

A COMPARISON OF MENTALLY RETARDED
IMPRISONED ADULTS AND INTELLECTUALLY NORMAL
IMPRISONED ADULTS ON VOLUNTARY PARTICIPATION
IN AVOCATIONAL ACTIVITIES

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
DAVID R. WALTERS
1970

THESIS



This is to certify that the

thesis entitled

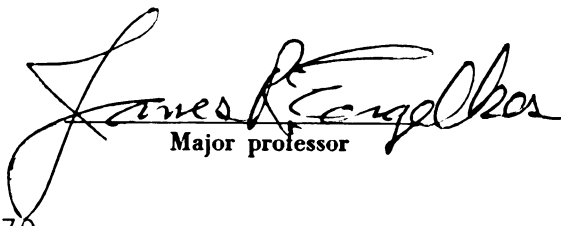
A Comparison of Mentally Retarded Imprisoned
Adults and Intellectually Normal Imprisoned
Adults on Voluntary Participation in Avoca-
tional Activities.

presented by

David R. Walters

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education


Major professor

Date May 8, 1970

ABSTRACT

A COMPARISON OF MENTALLY RETARDED IMPRISONED ADULTS AND INTELLECTUALLY NORMAL IMPRISONED ADULTS ON VOLUNTARY PARTICIPATION IN AVOCATIONAL ACTIVITIES

By

David R. Walters

An estimated twenty thousand mentally retarded felons are housed in prisons in the United States of America. Little is known about this group and how they function.

The intent of this study was to examine different methods of increasing the participation of mentally retarded felons in avocational, hobbycraft type programs in a large penitentiary. It was hypothesized that (a) verbal information in a formal presentation would result in more self-referrals by inmates than informal communications alone, (b) verbal information coupled with experience and/or exploratory opportunities would result in more self-referrals than verbal information alone, and (c) non-mentally retarded inmates would have more self-referrals after treatments than the mentally retarded.

Ninety mentally retarded and ninety non-mentally retarded subjects participated in this study. Sixty

subjects were given verbal information alone, sixty received verbal information coupled with exploratory opportunities, and sixty served as a control group and received no treatment. Ten days after the treatments were administered a count was made of subjects making written application for permission to use hobbycraft materials and equipment.

Data was analyzed by use of a two-way analysis of variance. Post hoc comparisons were made using the Scheffé procedure, and Student's "t" test was used in analyzing chronological age, length of time served under current sentence, and average grade rating.

Data analysis revealed that informal communications is least effective of all techniques; verbal information alone and verbal information coupled with experience resulted in more self-referrals. Both the hypotheses that verbal information in a formal presentation would result in more self-referrals and that verbal information coupled with experience would result in more self-referrals were retained. The hypothesis that the non-mentally retarded would have more self-referrals than the mentally retarded was not supported by the analysis of data and was rejected. Significant differences were found to exist in age, with the mentally retarded felons being five years older than the non-mentally retarded, and in average grade rating where mental retardates were found to be functioning much

lower than the non-mentally retarded. Significant difference was not found in time served under current sentence.

This study points up the relative ineffectiveness of informal communication with both groups. It would appear that the effectiveness of verbal information coupled with exploratory opportunity has been under-estimated with both the mentally retarded and the non-mentally retarded.

This study is limited by use of a rudimentary criterion and by the population. From an experimental design view it would have been helpful to isolate the effectiveness of exploratory opportunity without being coupled with a verbal presentation.

A COMPARISON OF MENTALLY RETARDED IMPRISONED
ADULTS AND INTELLECTUALLY NORMAL IMPRISONED
ADULTS ON VOLUNTARY PARTICIPATION
IN AVOCATIONAL ACTIVITIES

By

David R. Walters

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Counseling, Personnel Services, and
Educational Psychology
College of Education

1970

64446
10-23-70

ACKNOWLEDGMENTS

Sincere appreciation is given to Dr. James Engelkes who served as Chairman of my doctoral committee for his patience, guidance, and knowledge, along with many, many hours of his time.

Dr. Guy Timmons served as a model for me since early in my studies, as did Dr. Richard Johnson, and I am indebted to them for their encouragement, advice, and support. Dr. William Goldberg was particularly helpful throughout my studies, and through his teaching and personal influence has had great influence on my thinking in developing systems for the rehabilitation of the criminal offender.

Special thanks are extended to fellow students Rick Gay and Barry Mintzes. They have been friends, compatriots, teachers, and a source of great strength throughout my studies.

The staff of the Michigan Department of Corrections were most kind and helpful. I am particularly indebted to Mr. John Hawley, Counselor at the State Prison of Southern Michigan, who administered my treatments.

Finally I wish to thank my wife, Bobbi, for her humor, patience, and inspiration without whose help this

would have been impossible. In the darkest hours neither she, my daughter Kimberly, nor my son Scott lost faith.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS.	ii
LIST OF TABLES	vi
 Chapter	
I. INTRODUCTION	1
Introductory Statement.	1
Statement of the Problem	3
Hypotheses.	4
Need for the Study	5
Definition of Terms.	7
II. REVIEW OF THE LITERATURE	9
Criminological Studies.	9
Mental Retardation	11
Recreational and Avocational Activities	17
Approaches to Learning.	20
III. METHODOLOGY	24
Subjects	24
Materials and Procedures	25
Design of the Study.	27
Analysis of Data.	28
IV. RESULTS.	29
Introduction	29
Findings	29
Summary.	37
V. DISCUSSION.	39
Implications of the Study.	42
Limitations of the Study	44

Chapter	Page
Need for Further Research.	46
Summary.	47
REFERENCES	48
APPENDICES	56

LIST OF TABLES

Table	Page
1. Mean number and standard deviations of applications for hobbycraft privileges of mentally retarded and non-mentally retarded inmates of the State Prison of Southern Michigan in groups receiving no treatment, verbal information, and verbal information plus exposure and experience.	30
2. Two-way analysis of variance table of applications for hobbycraft privileges of mentally retarded and non-mentally retarded inmates of the State Prison of Southern Michigan in groups receiving no treatment, verbal information, and verbal information plus exposure and experience.	33
3. Post hoc comparisons of mentally retarded and non-mentally retarded inmates of the State Prison of Southern Michigan in groups receiving no treatment, verbal information, and verbal information plus exposure and experience	34
4. Student's "t" tests and means by group on chronological age, time in prison under current sentence, and average grade rating of mentally retarded and non-mentally retarded inmates of the State Prison of Southern Michigan receiving no treatment, verbal information, and verbal information plus exposure and experience	36

CHAPTER I

INTRODUCTION

Introductory Statement

The offender presenting special problems has long been of interest to criminologists. Until recently studies of prison inmates have addressed themselves largely to persons violating specific laws (Bullock, 1955; Frankel, 1937; Harlan, 1950; Sutherland, 1947; and Newman, 1958). Of late, researchers have begun to examine human behavior rather than simply legal code violation (Wolfgang and Ferracuti, 1967). Recent concern has focused on the youthful offender and the educationally handicapped offender (McKee, 1967).

Brown and Courtless (1967) surveyed every prison in the United States and found that twenty thousand inmates have intelligence scores low enough to be considered mentally retarded. These twenty thousand represent ten per cent of the total prison population of the country. Little is known about this group, other than for the fact that they return to prison with great frequency (Jacks, 1962).

Even with opportunities for improvement of self available in prisons it has been found that many inmates

do not participate (Peters, 1969). This is true of educational, occupational, recreational, and avocational programs. This lack of involvement in programs has concerned penologists and specialists in mental retardation. Attempts have been made to explain lack of involvement in programs via the concept of internal-external control functions of personality (Rotter, Seeman, and Liverant, 1962; Seeman, 1959; Peters, 1969).

Rotter's construct of internal-external control is related to the individual's expectancy of control or lack of control over his environment. If an individual perceives events as being related to his own actions he is "internal"; if related to forces beyond the control of the individual he is "external." The internal person feels he has a hand in controlling his own destiny. The external person, on the other hand, believes that luck, fate, or chance determine success or failure of the individual.

Lack of participation in programs may be due to other factors, however. While it is assumed that the informal communications system among inmates (the "grapevine") is one of the most effective ways of imparting information, other methods and techniques may be more effective with certain groups and individuals. Most institutions publish a host of written materials written at the eighth grade level or higher, and these impart

information regarding the availability of existing programs for many inmates. For those who are illiterate these methods are largely ineffective, and the mentally retarded are often in this category. New or different methods need to be explored so that not only the literate and normal, but the illiterate inmate as well will become involved. Because of the nature of their disability, the retarded in prison are often members of the hard to reach illiterate group.

