The effects of environment on the self perception of the mentally retarded adult.

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THE EFFECTS OF ENVIRONMENT ON
THE SELF PERCEPTION OF THE MENTALLY RETARDED ADULT

A Thesis Presented
by
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Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of
MASTER OF SCIENCE
September 1983
Psychology
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ACKNOWLEDGEMENTS

It is very important that I thank the special people who made this possible; Drs. Marian MacDonald, Eric Fajardo and Tom Zane for all their support, ideas, suggestions and guidance through this "learning ordeal"; my parents, Jack and Millie and my sister Angie for their continued love, support and care packages; the staff and clients of the Occupational Training Center; the staff and clients of the Templeton Colony, especially Peter Cross who saved my spirit numerous times; Ruth and Ted, my R.A.'s for transcribing tapes, JoAnne for typing, and Millicent P. Scott for her valuable time and clinical expertise in scoring and coding the interviews; WAARC, especially Barbara and Fran who got me involved in this field in the first place and kept me enthusiastic; Becky for her graphics, illustrations, support, love and giving me tissues at all the right times; my grandfather, Dr. Ernest S. Patterson, who has lovingly nagged me to finish this for years; and all my friends and colleagues for their continued patience and support.
ABSTRACT
The Effects of Environment on the Self-Perception of the Mentally Retarded Adult
September 1983
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The deinstitutionalization movement has made a significant impact on the lives of mentally retarded people. Deinstitutionalization provides the necessary environmental changes for mentally retarded people who have been forced to spend their prior years in institutions. These environmental changes are widely regarded as having beneficial effects. However, little research has been done to assess whether the "community residence" is actually an environment of growth or even the environment of choice for the mentally retarded person. The purpose of this study was to explore the self-images of mentally retarded persons living in institutional and noninstitutional environments and attitudes toward retardation held by caretakers in those environments. It was expected that there would be some relationship between self-concept and current living environment, and that the relationship would be consistent with differences observed in caretaker attitudes. In Experiment One, 54 mentally retarded men living in one of three environments, with their family of origin (N=18), in a community residence (N=18), and in a state institution (N=18), were asked to respond to various measures of
self-concept. Experimental measures included adapted versions of the Tennessee Self-Concept Scale and the Nowicki-Strickland Internal-External Locus of Control Scale, along with a drawing selection task and a semi-structured interview. In Experiment Two, 100 caretakers, including parents, state institution staff, and staff who work with community residence people, completed a questionnaire on attitudes toward mentally retarded people. The findings, from both studies, indicated that while there were significant differences between the family and non-family (community residential and institutional) groups, the non-family groups did not differ from one another. This study suggests that despite deinstitutionalization's legal, ethical, philosophical, and behavioral advantages, its psychological impact may be less beneficial than would be desirable. It may be, then, that more supportive and transitional services are needed to help the deinstitutionalized retarded person change with his environment.
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CHAPTER I
INTRODUCTION

The 1977 Grossman definition of mental retardation, which is used by the American Association of Mental Deficiency, and the criteria for designating someone as mentally retarded in the Diagnostic and Statistical Manual of Mental Disorders - Third Edition (1980, p. 36-41) states that:

Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period.

General intellectual functioning is defined as the results obtained by assessment with one or more of the individually administered general intelligence tests developed for that purpose.

Significantly subaverage is defined as IQ more than two standard deviations below the mean for the test.

Adaptive behavior is defined as the effectiveness or degree with which an individual meets the standards of personal independence and social responsibility expected for age and cultural group.

Developmental period is defined as the period of time between birth and the 18th birthday.

(Grossman, 1977)

Along with these mutual criteria, the Diagnostic and Statistical Manual adds that classifying a case an instance of mental retardation requires the demonstration of a chronic biological course without remission; deficits or impairments in adaptive functioning; complications in functioning or the inability to function totally independently; and the need for some continuing supervision and financial support. The
Diagnostic and Statistical Manual also reports, on the basis of preliminary observations, that of those diagnosed as mentally retarded, 25% have biological abnormalities. These persons are equally distributed across socioeconomic groups. The remaining 75% of those persons diagnosed as mentally retarded, however, are not deficient because of biological cause (this does not mean that there is not organic damage); moreover, they have IQs of 50-70, come from lower socioeconomic status (SES) groups, and may be retarded due to psychosocial deprivation.

