480. I must admit it would bother me to put a worm on a fish hook.

## APPENDIX B

ADULT EDUCATION DATA QUESTIONNAIRE

## ADULT EDUCATION DATA QUESTIONNAIRE

Name
Institution
last first
(1) AGE
(2) WHAT WAS THE LAST GRADE OR YEAR YOU FINISHED IN REGULAR PUBLIC SCHOOI
(3) WHAT IS THE LENGTH OF THE SENTENCE YOU ARE NOW SERVING
(4) HOW MUCH TIME HAVE YOU SERVED ON THIS SENTENCE $\qquad$
(5) WHAT TYPE OF CRIME DID YOU COMMIT $\qquad$
(6) ARE YOU A FIRST TIMER
(7) IF NOT A FIRST TIMER, HOW MANY TIMES HAVE YOU BEEN COMMITTED
(8) HAVE YOU SERVED IN THE ARMED SERVICES
(9) IF SO, WHICH BRANCH (army, navy, air force, etc.) $\qquad$
(10) WHAT IS YOUR MARITAL STATUS AT THE PRESENT TIME $\qquad$
(II) DO YOU HAVE ANY CHILDREN
(12) IF SO, HOW MANY
(13) WHAT STATE WERE YOU BORN IN
(14) OF WHAT STATE WERE YOU A RESIDENT WHEN YOU WERE COMMITTED THIS TIME
(15) HAVE YOU PARTICIPATED IN ANY ADULT EDUCATION PROGRAMS
(16) IF YES, WHAT TYPE OF ADULT EDUCATION PROGRAM HAVE YOU PARTICIPATED IN
(17) IF YOU DID NOT FINISH PTGH SCHOOL, HAVE YOU PASSED THE G.E.D. $\qquad$
(18) WHAT WAS YOUR PREVIOUS OCCUPATION

## APPENDIX C

SCALE INTERCORRELATION MATRIX FOR MALES ON THE CAIIFORNIA PSYCHOLOGICAL INVENTORY

Scale Intercorrelation Matrix for Males on the California Psychological Inventory


## APPFNDIX D

CORRELATIONS OF CAIIFORNIA PSYCHOLOGICAL
INVENTORY WITH OTHER PSYCHOLOGICAL TESTS
(Test or Variable) Do $\underline{C s}$ Sy $\underline{S p}$ Sa Wb Re

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY ( $\mathrm{N}=295$ Males)

| L (lie) scale | . 10 | . 14 | . 08 | -. 10 | -. 09 | . 29 | . 28 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $F$ (infrequent items) | -. 18 | -. 18 | -. 35 | -. 12 | -. 19 | -. 46 | -. 29 |
| K (ego functioning) | . 20 | . 36 | . 39 | . 35 | . 06 | . 60 | . 35 |
| Hs (hypochondriasis) | -. 16 | -. 04 | -. 13 | -. 06 | -. 21 | -. 01 | -. 02 |
| D (depression) | -. 36 | -. 12 | -. 39 | -. 26 | -. 37 | .15 | -. 03 |
| Hy (hysteria) | -. 08 | . 19 | . 03 | . 07 | -. 08 | . 06 | 10 |
| Pd (psychopathic deviate) | . 05 | . 12 | . 16 | . 14 | . 13 | -. 07 | . 15 |
| Mf (feminine interests) | -. 04 | . 25 | -. 11 | . 06 | . 07 | -. 20 | . 07 |
| Pa (paranoia) | -. 04 | . 08 | -. 07 | . 00 | -. 04 | . 05 | . 06 |
| Pt (psychasthenia) | -. 30 | . 02 | -. 20 | -. 14 | -. 23 | -. 21 | . 10 |
| Sc (schizophrenia) | -. 14 | . 03 | -. 10 | . 04 | -. 11 | -. 18 | . 13 |
| Ma (mania) | . 21 | . 10 | . 22 | . 17 | . 33 | -. 27 | -. 31 |
| Si (social introversion) | -. 56 | -. 44 | -. 78 | -. 48 | -. 56 | -. 31 | 15 |
| A (Welsh, anxiety) | -. 39 | -. 29 | -. 45 | -. 39 | -. 23 | -. 59 | -. 37 |
| R (Welsh, repression) | -. 30 | -. 06 | -. 32 | -. 04 | -. 34 | . 26 | . 19 |
| EC (Block, under-control) | . 03 | -. 04 | . 15 | . 16 | . 41 | -. 46 | -. 32 |
| ES (Barron, ego-strength) | . 20 | . 26 | . 30 | . 39 | . 24 | . 36 | 15 |
| TMA (Taylor, manifest anxiety) | -. 38 | -. 26 | -. 47 | -. 37 | -. 26 | -. 54 | -. 29 |
| SD (Edwards, social desirability) | . 37 | . 34 | . 48 | . 40 | . 25 | . 51 | . 31 |
| AI (Welsh, anxiety index) | -. 22 | -. 06 | -. 21 | -. 23 | -. 16 | -. 21 | . 04 |
| IR (Welsh, internalization ratio) | -. 42 | -. 23 | -. 51 | -. 44 | -. 53 | . 02 | 11 |
| F-K (Gough, dissimulation index) | -. 23 | -. 33 | . 4 | . 3 | -. 1 | . 6 | -. 39 |

GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY ( $\mathrm{N}=69$ Males)

1. General Activity

| .33 | .05 | .31 | .08 | .15 | .13 | .13 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -.30 | -.18 | -.24 | .04 | .19 | -.04 | .24 |
| .56 | .28 | .53 | .50 | .41 | .04 | .25 |
| .41 | .18 | .54 | .41 | .21 | .08 | .08 |
| .19 | .34 | .24 | .35 | .18 | .37 | .30 |
| .06 | .33 | .04 | .20 | -.02 | .43 | .35 |
| .02 | .14 | .04 | .12 | .18 | .37 | .41 |
| .07 | -.01 | -.02 | .03 | -.05 | -.02 | -.07 |
| .15 | .39 | .14 | .21 | .17 | .52 | .48 |
| .04 | .24 | .16 | .28 | .25 | .20 | -.08 |

(Test) So Sc To $\underline{\mathrm{Gi}} \mathrm{Cm} \quad \mathrm{Ac}$ Ai Ie Py $\underline{\mathrm{Fx}} \mathrm{Fe}$ MINNESOTA MULTIPHASIC PERSONALITY INVENTORY ( $N=295$ Males)

| L | .18 | .47 | .22 | .54 | -.14 | .24 | .03 | .10 | .16 | -.05 | .03 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| F | -.31 | -.28 | -.30 | -.34 | .- .35 | -.42 | -.02 | -.33 | -.01 | .20 | .07 |
| K | .30 | .52 | .63 | .61 | -.02 | .48 | .35 | .50 | .38 | .21 | -.05 |
| HS | .00 | .06 | .08 | .04 | -.13 | -.08 | .14 | -.12 | .09 | .23 | .03 |
| D | .04 | .11 | -.10 | -.06 | -.30 | -.18 | .14 | -.28 | .12 | .18 | .33 |
| Hy | . .05 | .15 | .26 | .11 | -.18 | -.03 | .26 | .06 | .27 | .31 | .20 |
| Pd | -.32 | -.14 | .01 | -.02 | -.07 | -.14 | .02 | -.03 | .03 | .11 | -.13 |
| Mf | -.08 | -.11 | .04 | -.20 | -.18 | -.04 | .36 | .11 | .15 | .31 | .44 |
| Pa | -.12 | -.04 | .11 | -.02 | -.13 | -.08 | .10 | -.06 | .15 | .15 | .00 |
| Pt | -.01 | .00 | .03 | -.10 | -.14 | -.22 | .18 | -.09 | .13 | .34 | .21 |
| SC | -.19 | .13 | .03 | -.13 | -.18 | -.17 | .16 | -.04 | .10 | .31 | -.01 |
| Ma | -.31 | -.43 | -.26 | -.19 | .12 | -.20 | -.31 | -.06 | -.20 | -.13 | -.28 |
| Si | -.13 | .00 | -.28 | -.37 | -.20 | -.33 | .14 | -.31 | -.03 | .12 | .29 |
| A | -.22 | -.44 | -.47 | -.55 | -.03 | -.54 | -.19 | -.48 | -.34 | .02 | .10 |
| R | . .12 | .50 | .33 | .26 | -.35 | .13 | .42 | .14 | .41 | .32 | .38 |
| EC | -.34 | -.68 | -.48 | -.60 | .03 | -.45 | -.31 | -.22 | -.37 | -.07 | -.15 |
| ES | -.06 | .18 | .43 | .22 | -.13 | .27 | .27 | .46 | .25 | .07 | -.11 |
| TMA | -.17 | -.33 | -.43 | -.51 | -.13 | -.48 | -.06 | -.43 | -.15 | .14 | .24 |
| SD | .21 | .37 | .47 | .51 | .15 | .46 | .16 | .44 | .24 | -.01 | -.17 |
| AI | . .11 | .03 | -.17 | -.01 | -.08 | -.11 | -.09 | -.30 | -.14 | -.03 | .17 |
| IR | .26 | .41 | .10 | .12 | .04 | .12 | .20 | -.14 | .04 | .07 | .29 |
| F-K | -.36 | -.51 | -.59 | -.61 | -.15 | -.55 | -.26 | -.51 | -.28 | -.05 | .07 |

## GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY (N=69 Males)

| 1. | .04 | .00 | .10 | .26 | .12 | .17 | -.08 | .08 | .06 | .05 | -.02 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2. | .46 | .27 | .06 | .10 | .15 | .23 | .16 | -.18 | -.06 | .06 | .36 |
| 3. | .13 | .08 | .02 | .11 | .08 | .50 | -.09 | .14 | -.03 | .08 | .17 |
| 4. | .23 | .11 | .08 | .28 | .02 | .17 | -.04 | .04 | .04 | .08 | .08 |
| 5. | .25 | .31 | .45 | .36 | -.12 | .40 | .29 | .41 | .22 | .20 | .04 |
| 6. | .36 | .49 | .38 | .45 | -.24 | .42 | .15 | .25 | .07 | .15 | .08 |
| 7. | .25 | .49 | .41 | .35 | -.16 | .29 | .40 | .20 | .10 | .33 | .35 |
| 8. | -.11 | .06 | .08 | .02 | .04 | .03 | .13 | .10 | .18 | -.01 | .14 |
| 9. | .35 | .37 | .54 | .39 | -.06 | .35 | .35 | .43 | .16 | .17 | -.07 |
| 10. | .04 | -.03 | .16 | .02 | .12 | .07 | .06 | .14 | .23 | .16 | -.08 |


[^0]:    ${ }^{6}$ Edmund deS. Brunner, and others, An Overview of Adult Education Research (Chicago: Adult Education Association of the U.S.A., 1959), p. 3.
    ${ }^{7}$ Ibid., p. 6.
    ${ }^{8}$ Mary Ely, ed., Handbook of Adult Education in the United States (New York: Institute of Adult Education, 1948).

[^1]:    ${ }^{1 l_{\text {Robert }}}$. Plummer, "An Experiment in Counseling," Adult Education, Vol. IX, No. l (Autumn, 1958), p. 34.

    12Deane, "Psychological Description of Adults," p. 24.

[^2]:    ${ }^{15}$ Malcolm S. MacLean, "Learning to Live with Atomic Energy," (paper presented at the Institute on Atomic Energy, University of California, Los Angeles, May, 1947), p. 4.
    $16_{\text {Bernice }}$ L. Neugarten, "Adult Personality: Toward a Psychology of the Life Cycle," Middle Age and Aging (Chicago: University of Chicago Press, 1968), p. 137.

[^3]:    38
    Harrison G. Gough, Manual for California Psychological Inventory (Palo Alto: Consulting Psychologists Press, Inc., 1969), pp. 10-11.