Statement of the Problem

Use of leisure time is of growing concern to our nation. Through beneficial use of leisure time in avocational and recreational pursuits, many benefits accrue to the individual. Avocational programs are a social, cultural, educational, physical, and moral necessity in the lives of children, youth, and adults (American Association of Health, Physical Education, and Recreation, 1966). Involvement in recreational and/or avocational programs for the individual may result in personal growth, emotional catharsis, creative expression, and enhanced social and interpersonal relationships.

Retarded and normal prison inmates fail to make maximum use of available opportunities for self-development, however this fact may be more evident among the retarded because many cannot read the printed

information available, and their problem in understanding abstract material is greater than for the non-retarded.

The mentally retarded are differentiated from the non-mentally retarded in native endowment and in socially adaptive behavior. This is true of retardates in the community and in prison. Several plausible explanations for the retardate's lack of participation in penal programs exist: he is usually impaired earlier, has experienced failure in attempting to achieve goals more than the non-retarded, and because of impaired comprehension may not be aware of many opportunities.

Although in some instances special institutions have been created for the mentally retarded felon (Westwall, 1951) usually this group is kept in the general prison population. Consequently they are treated much the same as the inmate who is not retarded. Evidence exists in the field of mental retardation that other methods may be effective in involving this group in availing themselves of avocational, hobbycraft activities than existing methods.

Hypotheses

Verbal information in a formal presentation regarding hobbycraft activities will result in more self-referrals to the Hobbycraft Center than through informal communications between inmates.

Verbal information in a formal presentation coupled with exploratory opportunities will result in more self-referrals to the Hobbycraft Center than verbal information alone among inmates.

Non-mentally retarded inmates will yield a greater number of self-referrals to the Hobbycraft Center after either treatment than mentally retarded inmates.

Need for the Study

The mentally retarded participate less in programs than the non-retarded. Moreover, the retardate functions consistently lower in motor skills than normals (Ross, 1969) and in other developmental areas (Heber, 1963; Howe, 1959). Although this deficit has been noted in retarded children, it need not be permanent. Corder (1966) found that with training and practice mental retardates can improve on a variety of skills.

If retardates participate less in many activities as children, they may or may not continue this pattern as adults. Conversely, adult retardates may approximate normals as a result of maturation, experience, and practice. This question needs resolution.

The motivation to participate in many prison programs is frequently related to the inmate's perceptions of how paroling authorities will view a given activity. Many worthwhile programs are available but are not used to the

fullest by inmates. This study reveals and measures the effectiveness of different treatments in increasing participation, irrespective of inmates' perceptions of parole board decision making. A common problem in the fields of corrections, mental retardation, and recreation is in dispensing and disseminating information to clients. Bruner (1963) has called for the development and utilization of methods of stimulating the desire to learn and participate without consideration of external goals such as grades (or in this particular case, decisions of parole boards). A first step in this process in the prison setting is to examine methods of communicating with inmates, above and beyond the level of informal communications as represented by the "grapevine."

Programs for the prison inmate are often based upon the notion that the non-retarded individual functions well with symbolic representation and the abstract. Bruner (1966) discussed the development of mental abilities and he listed three stages. The first stage of development is characterized by manipulation and single tract attention. The second broad stage is described and characterized by "internal representation" or "perceptual organization and imagery." The third and highest stage is represented by problem solving through the use of abstractions and symbolic behavior. It is usually assumed that adults function primarily in the third stage, and this implies thinking

and cognition which allows abstractions. Deviants, and particularly the mentally retarded deviant, may not be functioning at the level assumed, and current methods of communicating with this segment of the inmate population may be very ineffective. This study addresses itself to this question.

Definition of Terms

1. Adult.--If a person is charged with the commission of a felony, upon motion of the prosecuting attorney and with waiver from the presiding officer of the juvenile court, one may be considered an adult from his fifteenth year on up under Michigan law.

2. Institution.--This term shall refer to the State Prison of Southern Michigan located at Jackson, Michigan.

3. Mentally retarded.--An inmate is considered to be mentally retarded if he scores one or more standard deviations below the mean on a standardized group or individual intelligence test.

4. Hobbycraft activities.--This includes the activities of leathercraft, wood carving, bead work, plastics, weaving, painting, model making, costume jewelry work, and related recreational and avocational activities offered through the Hobbycraft shop of the institution.

5. Average grade rating.--The academic achievement score obtained by inmates using the Stanford Achievement

Test, Intermediate Form II for those with IQ scores <94 and the SAT Advanced test for those with IQ scores >94.

6. Verbal information.--This term shall refer to orally communicated information.

CHAPTER II

REVIEW OF THE LITERATURE

This investigation's focus on the mentally retarded felon and his participation in voluntary avocational activities draws upon knowledge in the areas of criminology, mental retardation, recreation, and approaches to learning. Each of these areas share commonalities including a concern for human lives, the social behavior of the individual, and the reaction of society to behavior.

Criminological Studies

The study of the relationship between mental retardation and crime has a long history. After it was established that no causal relationship existed between the two factors, interest in the area waned. Re-examination of the mentally retarded felon gave evidence that differences exist when compared with the general prison population in crimes committed, with mentally retarded felons committing more violent crimes than the non-retarded. Although a few institutions were established for this group, very few of the estimated 20,000 mental retardates in prisons are housed in these special facilities. Further, evidence exists which shows that

retardates have a more difficult time in adjusting to the demands of community life after their release from prison.

Early writers and investigators (Lombroso, 1897, 1913; Dugdale, 1910; Goddard, 1912, 1923; Goring, 1913; Zeleny, 1938, Sutherland, 1931; Brown and Hartman, 1938) were concerned over the issue of causation of crime in relation to mental retardation and when it was established that no correlation existed between the two, researchers looked elsewhere in trying to understand deviant behavior. From the 1930's until 1946 the literature had no research reported or published on this topic.

Fox (1946) analyzed the intelligence scores of 5,104 Michigan prisoners and found significantly higher intelligence in prisoners convicted of violations of state security laws, forgery, and robbery, than those imprisoned for assault, murder, and sex offenses. Grigg (1948) studied a sample of twenty-five mentally retarded adult prisoners in Virginia and concluded that a majority of those studied displayed an inability to foresee the long range consequences of behavior. He believed much of the behavior of this group to be attributable to momentary stimuli.

Criminologists did not follow up on its examination of the mentally retarded offender and this client lived in an administrative twilight zone, unwanted by the fields of mental retardation, by mental health, and by

corrections. An attempt was made to meet the needs of this group by the establishment of institutions specifically for mentally retarded offenders. Best known of these special institutions is Patuxent in Maryland which was established after World War II, however, less than half of the inmates now residing in this facility are mentally retarded.

Boslow and Kandel (1965) reported data which compared the retarded and non-retarded inmates at Patuxent. They found:

1. The average age of retardates was higher.
2. The largest percentage of retardates was black.
3. Retardates committed more violent crimes than the non-retardates.
4. Retardates had a higher incidence of commitment for sex offenses.
5. Retardates' sentences averaged one year less than the non-retardates.
6. Of 19 retardates paroled, 12 had to be returned to the institution due to inability to adjust in the community.

Boslow and Kandel's findings must be interpreted with the knowledge that the non-retarded population of the institution are all considered to be dangerous, and the individually tested I.Q. cutoff for retardates was 70 or below.

Mental Retardation

Central to this study is the assumption, based upon the definition of mental retardation, that each retardate

displays impaired adaptive behavior. Prenatal causes of mental retardation include toxoplasmosis (Feldman and Miller, 1956), phenylketonuria (Forbes, 1965), drug ingestion, anoxia, and many other conditions. Prematurity alone is associated with 15 to 20 per cent of all cases of mental retardation (Baumeister, 1967) and accounts for 24.5 per cent of all neonatal deaths (Gold, 1962). Postnatal factors producing mental retardation include infections, allergies, and neoplasia (Tarjan, Wright, Dingman, and Sabagh, 1959). Emotional problems, physical and cultural handicaps, and maternal deprivation can cause normal children to function at the retarded level (Koch, Graliker, Bronston, and Fishler, 1965), thus the problem of diagnosis is often difficult.