Mental retardation occurs in twice as many males as females. Depending on whose definition is used, about 1% of the population is diagnosed as mentally retarded. The 1962 President's Panel on Mental Retardation predicted that 4 out of every 1,000 people (or about 800,000 citizens) were mentally retarded. Studies from 1975 (Ingalls, 1978) estimated that 4 out of every 1,000 people have IQs under 70. Mercer (1973), in her study of 812 mentally retarded citizens, found that 7% were under 5 years old, 72% were 5-19 years old, and 21% were over 19 years old with between 40-50% (depending on definition) of this population in the lower SES groups.

According to the Diagnostic and Statistical Manual - III, there are four behavioral categories of mental retardation: mild (IQs 50-70); moderate (IQs 35-49); severe (IQs 20-34); and profound (IQs below 20). Unspecified (untestable) mental retardation and borderline intellectual functioning (IQs 71-84) are also included as diagnostic categories.

Deinstitutionalization in recent years has become more popular. It is frequently the mild or educable groups that may be affected by this
movement. Little is known about this group so this study looks at individuals in the mild or educable category of mental retardation, with approximate IQ scores from 50 to 70, mental ages between 1/2 and 3/4 of their chronological ages and high verbal functioning. This is an important group: approximately 80% of the mentally retarded population falls into this category which shows minimal sensory-motor impairment, academic skills at about the 4th to 6th grade level by late adolescence, and sometimes social and vocational skills adequate for minimum self support by adulthood. These persons may need guidance and assistance when under stress socially and economically, but for the most part they can function quite well with training in an appropriately structured environment (Diagnostic and Statistical Manual - III, 1980).

Despite this potential, mentally retarded individuals have long been considered almost "subhuman", as if they had no real emotions and feelings. This expectation holds even for their own handicap: mentally retarded individuals are typically thought to feel no significant aspect around their own retardation. It is quite at odds with the observations of Safilos-Rothschild (1970), however, who discussed a number of feelings associated with "handicap" that could be applicable to mentally retarded individuals. These feelings included denial of handicap (retardation), defeat associated with accepting the handicap (retardation), through adaptation and "easy" acceptance of the handicap (retardation) with an underlying element of hostility. While empirically verified factors about the existence of these feelings are unavailable, most importantly, very little is known about which
feelings and emotional characteristics are the most common and adaptive for a mentally retarded person.

Nirje (1969), in his classic work on normalization, noted the emotional difficulties of retardation:

For the mentally retarded, growing from adolescence into adulthood is often a longer, more painful and more uncertain process than for others. Their image of themselves often becomes warped and confused. They are not always accepted, treated and respected as adults. Here, the attitudes expressed toward them by others are of utmost importance, whether these others are parents, relatives, or institutional personnel.

(p. 183)

Based on Nirje's (1969) observations regarding the possibility of the onset of emotional disorders, it appears that study, and perhaps psychological intervention may be warranted. Cobb (1966) comes to similar conclusions; he points out that becoming an adult for a mentally retarded person also means coming to terms with his own awareness of being mentally retarded. The mentally retarded adult is placed in a confusing and frustrating situation. The self image of the mentally retarded person, which can be based on whether the individual must deny or can accept the stigma of the "retarded" label, is important in the individual's definition of self as an adult. Internally there are many difficulties (positive self image, ability to express and experience emotions appropriately, appropriate social skills) in the formation of a "comfortable" psychological well being for both a normal and retarded individual. These internal pressures combined with the external pressures of society (family, community,
decreasing social service funding, discrimination) result in a more emotionally difficult developmental process for the developmentally disabled individual, especially in the development of self-identity and self-esteem. Theoretically then, these individuals should be receiving more psychological services than the "normally" emerging adult.

The environment in which the adult lives contributes to the external and internal difficulties that he may experience. It becomes an inescapable cycle: the mentally retarded adult living with his family may not achieve "full normalization" because he is not an independently functioning member of society and does not "leave home" as part of the normal developmental stage; the mentally retarded institutionalized adult cannot experience full normalization to the segregated and restrictive environment in which he lives; and the community residence adult has the opportunity to experience "full normalization", but is unable to experience it because society cannot accept him as a "normal" adult. If the environment has been normalized, but the individual still feels 'deviant', then the normalization process is still not catering to all aspects of a "normal" life.