The mental retardate's inadequacies were found by Benton (1964) to rest in intellectual functioning, personality, psychomotor skills, and sensory discrimination capacity. During the developmental period the retardate often finds he cannot compete with peers, or meet parental expectations. Gardner (1958) and Miller (1958) found that under such conditions, retardates frequently decrease effort or withdraw entirely. This could in part explain the lack of development of many skills in the retardate and could have great impact on later adjustment. Credence is given this thought by findings (Spradlin, 1960; Bialer, 1960) that growth and developmental processes in retardates

are often hampered by their tendency to return to previously successfully completed tasks, rather than to explore past learning situations where failure was encountered.

Language problems compound the difficulties of many retardates. Frustration and developmental difficulties arise due to an inability to articulate. Lack of language stimulation also compounds the problem of the retardate (Schiefelbusch, 1963). Vocal anomalies are noted among the institutionalized retardates and Schlanger (1953, 1957) found that these anomalies compound the adjustment problems of the institutionalized.

Other problems facing the retardate are in interpersonal relationships and this may result in antisocial behavior (Banay, 1952; Gillin, 1946; Benoit, 1967; and Wolfgang and Strohm, 1956).

Many retardates are institutionalized when young due to difficulty in the home and school. Many display "acting out" types of behavior which leads to expulsion from school, referral to a juvenile court, and institutional commitment. Among those groups studied who are not delinquent but are institutionalized for their retardation, the effects of institutionalization are not clear. Saranson and Gladwin (1958) found it to be detrimental to later adjustment yet Hartzler (1953), Grant

(1956), and Tong and McKay (1959) found the opposite to be true.

One of the hypotheses of this experiment is that the retarded will participate less across all treatments than the non-retarded. Support for this hypothesis is found in comparing the mentally retarded and non-mentally retarded in motor skill level of functioning (Ross, 1969; Heber, 1963; Howe, 1959; Johnson, 1963; and Rabin, 1957). It is also important to note that motor skills can be improved upon and earlier defects can be overcome. Corder (1966) found that with training and practice retardates could improve upon a number of motor skills and become quite adept. This has implications for long term involvement in projects the retardate might not be able to initially master. The obvious implication seems to be that exposure to and activity in avocational pursuits requiring motor skills are as applicable to the retarded as to the non-retarded. That is to say, with practice the retardate can improve upon many skills.

A plethora of contradictory evidence exists regarding the presence or absence of learning deficit in mentally retarded children. It is not known if a linear relationship exists between retarded children and adults in behavior related to rote learning and retention. If a linear relationship does exist, it should be more obvious in adults, and should affect performance in many

ways. One obvious implication would be in failure to retain knowledge of objects such as tools, to be able to recall their name and purpose, or to meaningfully integrate this knowledge into the sphere of application. Denny (1964) and Lipman (1963) have reviewed many of these studies and pointed up the contradictory findings. Many similar studies have appeared since the reviews (Baumeister, 1963; Blue, 1963; Giradeau and Ellis, 1964; Lance, 1965; and Vergason, 1964) and the issue has yet to be resolved in favor of either point of view. Prehm (1966) recently summed up the area in his statement, "with respect to our knowledge of the verbal learning abilities of retardates, we are in a woeful state of ignorance."

Again, it must be stressed that most of the research undertaken with mental retardates is with children. Research on the adult retardate is scarce, and research which addresses itself to the mental retardate who is imprisoned is non-existent.

One might question whether the retardate in prison is like his retarded peer in the community. The answer would appear to be both "yes" and "no." The answer is affirmative in the sense that the mentally retarded inmate meets the criteria for mental retardation as defined by authorities in the field. He is intellectually and socially impaired. On the other side, he is atypical if counted numerically for very few retardates are in prison

when we look at the total number of mentally retarded adults in the nation. Chronologically, the retarded prison inmate is much older than the average of retardates in the community. Most obvious is the fact that he is imprisoned and this separates him from the mainstream of both retardates and non-retardates. Finally, he does not represent all levels of mental retardation and certain syndromes (e.g. Downs) usually associated with mental retardation are not found in prisons.

Brown and Courtless (1967) estimate that somewhere in the neighborhood of ten per cent of all imprisoned felons are mentally retarded. This implies an over-representation of mental retardates in the penal system, as compared to retardates in the community.

From a sociological viewpoint the over-representation of mentally retarded in our penal system is understandable. Clinard (1968) points out that society selects those whom it will punish and imprison. The person so selected may violate a social, political, monetary, or interpersonal trust. Society also devises "rules" by which the game of deviance is played. Evidence of this is seen in a rather elaborate enforcement, prosecutory, judicial and correctional system in our country. To "play" the game of deviance some measure of sophistication is necessary if the person apprehended is not doomed to lose. He must be able to have access to a lawyer who is a full time

participant in the game so that he will be adequately defended. Second, in keeping with the spirit of Clinard's statement, he must not be a member of any group which society selects for punishment. He must approximate the norm if he is not to become enmeshed in the system. That is, if a person charged with deviant behavior does not literally have his wits about him, if he cannot obtain suitable legal representation, if his speech or attire do not approximate the society in which he lives, the chances of his removal from society are increased. We know by definition the mentally retarded offender has impaired adaptive behavior. He may be more prone to become deviant by going outside "normal" or "approved" channels. He would appear likely to experience more difficulty in the legal system than the non-retarded by the nature of his disability. In a sense then, society may be selecting certain retardates for inclusion in our penal processes. Consequently, they are over-represented in the penal system.

Recreational and Avocational Activities

Overs (1970) reported that special activities are needed for special client groups such as the aged, the amputee, and clients who are paralyzed. This principle also appears to be applicable to imprisoned felons and the mentally retarded.

The needs of the mentally retarded in the field of recreation and avocational activities has long been recognized in the institutional setting. In its broadest sense, something is recreation "if it is fun for the participant" (Lawler, 1964). The term "recreational therapy" is often applied to avocational activities or services that are offered to the retarded either in the institution or in the community. Formal recognition of the therapeutic aspects of these activities is given by the American Association of Mental Deficiency manual of institutional standards (A. A. M. D., 1964) which lists "recreational therapy" under the general rubric of "Therapies and activities." Although the therapeutic aspects are not explicitly defined in the manual, the major point is made that "recreational programming should provide each resident with enjoyable leisure-time activities and promote physical and mental health through interesting and worthwhile recreational pursuits" (p. 4).

The benefits of recreation for the retardates are many: personal fulfillment, the development of leisure time skills and interests, democratic human relations, health and fitness, creative expression, and aesthetic appreciation (American Association for Health, Physical Education, and Recreation, 1966).

Avocational activities such as arts and crafts can lead to personal fulfillment as well as contribute to

occupational development (Hawley, 1970). This is part of the reason for inclusion of these activities in penal programs. Moreover, financial gain may be a very desirable side effect of these activities.

The relative lack of sophistication of retardates need not be a handicap in recreational programming. The American Association for Health, Physical Education, and Recreation (1966) lists nearly one hundred arts and crafts activities for the retarded. Arts and crafts seems appropriate for both the retarded and non-retarded, and for adults as well as children. Overs (1966) has defined a typology of these activities through use of a multidigit classification system which lists skills employed and their relative level of difficulty, among other factors. Very few arts and crafts activities are exclusionary for the mentally retarded although a few, such as metalworking, require a fairly high degree of spacial visualization.

Lack of participation in avocational programs by mental retardates, whether it be in the home, community, center for the retarded, or prison can be due to a number of factors discussed earlier. In many instances lack of facilities preclude involvement but in many instances where facilities are available, it is due in part to individual variables and in part to problems connected with mental retardation. But that participation of the

mentally retarded in these activities is a desirable goal appears beyond question (A. A. H. P. E. & R., 1966).

Approaches to Learning

There are many approaches to learning, most of which have their base in antiquity. The demonstration method can be traced to Comenius, and the laboratory method to Plato. Socrates gave the foundation for the problem-solving method which is seen in many programs today. Bigge (1964) lists ten major approaches: mental discipline (faculty psychology), mental discipline (classicism), natural unfoldment, apperception, S-R bond, conditioning (with no reinforcement), reinforcement and conditioning, insight, goal insight, and cognitive-field, or field psychology.

Each of these approaches has its disciples and eminent psychologists such as Titchener, Thorndike, Hull, Watson, Lewin, Tolman, and Bruner have been associated with the various schools. Each approach has fostered methodologies of their own that have found their way into the educational process.

Central to any notion of education is that the student will receive and/or acquire knowledge in the way of facts, sets, concepts, and the like, and that he will assimilate this material which in turn will result in cognitive, emotional, or behavioral change. Each approach

differs somewhat in its interpretation of what should be acquired, how it should be acquired, and in what the result of the process should be, or how it manifests itself. Nevertheless, information in some form is basic to the learning process. Mager (1968) suggests the crucial aspect related to subject matter is in the test of whether it results in knowledge, problem solving ability, creativity, or increased motor skill. Hutchins (1965) has pointed out the "facts" he learned in childhood were false when he became an adult, yet both Hutchins and Mager realize the necessity of the informational base of education.

One approach of this experiment consists of information regarding hobbycraft activities in a verbal presentation. In presenting information regarding avocational activities it represents what Bruner (1962) would describe as a "functionally equivalent category." That is to say, a number of similar activities are placed under the rubric of avocations and recreations in that each shares the same basic functions.

Another approach of this experimental study utilizes a combination of verbal information coupled with exposure to various tools, materials, and products of the activities. The two schools having major impact on education today, the Gestalt-field psychologists and the S-R associationists (Bigge and Hunt, 1964) each recognize the term "experience" although they define it quite differently.

If an S-R associationist were to discuss the term he would view it only as a conditioning process, or perhaps as a link in the learning chain. Skinner (1953) even had doubts that it was a link in a causal chain. To the Gestalt-field psychologists experience is the interaction of the person and his perceived environment. Thirty years ago Dewey (1938) explained this view in his statement, "An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment" (p. 31). Earlier (1916) Dewey had viewed experience as both "trying" and "undergoing."

Many educational methods and approaches stress the learning environment, and the effect the environment can have on the learning process. Throughout Montessori and the Summerhill approach, although they differ in basic philosophy, both approaches place heavy emphasis upon exposure of the child to the learning environment.

Kephart's (1960) classic, The Slow Learner in the Classroom, placed emphasis upon the classroom and its materials, and exposure of the child to beneficial experiences. The movigenic school of Barsch (1965) is also in part based upon the notion of exposure and experience.

There is ample indication that the combination of verbal information coupled with experience and exposure is beneficial to the child with learning disabilities

(McCarthy and McCarthy, 1969). Whether this technique is effective with mentally retarded imprisoned adults is a focus of this investigation.

CHAPTER III

METHODOLOGY

Subjects

This study contained six groups of thirty subjects each. Each of the one hundred eighty subjects were imprisoned in the institution where the experimental treatments were administered. Ninety of the subjects were mentally retarded and ninety were not. Each of the subjects in the population was pre-selected on the basis that he had not previously participated in hobbycraft activities. After excluding those who have or were participating in hobbycraft, the population for this study was selected randomly from the institutional population. All of the subjects were male and ranged in age from eighteen to sixty-one.

Subjects who had been institutionalized for less than ninety calendar days were eliminated from inclusion in this study. It would appear that this is sufficient time for an inmate to receive information through informal communications (e.g. the "grapevine") regarding institutional programs and if he did not apply for hobbycraft privileges in that length of time it could be assumed that

he could be classified as a "non-participant" who would not apply for this privilege.

Subjects were randomly selected from the institutionalized populations of mentally retarded and non-mentally retarded inmates. They were then randomly assigned to the groups receiving Treatments I, II, and III.

Materials and Procedures

The materials for Treatment II and the first half of Treatment III were the same. This consisted of a verbal presentation of information and facts regarding hobbycraft activities in the institution (Appendix A). Treatment I consisted of a control group and received no treatment.

Treatment III, in addition to the verbal presentation of Treatment II, consisted of the subjects going to the Hobbycraft Center work area where they viewed a display of raw materials, tools, partially completed projects, and completed projects for each of the activities. Subjects were given standardized instructions to explore and examine the items at hand. Factual information was given when a question arose as to the function or purpose of any tool, material, or product. Subjects were given twenty minutes to see the complete display, and to explore the items at hand through visual and tactile contact. At

the end of Treatment III, subjects were returned to their regular institutional assignments.

The administrator of the verbal treatments to the four groups receiving the presentation was a counselor employed by the institution. This person was selected by the experimenter, the Director of Treatment of the institution, and the Director of the Hobbycraft Center in a joint decision. Reasons for the selection of the presenter were: he did not represent custody personnel or an authoritarian figure, he was not employed by the Hobbycraft center, and his diction was excellent. In a period of four successive trials of Treatment II, after practicing several times, the administrator did not vary over $\pm$ two seconds from the presentation time of nine minutes and twelve seconds.

Treatments were administered in the "Old Hobbycraft Shop" in the institution which now serves as a meeting place for activities and instruction, for that part involving verbal presentations. This space was selected due to its relative proximity to the Hobbycraft Center (which is in an adjacent building) and on the basis of space available.

Treatments were administered on two successive days. Treatment II was administered to two groups on February 23, 1970 at 12:30 and 1:30 p.m. Treatment III was administered on February 24, 1970 at 12:30 and 1:30 p.m.

Data were also collected from inmate Central Office files of the Michigan Department of Corrections to obtain the chronological age, length of time in prison under current sentence, and average grade rating at time of imprisonment. These data were obtained so that partial comparisons with Boslow and Kandel's (1965) findings could be made.

Design of the Study

The design used in the present study was a 2 X 3 factorial design which was crossed and balanced. The independent variables are as follows:

A. Type of Subject

A₁--Mentally Retarded

A₂--Non-Mentally Retarded

B. Type of Treatment

B₁--T₁ (Control Group - No Treatment)

B₂--T₂ (Verbal presentation alone)

B₃--T₃ (Verbal presentation + experience
and exposure)

The dependent variable was written application to the Hobbycraft Center for use privileges. Ten days was allotted after the administration of the treatments for subjects to apply or not apply. At the expiration of the ten day period a frequency count for each group was obtained.

Analysis of Data

The data were analyzed by use of a two way ANOVA. This test is appropriate with proportions (Smith and Torrie, 1960) and with dichotomous data. Hsu (1968) and Hsu and Feldt (1969) in studies of the effect of limitations on the number of criterion score values on the significance level of the F-Test found no contraindications to its use. The .05 level of significance was selected. Scheffé method post hoc comparisons (Hays, 1963) were utilized when significant main effects warranted this method. Comparisons of mean differences in chronological age, length of time in prison under current sentence, and average grade rating were by use of Student's "t" test. The Michigan State University Computer Laboratory facilities were used for determination of analysis of variance.

CHAPTER IV

RESULTS

Introduction

The major intent of this study was to examine different methods of increasing the participation of mentally retarded felons in avocational programs in prison. It was hypothesized that (a) verbal information in a formal presentation would result in more self-referrals than informal communication alone, (b) verbal information and exploratory opportunities would result in more self-referrals than verbal information alone, and (c) non-mentally retarded inmates would have more self-referrals after treatments than the mentally retarded.

Findings

Twenty-three of 120 subjects in the two groups receiving treatments I and II applied for institutional hobbycraft privileges within ten days of the administration of the treatments. One subject in the control group of 60 also applied for hobbycraft privileges. Appendix B contains the raw scores for each cell and group.

Table 1 presents the means which were utilized to compute the two-way analysis of variance and for

TABLE 1.--Mean number and standard deviations of applications for hobbycraft privileges of mentally retarded and non-mentally retarded inmates of the State Prison of Southern Michigan in groups receiving no treatment, verbal information, and verbal information plus exposure and experience.

		T ₁	T ₂	T ₃	
		No Treatment	Verbal Information	Verb. Info. Plus Experience	
Mentally Retarded	M.	.033	.067	.333	.144
	S.D.	.179	.249	.471	.351
Non Mentally Retarded	M.	.000	.116	.200	.122
	S.D.	.000	.372	.400	.327
	M.	.017	.117	.267	.133
	S.D.	.127	.321	.442	.340

examination of the hypotheses. This table shows little change resulting from T_1 which consisted of thirty mentally retarded male inmates and thirty non-mentally retarded male inmates who served as a control group. Those receiving verbal information displayed some pre-post treatment change as did those who received both the verbal information plus the experience and/or exposure to hobbycraft activities. The greatest participation resulted from those subjects in the treatment condition of verbal information plus experience and exposure to hobbycraft activities. Verbal information is more effective than informal communications alone. Further, this table indicates that differences exist in the effectiveness of verbal information alone with both groups of subjects. Verbal information alone is more effective with the non-mentally retarded. The combination of verbal information coupled with experience has a mean of .267 as opposed to a mean of .116 for verbal information alone thus indications are that Treatment III is more effective than Treatment II. The effectiveness of both treatments were nearly the same for the non-mentally retarded subjects, and both treatments appear to be more effective with this group than Treatment I, which was a control.