In recent years, there has been an increasing emphasis on deinstitutionalization and normalization with the developmentally disabled population, but very few studies have looked at personality adjustment variables. The pioneers in this field, G. Guthrie, A. Butler, and C. Gorlow, in 1961, looked at patterns of self-attitude of retarded people. They reported responses of institutionalized and noninstitutionalized
mentally retarded females to the Laurelton Self Attitude Scale. There were three positive themes: "There's nothing wrong with me", "I do as well as others do", and "I don't give anyone trouble", and four themes of failure: "I act hatefully", "I am shy and weak", "I am useless", and "Nobody likes me". They believed that different self-attitude patterns should be assessed for planning treatment programs. In subsequent analyses of the data collected from the female institutionalized and noninstitutionalized retarded subjects on the Laurelton Self Attitude Scale, Guthrie, Butler and Gorlow (1963a) found the institutionalized group had worse tempers, more inappropriate behaviors, more negative self attitudes, and were believed to deny anger more while noninstitutionalized subjects were healthier, happier and more responsive to society. A later study (Gorlow, Butler & Guthrie, 1963b) found a small but significant correlation between self-acceptance and intelligence when higher IQ was positively correlated with higher positive self-attitude as measured by the Laurelton Self Attitude Scale. This study also suggested that the longer the mentally retarded individual had been away from her parents, the more negative was her self-attitude.

To assess self-attitude and ideal selves, Guthrie, Butler, Gorlow and White (1964) looked at nonverbal expression of self-attitudes with teenage mentally retarded females. Each subject was shown pairs of photographs and asked which one was "more like them". Factor analysis showed that positive self-attitudes were organized around themes of popularity, acceptability to the opposite sex, compliance, and friendliness with peers. Negative attitudes were organized around
themes of being ignored, being actively rejected, being dominant, giving but not receiving, and being angry with peers. Self-ideals centered around self-confidence, popularity, compliance, receiving help, being helpful, being loyal, being assertive, being aware of others, and avoiding involvement with peers. The investigators concluded from their data that mentally retarded subjects protect themselves more from painful rejection due to past abuse, rather than seek out opportunities to gain achievement.

Self-concept in the mentally retarded has been assessed by many other researchers, but their results have been generally inconclusive. Harrison and Budoff (1972) continued work with the Laurelton Self Attitude Scale with young educable mentally retarded teenagers in institutions and public schools. They found that institutionalized children were generally more maladjusted, overly attached to family and family fantasies, more depressed and with less control of interpersonal encounters. Children who entered special education classes at a later age, after having been in regular classes, had lower opinions of self, more depression, more fear of rejection by elders, and were less optimistic than comparison children who had been in special education classes since earlier ages. Across all groups, lower IQ was more associated with denial than was higher IQ.

Shipe (1971) looked at impulsivity and locus of control as predictors of achievement and adjustment in educable mentally retarded youth in both community and institutional settings. Using the Bialer Children's Locus of Control Scale and Intellectual Achievement Responsibility
Questionnaire, she found the more internal the boys were in the community vocational setting (as measured by locus of control), the higher their academic and shop achievement tended to be and the better their personal and social adjustment and the lower their impulsivity tended to be as well.

Mayer (1966) also looked at early and later special class placements in the self-concept of mentally retarded children. Using the Children's Self Concept Scale, he was unable to demonstrate that early-special class placement children develop more positive self-concepts than do later special class placement children, but he did conclude that retarded children do not have negative self-concepts. Collins and Burger (1970) could not accept this finding and tested normal adolescent students and educable mentally retarded adolescent students in special classes using the Tennessee Self Concept Scale. Significant differences were found between normal and retarded adolescents on the self-criticism and the social self scale. On the basis of these data, Collins and Burger (1970) concluded, contrary to Mayer (1966) that educable mentally retarded children did have negative self-concept and low self-esteem.