Table 2 presents the two-way analysis of variance table with the computed values and approximate significance probability of the F statistic. The treatment effect is significant at $p < .005$ level. The analysis of variance reflects the treatments as being significant but does not speak to the question of what treatment appears most effective. The hypothesis that the non-mentally retarded would have more self-referrals than the mentally retarded was not found to be significant by the analysis of variance and this hypothesis is rejected.

Post hoc comparisons using the Scheffé method were then computed to examine these data in detail. Table 3 presents these results. The presentation of verbal information alone was examined against no treatment and was found to be significant at $p < .01$ in its effectiveness in obtaining voluntary self-referrals to hobbycraft activities. This finding supports the hypothesis that verbal information in a formal presentation would result in more self-referrals than informal communications alone. A comparison was then made between verbal information and experience against verbal information alone. Table 3 presents the finding that the combination of verbal information plus experience is significantly more effective at $p < .01$ in obtaining self-referrals to hobbycraft activities than verbal information alone. With this finding we retain the hypothesis that verbal information plus

TABLE 2.--Two-way analysis of variance table of applications for hobbycraft privileges of mentally retarded and non-mentally retarded inmates felons of the State Prison of Southern Michigan in groups receiving no treatment, verbal information, and verbal information plus exposure and experience.

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	F Statistic	Approx. Significance Prob. of F
Treatments	1.90000000	2	0.95000000	8.95126	<0.0005
Groups	0.02222222	1	0.02222222	0.20939	0.648
Interaction of Treatments and Groups	0.41111111	2	0.20555556	1.93682	0.147
Remaining Error	18.46666667	174	0.10613027		
Total	20.80000000	179			

TABLE 3.--Post hoc comparisons of mentally retarded and non-mentally retarded inmates of the State Prison of Southern Michigan in groups receiving no treatment, verbal information, and verbal information plus experience and/or exposure to hobbycraft activities.

Source	Contrast	Scheffé Coeff.	$\sqrt{\text{Var. } (\hat{\psi})}$	Interval	Significance
Comparison of Verbal Information Against No Treatment (Informational Communications)					
	.15000	3.03645	.05949	+.10735;+.19265	p < .01
Comparison of Verbal Information Plus Exposure and/or Experience Against Verbal Information Alone					
	.10000	3.03645	.05949	+.05735;+.14265	p < .01

experience will result in more self-referrals than verbal information alone.

Boslow and Kandel's (1965) finding that age differences existed between mentally retarded and non-mentally retarded felons was examined with two other aspects to determine if their finding was true of the population under study. Of particular interest was the finding that the average age of retardates was higher, although differences in time served under current commitment were negligible. Unlike Boslow and Kandel's population who had been released from an institution, this population was imprisoned at the time of the study.

Table 4 presents data on chronological age length of time in prison, and the average grade rating of mentally retarded felons in comparison with non-mentally retarded inmates felons. Student's "t" test revealed significant differences in age of mentally retarded felons compared to non-mentally retarded felons, with the mentally retarded being older. Comparisons in length of time imprisoned under current sentence revealed differences to be non-significant. The third test of means revealed significant differences between groups in average grade rating with the mentally retarded being retarded in academic achievement. Chronological age and average grade rating differences were both found to be significant at $p < .001$ level.

TABLE 4.--Student's "t" tests and means by group on chronological age, time in prison under current sentence, and average grade rating of mentally retarded and non-mentally retarded inmates of the State Prison of Southern Michigan receiving no treatment, verbal information, and verbal information plus experience in hobbycraft activities.

Criterion	Group	Mean	df	t value	Obtained Value	Significance
Chronological Age	Mentally Retarded	36.06 ¹	178	3.291	11.75	p < .001
	Non-Mentally Retarded	30.77				
Time in Prison Current Sentence	Mentally Retarded	2.95 ¹	178	3.291	.01	N.S.
	Non-Mentally Retarded	3.20				
Average Grade Rating	Mentally Retarded	1.31 ²	178	3.291	12.15	p < .001
	Non-Mentally Retarded	5.90				

¹Computed in calendar years

²Computed in school grade years

Summary

These data reflect the following:

1. The control group which consisted of thirty mentally retarded subjects and thirty non-mentally retarded subjects showed very little change, with one mentally retarded subject applying for hobbycraft privileges at the expiration of the ten day period. The implications of this finding and its relationship to informal communications will be discussed in Chapter V.

2. Verbal information alone appeared more effective than no treatment, or "the grapevine" with both the mentally retarded and non-mentally retarded groups. The effectiveness of verbal information alone over no treatment was found to be significant at $p .01$ using a Scheffe post hoc comparison.

3. Verbal information along with experience and exposure to hobbycraft activities was most effective with mentally retarded and non-mentally retarded subjects. Little in the way of difference is noted within the non-mentally retarded groups between this technique and Treatment II, which consisted solely of verbal information.

4. Contrary to expectation, the non-mentally retarded did not do better across all treatments than the mentally retarded. This is reflected by the finding in the analysis of variance that differences between groups were not significant.

5. Significant differences are noted in comparing the means of chronological age and average grade rating between the mentally retarded and non-mentally retarded inmates felons. The mentally retarded subjects are older and are academically retarded in comparison to the non-mentally retarded.

Chapter V discusses these findings in relation to the hypotheses of this study, the implications of these findings, and of the need for further research.

CHAPTER V

DISCUSSION

A great deal of time, money, and effort is put into prison programs. Although many facilities and programs are being provided for all prison inmates, these programs are not being used to the fullest. Reliance is placed by prison administrators upon informal communications and written materials to acquaint inmates with available opportunities. These techniques do not always prove effective, and this is particularly true with the mentally retarded inmate.

It was the purpose of this study to compare methods of involving mentally retarded and non-mentally retarded inmates in avocational, hobbycraft activities in a state prison. Three hypotheses were formulated and tested. In addition, descriptive data related to three aspects of the inmated felons were collected and compared.

Hypothesis One stated that verbal information in a formal presentation regarding hobbycraft activity will result in more self-referrals to the Hobbycraft Center than through informal communications between inmates. In Chapter IV data was presented which indicated that we retain this hypothesis. Verbal information in a formal

presentation is superior to informal communications alone in obtaining participation in the program under investigation. This finding must be viewed with caution as the ineffectiveness of informal communications and "the grapevine" may be due in part to the large number of inmates at the institution. Further, the relative ineffectiveness of informal communications in this instance may be attributable in part to the fact that hobbycraft participation is not deemed essential in receiving favorable consideration from the parole board. Even with the limitations noted, it does appear that verbal information in a formal presentation is superior to informal communications alone. This treatment entailed symbolic representations and called upon subjects to make abstractions. Bruner (1966), in his thinking about stages of development, appears to receive support from this study with the groups under investigation.

Hypothesis Two states that verbal information in a formal presentation coupled with experience or exploratory opportunities will result in more self-referrals to the Hobbycraft Center than verbal information alone. This hypothesis was retained. This technique was the most effective with both the non-mentally and mentally retarded groups. The coupling of verbal information with exploratory opportunity seems to provide more incentive for subjects in both the mentally retarded and non-mentally retarded groups to apply for Hobbycraft privileges. Verbal information coupled with exploratory opportunities is also

more effective than "the grapevine" or informal communication which was represented by the control group receiving no treatment.

Hypothesis Three states that the non-mentally retarded will yield a greater number of self-referrals from treatments II and III than the mentally retarded. This hypothesis was rejected. This finding is of interest as it tends to refute the concept that the non-mentally retarded perform better under all conditions than the mentally retarded, and the idea that the effectiveness of any technique is less with the mentally retarded than with the non-mentally retarded. This study has provided support for the combination of information and exploratory opportunity as being effective with both the mentally retarded and non-mentally retarded groups.

The finding that the chronological age of mentally retarded felons is five years higher than the non-mentally retarded is of interest. This may indicate that mental retardates who are deviant experience problems for a greater number of years, or that they commit crimes later in life than the non-mentally retarded. The ramifications of this finding are unclear insofar as it effects the families of these subjects, institutional adjustment, programming, and post-imprisonment adjustment.

Perhaps most striking is the finding that the mentally retarded subjects had an average grade rating of 1.3 as opposed to 5.9 for the non-mentally retarded. Public

school systems were apparently unable to reach this group, and their educational handicap is severe. Questions may be generated regarding the thrust of prison programs in light of this finding. With an average educational functioning of 1.3 years of schooling, perhaps full-time schooling and remediation in educational spheres is indicated rather than involvement only in vocational training programs. Further, question arises as to what counseling services can realistically be offered this group.