Ringness (1961) assessed self-concept of children of low, average and high intelligence and found that children of high intelligence had the highest self-concepts, low intelligence children in special education classes had the next highest levels, and average children in regular classes had the lowest self-concept scores in teacher and peer ratings of achievement. He noted that special education children had the
greatest variance between estimate of ability and actual success, and concluded that mentally retarded children tend to be overconfident. Piers and Harris (1964) offer an opposing view from Ringness, concluding that institutionalized mentally retarded children had lower self-concept than any other age nonretarded public school group. This study failed to take into account the differences between institutionalized and noninstitutionalized mentally retarded children on self-concept measures, so the conclusion of the study can say that only institutionalized mentally retarded children differ from noninstitutionalized normal children. In a more recent study, Zisfein and Rosen (1974) looked at four self-concept measures with day and residential students at an institution for the mentally retarded. They concluded that self-concept could be measured in these persons and that it varies independently of IQ.

Self-concept has also been measured as the discrepancy between "ideal self" and "real self" image. McAfee and Cleland (1975) looked at 30 adjusted and 30 maladjusted educable mentally retarded males (ages 14 to 22) using an adapted Bills, Vance and McLean Index of Adjustment Value and attendant ratings. They found that discrepancy scores between self-concept and ideal self were not valid indications of psychological adjustment. Higher IQ subjects had large discrepancies and awareness of their capacities and those of others, while retarded males tended to use normal males as their image of ideal self.
Zigler, Balla and Watson (1972) looked at self-image disparity with institutionalized and noninstitutionalized mentally retarded and normal children that were matched on chronological or mental age. They found that older normal children had the greatest image disparity between real and ideal self, with lower real than ideal self-images. Mentally retarded children, overall, had a relatively small real and ideal self-disparity with a lower real self-image. However, institutionalized mentally retarded children had a greater image disparity as well as lower real and ideal self-images than did noninstitutionalized mentally retarded children. The authors concluded from these data that image disparity is related to normal developmental growth. Continuing with this research, Leahy, Balla and Zigler (1982) found that a more positive real self-image on picture and checklist tasks was related to a higher IQ and a higher mental age on the checklist task. By using cognitive developmental self image measures, they concluded from their data that self-image is not only a function of cognitive level, but also of stigmatized status due to lower self-evaluations and lower standard for the self. All of these studies have examined various aspects of self concept in relation to retardation. Only Leahy, Balla and Zigler (1982), however, have implicated stigma as a factor in the self-concept of a mentally retarded person.

Self-concept assessment has been done successfully in normal populations. Since mentally retarded persons do not fit the "normal" criteria, however, it is important to assess directly what it is that actually contributes to self-concept in mentally retarded populations. The term
"mentally retarded" itself has negative connotations; it is associated with images of "subhumans", "deviants", "crazy persons" and "morons". Although people in general often refer to themselves with labels (for example, "I am young", "I am a student", "I am black", "I am female") mentally retarded people are first labelled with the negative term "retarded" and then labelled with less offensive attributes. Labels with negative connotations, if incorporated by the labelled person, could be expected to have serious effects on an individual's self-esteem. Research has shown (Edgerton, 1967; Edgerton and Bercovici, 1976; and Heshius, 1976) that in studies of people labelled "mentally retarded", most subjects insist that they are not retarded and outwardly reject the negative label.

Carp (1960) viewed the negative self-concept of the individual as related to feelings of being degraded. As a result of being degraded and not treated as a human being, Carp (1960) hypothesized that the mentally retarded person would become antisocial and aggressive.

Edgerton and Sabagh (1962) looked at mentally retarded individuals entering the institution and found two prehospital extremes associated with the label of mental retardation: either the individual thinks of himself as mentally retarded if significant others have reinforced the definition and accepts the label, although it is humiliating, or the individual never accepts the definition due to his family protecting him from "being retarded". The self is aggrandized when hospitalized, because the individual must now compare himself to more severely impaired patients, must have a peer group entirely composed of other mentally
retarded patients, and must enter a relationship with paid caretakers where he is rewarded for behaving for them. This may result in bizarre behavior, lying about higher intelligence, pretending to be staff, which would be needed for him to "pass" on the "outside" as "normal". Psychiatrically, it may be better for the patient to be realistic and not deny his retardation, but in his day-to-day interactions with normals outside, accepting the retardation could be harmful to his self-esteem. Birenbaum and Seiffer (1976) stated that the way for a high level, mildly retarded adult to maintain a sense of self was to deny association and identification with those less able who could not care for themselves (including physically disabled). Higher functioning retarded adults had a belief that contact with severe or profound mentally retarded persons might contaminate their self. Bogdan (1980), in his intensive interviews with two retarded subjects, agreed with the finding that mildly retarded people use the term mentally retarded to refer to lower IQ individuals, physically impaired people, and people who cannot communicate verbally. Because mildly retarded-educable mentally retarded persons do not fit the above mentioned criteria, they will not accept the label of mentally retarded. In continuing the study of how mentally retarded persons deal with their retardation stigma, Edgerton (1967) looked at ex-institutionalized patients who were living in the community. The phenomena of "passing" (not associating with other ex-residents, denying they were ever hospitalized, pretending they are "normal") and "denial" (noticing that they are not as competent as "normals" but denying their retar-
dation and blaming their lesser competence on wrongly having been institutionalized while making excuses for their hospitalization such as "My family was having problems", "I was sick a lot as a kid", were very important in the lives of the deinstitutionalized persons. Edgerton notes the paradox that the deinstitutionalized person needs to "pass" and deny, but also must depend on normals for help. These people usually fail to pass in society but are often aided by "normal" people who know that they are retarded but help them to try and pass.