The very slight difference noted in length of time served under current sentence suggests that little difference exists between groups of mentally retarded and non-mentally retarded inmates insofar as time served is concerned.

Implications of the Study

1. This study points up the relative ineffectiveness of informal communications such as "the grapevine" in the institution over systematized presentation of information. The common lore of penology holds "the grapevine" to be a potent and effective mechanism which permeates the whole prison structure. The findings of this study do not support this notion.

2. The effectiveness of mere dissemination of information in a verbal presentation with both groups is limited. This study suggests that programs acquainting inmates with institutional opportunities needs development. The rather traditional method of "the grapevine"

imparting information to new inmates was found to be inferior to formal verbal presentation of information.

3. The effectiveness of a verbal presentation followed by experience and exposure in an area of interest by mentally retarded and non-mentally retarded felons has been underestimated. This study revealed this technique to be superior with both groups, and resulted in more self-referrals than for either treatments I or II.

4. Twenty-three of 120 subjects receiving the two treatments applied for hobbycraft privileges as a result of these treatments. None had applied prior to the experiment for these privileges. This suggests that orientation or re-orientation might be indicated either on an annual or perhaps ongoing basis rather than just at the time of reception or admission to prison. The interests and concerns, along with the abilities of people change with time and age. What may be unattractive or uninteresting to a person early in his prison experience may prove to be highly stimulating and attractive at a later date.

5. The obvious differences between the mentally retarded and non-mentally retarded in age and average grade rating indicate that differences do exist between these groups of inmates. However, these differences did not appear to have any noticeable impact on their response to the treatments administered in this study.

Limitations of the Study

This study had limitations and weaknesses in several areas.

The mean age of the non-mentally retarded is higher than for most prison populations. Rather than to suspect that State under study has an abnormally advanced age population it is suspected that those who apply for hobbycraft privileges are the younger, newer inmates. Further, every person who had been imprisoned for ninety days or less was excluded and this could have affected the mean age of the group.

Prison programs, environments, and sub-cultures differ greatly from one another and the results could well have been different if conducted elsewhere. These findings cannot be generalized to all prisons, however, they could be generalized to a population similar in all relevant aspects to that of the State Prison of Southern Michigan. Additional study is needed on adult felons imprisoned elsewhere to determine if the results are similar in other prison populations.

From a research point of view it would be helpful if an additional group were added; one which would receive experience and exploratory opportunities alone with no verbal information. This study would then have consisted of No Treatment, Verbal Information alone, Verbal Information coupled with experience and/or exploratory opportunities, and experience and/or exploratory opportunities

alone. This would allow for a more straightforward evaluation of the experimental aspect without contamination from another treatment.

The criterion used in this study was written application for hobbycraft privileges. While this was a necessary first step, a more sophisticated study could break down and examine differences in interests and activities between groups as well as among individuals within groups. On theoretical grounds we have reason to suspect that the mentally retarded would be more likely to apply for permission to use available facilities and to involve themselves in the simpler activities requiring rudimentary skills. The non-mentally retarded probably would apply for permission to involve themselves in those activities requiring a greater degree of skill and sophistication.

This study was conducted in a maximum security prison. The agency responsible for the prison in which the study was conducted also administers several other prisons which serve rather specialized groups such as young offenders, educationally receptive offenders, and the like. In addition, the agency operates a number of camps and other medium and minimum security facilities. In this respect, question can be raised as to whether the prison in which the study was conducted is representative of the other facilities. Patently, it is not. Both groups, the mentally retarded and the non-mentally retarded, are somewhat older, represent a greater security risk, and

display problems or characteristics that result in not being transferred to other facilities.

Legitimate question can be raised about the results of this study if the purpose of the treatments were to involve subjects in activities other than hobbycraft. Whether these treatments would be as effective in generating self-referrals to sports activities, religious programs, and counseling services is unknown.

Need for Further Research

1. In view of the results of this study, additional research is indicated to determine when and how informal communications among inmates and staff transmits information. Perhaps the mechanism of "the grapevine" functions most effectively with new inmates, or perhaps in those areas considered crucial to the inmate's parole. Another hypothesis may be that distortions occur in the process of informal communications, and that information transmitted to inmates is inaccurate.

2. Results obtained from mere dissemination of information to mentally retarded and non-mentally retarded inmates were limited. Research is indicated with videotape presentation and other multi-media methods utilize mechanical delivery systems to determine if they are as effective as "live" deliveries.

3. Indications are given that those who apply for hobbycraft privileges early in their imprisonment differ

from these who do not. Research is indicated to determine if this exists, and if so, the reason for this phenomenon.

4. Replications of this study with other prison populations are indicated from the previous discussion. In addition, replications with adult retardates and normals in the community and adult retardates and non-retardates in institutions who are not felons would indicate whether these techniques are effective with other groups or limited to the criminally deviant institutionalized retardate and non-retardate. Finally, replications with females would be beneficial to determine the influence of sex in the treatments used in this study.

Summary

This study has pointed up the need for further research in the area of the mentally retarded felon. This study indicates significant differences and a greater effectiveness in employing a combination of verbal information and experience over informal communications and verbal information alone in interesting this group in voluntary avocational programs. Further, it shows that even verbal information alone in a formal presentation is superior to informal communications.

REFERENCES

REFERENCES

- American Association of Health, Physical Education, and Recreation. Recreation and physical activity for the mentally retarded. Washington: National Education Association, 1966.
- American Association of Mental Deficiency. Standards for state residential institutions for the mentally retarded. Monograph Supplement. Amer. J. of Ment. Defic., 1964, 68.
- Banay, Ralph S. Study in murder. Annals of the Amer. Acad. of Political and Social Sciences, 1952, 284, 26-34.
- Barsch, Raymond H. A movigenic curriculum. Madison, Wisconsin: Bureau for Handicapped Children, 1965.
- Baumeister, Alfred A. A comparison of normals and retardates with respect to incidental and intentional learning. Amer. J. of Ment. Defic., 1963, 68, 404-408.
- _____. (ed.). Mental retardation. Chicago: Aldine, 1967.
- Benton, A. L. Psychological evaluation and differential diagnosis. In H. H. Stevens and R. Heber (eds.), Mental retardation. Chicago: University of Chicago Press, 1964.
- Bialer, Irvin. Conceptualization of success and failure in mentally retarded and normal children. Ann Arbor, Michigan: University Microfilms, 1960.
- Bigge, Morris L. Learning theories for teachers. New York: Harper and Row, 1964.
- Bigge, Morris L. and Maurice O. Hunt. Psychological foundations of learning. New York: Harper and Row, 1958.

- Blue, C. M. Performance of normal and retarded subjects on a paired-associates task. Amer. J. of Ment. Defic., 1963, 68, 228-234.
- Boslow, Harold and Kandel, Arthur. Psychiatric aspects of dangerous behavior: the retarded offender. Amer. J. of Psychiatry, 1965, 122(6), 646-652.
- Brown, Andrew and Hartman, A. A. A survey of the intelligence of Illinois prisoners. J. of Crim. Law and Crim., January-February, 1938, 28, 707-719.
- Brown, Bertram and Courtless, Thomas F. The mentally retarded offender. Submitted by the authors to the President's Commission on Law Enforcement and the Administration of Justice. Washington, D.C.: 1967.
- Bruner, Jerome S. Education as social invention. Saturday Review, 1966, 49, 7-72, 102-103.
- _____. The process of education. New York: Random House, Inc., 1963.
- Bruner, Jerome S., Goodnow, Jacqueline, and Austin, George A. A study of thinking. New York: Wiley and Sons Publishers, 1956.
- Bullock, Henry A. Urban homicide in theory and fact. J. of Crim. Law, Crim. and Police Sci., January-February, 1955, 45, 565-575.
- Clinard, Marshall B. Sociology of deviant behavior. New York: Holt, Rinehart, and Winston, Inc., 1968.
- Culbertson, E., Guthrie, G. M., Butler, A. J., and Gorlow, L. Patterns of hostility among the retarded. Amer. J. of Ment. Defic., 1961, 66, 3, 421-427.
- Denny, M. R. Research in learning and performance. In H. A. Stevens and R. Heber (eds.), Mental retardation. Chicago: University of Chicago Press, 1964.
- Dewey, John. Democracy and education. New York: Macmillan & Co., 1916.
- _____. Experience and education. New York: Macmillan and Co., 1938.
- Dugdale, Richard L. The jukes: A study in crime, pauperism, and heredity. (4th ed.) New York: Putnam, 1910.

- Feldman, H. A. Congenital human plasmosis. Ann. N. Y. Acad. Sci., 1956, 64, 180.
- Forbes, N. Maternal phenylketonuria. Nursing outlook. Cited by Alfred Baumeister (ed.), Mental retardation. Chicago: Aldine, 1967.
- Fox, Vernon. Intelligence, race, and age as selective factors in crime. J. of Crim. Law, Crim. and Police Sci., July-August, 1946, 37, 141-152.
- Frankel, Emil. One thousand murders. Proceedings of the American Prison Association, 1937.
- Gardner, W. I. Reactions of intellectually normal and retarded boys after experimentally induced failure: A social learning theory. Ann Arbor, Michigan: University Microfilms, 1958.
- Gillin, John L. The Wisconsin prisoner. Madison: University of Wisconsin Press, 1946.
- Giradeau, F. L. and Ellis, N. Rote verbal learning by normal and mentally retarded children. Amer. J. of Ment. Defic., 1964, 68, 525-532.
- Goddard, Henry H. Feeble-mindedness: Its cause and consequences. New York: Macmillan, 1923.
- _____. The Kallikak family. New York: Macmillan, 1912.
- Gold, E. M. A broad view of maternity care. Children, 1962, 9(8), 52-57.
- Gordon, S., O'Connor, N. and Tizard, J. Some effects of incentive on the performance of imbeciles. Brit. J. Psychol., 1954, 45, 277-287.
- Goring, Charles. The English convict: A statistical study. London: His Majesty's Stationery Office, 1913.
- Grant, J. R. Results of institutional treatment of juvenile mental defectives over a thirty year period. Canad. Med. Assn. J., 1956, 75, 918-921.
- Grigg, Austin. Criminal behavior of mentally retarded adults. Amer. J. of Ment. Defic., April, 1948, 52, 370-374.

- Harlan, Howard. Five hundred homicides. J. of Crim. Law and Crim., March-April, 1950, 40, 736-752.
- Hartzler, Ethel. A ten year survey of girls discharged from Laurelton State Village. Amer. J. of Ment. Defic., 1953, 57, 512-517.
- Hawley, John. Personal communication to the author. February 1, 1970.
- Hays, William L. Statistics. New York: Holt, Rinehart and Winston, 1963.
- Heber, R. The educable mentally retarded. In S. Kirk and B. Weiner (eds.), Behavioral research on exceptional children. Washington: Council for Exceptional Children, 1963.
- Howe, C. E. A comparison of motor skills of the mentally retarded and normal children. Except. Child, 1959, 25, 352-354.
- Hsu, Tse-Chi. An empirical investigation of the effect of the length of the score scale on the significance level of the F-Test. Unpublished Ph.D. dissertation, University of Iowa, 1968.
- Hsu, Tse-Chi and Feldt, Leonard S. The effects of limitation on the number of criterion score values on the significance level of the F-Test. American Educational Res. J., November, 1969, 6(4), 515-528.
- Hutchins, Robert M. Are we educating children for the wrong future? Saturday Review, September 11, 1965, 48, 66-67, 83.
- Jacks, William L. A comparison of releases and recidivists from June 1, 1946 to May 31, 1961, December 20, 1961; A 15 year study of convicted parole violators returned to prison, February 8, 1962; Trends of sex offenders over fifteen years, February 7, 1963. Harrisburg, Penn.: Pennsylvania Board of Parole.
- Johnson, G. O. Psychological characteristics of the mentally retarded. In W. Cruickshank (ed.), Psychology of exceptional children and youth. New Jersey: Prentice-Hall, 1963.

- Kephart, Newell C. The slow learner in the classroom. Columbus, Ohio: Charles E. Merrill Books, Inc., 1960.
- Koch, R., Graliker, Betty, Bronston, W. and Fishler, K. Mental retardation in early childhood. Amer. J. of Dis. Child., 1965, 109, 243.
- Lance, W. D. Effects of meaningfulness and overlearning on retention in normal and retarded adolescents. Amer. J. of Ment. Defic., 1965, 70, 270-275.
- Lawler, W. Why recreation? In SREB Recreation Committee, Recreation for the mentally retarded: A handbook for ward personnel. Atlanta: Southern Regional Education Board, 1964.
- Lipman, R. S. Learning: Verbal, perceptual-motor, and classical conditioning. In N. R. Ellis (ed.), Handbook of mental deficiency. New York: McGraw-Hill, 1963.
- Lombroso, Cesare. Crime, its causes and remedies. Trans. by H. P. Horton. Boston: Little, Brown and Company, 1912.
- _____. L'uomo delinquente. Turin: Bocca, 1897.
- Mager, Robert F. Developing attitudes toward learning. Palo Alto: Fearon Publishers, 1968.
- McCarthy, James J. and McCarthy, Joan F. Learning disabilities. Boston: Allyn and Bacon, Inc., 1969.
- McKee, John. The Draper experiment, a programmed learning project. Paper presented to the first Annual Convention of the National Society for Programmed Instruction. San Antonio, Texas, March 29, 1963.
- Miller, M. B. Locus of control, learning climate, and climate shift in serial learning with mental retardates. Ann Arbor, Michigan: University Microfilms, 1958.
- Newman, Donald J. White collar crime. Law and Contemporary Probs., Autumn, 1958, 23, 735-753.
- Overs, Robert. Personal communication to the author. January 29, 1970.

- Peters, John M. How an inmate's expectancies affect his performance. Amer. J. of Correction, May-June, 1969, 31(3). (a)
- _____. Internal-external control, learning, and participation in occupational education. Adult Education Journal, 1969, 20(1), 23-43. (b)
- Prehm, Herbert J. Verbal learning research in mental retardation. Amer. J. of Ment. Defic., July, 1966, 7(1), 42-47.
- Rabin, H. M. The relationship of age, intelligence, sex, to motor proficiency. Amer. J. of Ment. Defic., 1957, 72, 803-808.
- Ross, Sheila A. Effects of intensive motor skills training programs on young educable mentally retarded children. Amer. J. of Ment. Defic., 1969, 73(6).
- Rotter, J. B., Seeman, M. and Liverant, S. Internal versus external control of reinforcements: A major variable in behavior theory. In N. F. Washburn (ed.), Decisions, values, and groups. London: Pergamon Press, 1962.
- Sarason, S. B. and Gladwin, T. Psychological and cultural problems in mental subnormality: A review of research. Amer. J. of Ment. Defic., 1958, 62, 1115-1307.
- Schiefelbusch, R. L. Language studies of mentally retarded children. Monograph Supplement No. 10, J. Sp. Hear. Dis., 1963.
- Schlanger, B. B. Analysis of speech defects among the institutionalized mentally retarded. J. Sp. Hear. Dis., 1957, 54, 5-8.
- _____. Speech examination of a group of institutionalized mentally handicapped children. J. Sp. Hear. Dis., 1953, 18, 339-349.
- Skinner, B. F. Science and human behavior. New York: Macmillan Co., 1953.
- Seeman, M. Alienation and social learning in a reformatory. Amer. Soc. Review, 1959, 24, 782-791.

- Spradlin, J. E. Task resumption phenomena in mentally retarded negro children. Abstracts of Peabody Studies in Mental Retardation, 1960.
- Steel, Robert G. and Torrie, James H. Principles and procedures of statistics. New York: McGraw-Hill Company, 1960.
- Sutherland, Edwin H. Mental deficiency and crime. In Kimball Young (ed.), Social attitudes. New York: Holt, Rinehart, and Winston, Inc., 1931.
- _____. White collar crime. New York: Dryden Press, 1949.
- Tarjan, G., Wright, S. W., Dingman, H. F. and Sabagh, G. The natural history of mental deficiency in a state hospital. II. Mentally deficient children admitted to a state hospital prior to their sixth birthday. Amer. J. Dis. Child., 1959, 98, 370-378.
- Tong, J. E. and McKay, G. W. A statistical follow-up of mental defectives of dangerous or violent propensities. Brit. J. of Del., 1959, 9, 276-284.
- Vergason, G. Retention in normal and retarded subjects as a function of original training. Amer. J. of Ment. Defic., 1964, 68, 623-630.
- Weerts, Dennis J., Healy, John K. and Overs, Robert. Avocational activities inventory. Milwaukee, Wisconsin: Milwaukee Media for Rehabilitation Research, 1968.
- Westwell, Arthur E. The defective delinquent. Paper delivered to the Seventy Fifth Annual Meeting of the American Association on Mental Deficiency, New York, May, 1951.
- Wolfgang, Marvin and Ferracuti, Franco. The subculture of violence: Towards an integrated theory in Criminology. London: Tavistock Publications, 1967.
- Wolfgang, Marvin and Strohm, Rolf B. The relationship between alcohol and criminal homicide. Quart. J. of Studies on Alcohol, 1956, 17, 411-425.
- Zeleny, Leslie D. Feeble-mindedness and criminal conduct. Amer. J. of Soc., January, 1938, 38, 564-578.

APPENDICES

APPENDIX A

TREATMENT II

TREATMENT II

Verbal Presentation

First I would like to tell you why we wanted you to attend this meeting, and to tell you a little bit about what we are looking into.

In any prison program about one half of the men get into the activities and use the facilities that are in prison. The other half do not. We know of course that not every man is going to try his hand at every program. First, even if he wanted to try everything that is offered he just wouldn't have enough time to do everything. Second, he might not be interested in some programs and activities. Third, as you know, there are some men who can't seem to stay out of trouble and they are not eligible for many of the programs. Fourth, and the thing we are interested in looking at, he might not know what goes on in a lot of places. We think a lot of men do not know what goes on in these programs because the "grapevine" doesn't have all of the information and doesn't always pass along all of the facts. The purpose of this meeting is to tell you about one of the programs which is here for use by you and every other man who wants to use it. This program is Hobbycraft.

You men were asked to come to this meeting because you are in that group of one half of all of the men who have not applied for any hobbycraft activity. If you are wondering, "Why, out of all of the men in Jackson was I picked," the answer is really quite simple. We put together a list of the names of all of the men who have not gone to hobbycraft and then just picked a number of men by chance. You were in that group that was picked by chance and that is part of the reason you are here. The other part of the reason you are here is so that we can tell you about the hobbycraft program. What you do with the information after we give it to you is entirely up to you. You may decide to think about it some more, you may decide it is a waste of time, or you may wish to ask for hobbycraft privileges. You won't be under any pressure to go, or not go for that matter. What you do with this information has no bearing on whether you are, or are not, paroled. Again, we just want to give you the information.

There are a lot of activities and programs in hobbycraft. Some men think you have to be real good with tools in order to do anything in hobbycraft but that isn't true. Some of the men have had very little experience or practice with tools before going into the program. If you are older than most of the men your age that won't hold you back. If your health isn't too good that won't keep you

out of the program either. Men go at their own pace in hobbycraft and they are just like you. So if you don't feel like going real fast you don't have to do so. If you want to apply for a hobbycraft card then, there is no reason why you shouldn't go right ahead and do so.

The purpose of hobbycraft is to help you improve yourself and to have some fun while doing it. A lot of men pick up a hobby that is fun and some men even use hobbycraft activities as a base for a job after their release. It is not the same as job training or work in the academic school. It is meant to complement or "agree" with those programs. There is another benefit from hobbycraft and that is the opportunity to display things that are made, one at a time, and to sell them to the public through the sales counter at the entrance outside.

One of the activities of hobbycraft is carpentry and woodwork. Men make all kinds of things such as lamps, bookends, game boards, and models. There are quite a few machines that men use in carpentry and woodwork. Some of them are: sanders, a drill press, grindstone, polisher, saws, joiners, lathes, routers, drills, mitre boxes, hand tools, nails and screws. Just from the list of equipment you can imagine the things that can be, and are made by men in this area.

Leathercraft is another activity in which a lot of men are interested. In leathercraft the men make all

kinds of things out of leather such as billfolds and purses. Equipment for this kind of work includes sewing machines, patterns, an airbrush, and almost every kind of leathermaking tool. There are helpers in the leathercraft section who help beginners with any problems they might have, and they also help some of the more experienced men when they are up against a tricky or difficult problem in working the leather.

There are other things in which men are interested. Some men do bead work. Others work with plastics and using that kind of material all kinds of things can be made. Some like weaving, and others like to try their hand at oil painting, miniature sculpturing, or jewelry making. Some men are interested in making different kinds of models, such as model ships, and they are a lot of fun.

Let me go over some of the things men can and do make in the hobbycraft shop again. In woodworking I mentioned lamps, bookends, and models but men also make such things as coffee tables, cedar chests, jewel boxes, picture frames, game boards for chess, checkers, and cribbage. Men also make canes and models of all types, plaques, novelties, and musical instruments such as guitars, banjos, ukeles, and mandolins. In leathercraft men also make, in addition to the handbags and purses I mentioned earlier, billfolds, briefcases, belts, slippers, key cases, comb cases, and eyeglass cases.

The men who are interested in weaving make pot holders, crocheted bags, scarfs, booties, and small sweaters for youngsters.

The men working with jewelry and shellcraft produce all types of earrings, broaches, and pendants. In plastics you can make music boxes, cigarette cases, and picture frames, just to mention a few items.

Those who take up painting and art work in oils, watercolors, pastels, crayons, charcoal, pen and ink, and pencil. Some very beautiful and professional or high quality paintings have come out of this section, and have sold for as high as \$150.00 at the sales counter. A lot of you may be thinking that you haven't got the talent to become a painter and sell your paintings. We don't know whether you do or not, and the goal of selling them is not always the most important thing to a person. Some people paint pictures because it gives them something to do or because it relaxes them and we think this is just as good a reason to paint as selling them.

If you are one of those people who are not interested in painting and also cannot drive a nail straight, there are still a lot of things you could do, as this list of activities shows. We try to offer something to everyone, within their ability and interest.

We don't want to leave you with the idea that you have to be good at any type of activity to go into

hobbycraft. Many people have talent that they just don't know about. If you could see some of the things men have made when they first start out in hobbycraft, then see what they have been able to make a few months after they started, you would probably be just as surprised as they are over what they can do.

Now a word about the cost of hobbycraft. Some of the activities have fairly expensive materials and some cost hardly anything. A lot of the cost depends on what the person buys in the way of materials. Some men come over and bring their raw materials with them. Wood that has been lying around and scrap materials they have gotten from friends. Others have bought most of the material they use through the Hobbycraft Shop. They have all kinds of catalogs from hobbycraft suppliers that have been approved by the state. Men go through the catalog and order what they want. They pay for the materials out of their accounts.

What a lot of the men have done is to start out with a rather inexpensive item which they send to the sales counter. They make a small profit and can take the money they make and buy a little more material and take on a little larger project. In this way they can make money, buy supplies, and get ahead in the process.

On items sent home there is no charge other than for the postage. When you sell something through the

sales counter there is a 15% charge which is deducted. The 15% goes into the General Benefit Fund which, as you know, is used for improving the facilities and equipment for all of the men.

Once in a while there is a man who has no money in his account, who has no family, and who has very little if any chance of getting any money to buy supplies for hobby-craft. If you are in that small group and wish to do something in hobbycraft, if the record shows that you probably won't receive any money, Mr. Pickering will talk with you and see if he can't get you started in some way. I believe most of you have heard of Mr. Pickering but for those of you who have not, he is in charge of the whole Hobbycraft program.

We hope that this information will give you a better idea of just what does on in the hobbycraft program. As I mentioned right at the beginning we just wanted to give you information about what goes on, and about some of the opportunities that are there for you. If you do not wish to try these things, that is entirely up to you, and you are under no pressure. If on the other hand you think you would like to give it a try, or look into it a little more, all you have to do is make an effort to get in on this program. If you are interested, here is what you should do:

1. Ask for a Yard Pass either in your Block or Assignment.
2. Go to Mr. Pickering at the Hobbycraft Center.
3. Tell Mr. Pickering what type of activity you are interested in and apply for a Hobbycraft Card.
4. Place any size order for materials.

You will remember that I mentioned in the beginning that we are interested in finding out why men do and do not use many of the facilities, and that we are trying to provide information to a small number of men who do not participate in programs. We would appreciate it if you would make up your mind by yourself as to what you wish to do with this information, and we ask that you do not talk about the information that has been given you after you leave here.

Thank you for listening to this information.

APPENDIX B

APPENDIX B.--Frequency of application for hobbycraft privileges of mentally retarded and non-mentally retarded inmates felons of the State Prison of Southern Michigan receiving no treatment, verbal information, and verbal information plus experience.

	<u>T₁</u>	<u>T₂</u>	<u>T₃</u>	
	Control Group	Verbal Information	Verbal Information and Experience	
Mentally Retarded	1	2	10	13
Non Mentally Retarded	0	5	6	11
Total	1	7	16	24

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03177 9808