Twelve years later, Edgerton and Bercovici (1976) reinterviewed the discharged deinstitutionalized persons from their earlier study and found their concern for passing and denial was no longer important. They were more concerned with day-to-day needs than with stigma.

Recently, Heshius (1981), in a participant observation study of mentally retarded people in a community residence, found that mentally retarded individuals are in a "double bind" about accepting the "mentally retarded label"; if they accept it, they are not normal so they must be diviant, but if they do not accept it and really are normal, they could not accept their living conditions and status. They are able to rationalize why they must live in a community residence using reasons similar to Edgerton's (1967) subjects' reasons for hospitalization (family problems, illness, or wanting to be near friends).

Koegel and Edgerton (1982) look at perception of handicap among 50 mildly retarded black adults (X age = 25, X IQ = 59) that lived in group homes, with relatives, or in independent living programs. Thirty-three percent referred to themselves as "slow" or slow learners;
4% described themselves as mentally handicapped, 11% used the general description of "handicapped", and 9% indicated indirectly their limitations. Thirty-eight percent did not admit to any intellectual disability. Most who denied or avoided the label provided clues (i.e., participation in special school, Special Olympics, body language) that they did not really see themselves as normal. Twenty-nine percent of those who first denied the idea of being handicapped eventually identified themselves as being handicapped.

Although denial of the label of mental retardation throughout most of the studies is evident, Gan, Tymchuk and Nishihara (1977) found that mildly retarded persons had accurate information about retardation, had a realistic attitude toward their needs and abilities; and advocated community integration of the retarded. They used a questionnaire in their study and found on it that mentally retarded subjects were undecided in responding to questions about the personality of mentally retarded persons. This inability to derive a decisive answer to personality questions in their study corresponds to professionals' difficulty in general with measuring retarded persons' personalities. Despite the difficulties, however, it is important that self-concept and related personality variables can be accurately measured and that the variables measured encompass the difficult stigma that is a significant part of a mentally retarded person's personality.

It is also important to assess the services available to mentally retarded persons that could be beneficial or harmful to the person's self image. Institutionalization can be a devastating experience to a
mentally retarded person as noted by Goffman (1958) who believes that people are stripped of their self concept during institutionalization. Unfortunately, it also appears to be the case that deinstitutionalization is not without its problems. Goffman and Harris (1978) studied "transition shock" and culture shock systems of anxieties, hostilities, and depression in prisoners, Peace Corp volunteers, divorced persons and foreign students who totally changed to new environments. They noted transition anxieties including anger, hostility, a desire to "go back to the good old days", low levels of tolerance for minor pains, problems with eating and sleeping, and a despair of ever "fitting in" (Novak, 1981). Goffman and Harris (1978) then compared the symptoms found in the nonhandicapped population to deinstitutionalized retarded persons. They, too, are subject to the same "transition shock" of severe depression from the loss of a "family equivalent", emotional ties and a change in autonomy habits. Unless the new environment is sensitive to these psychological variables, the effects of these variables may be neglected. Cohen, Conroy, Frazer, Snelbecker and Sprent (1977) found stress resulting from transfers from one institution to another to be especially severe in higher functioning clients who showed lower functioning and withdrawal connected to feelings such as confusion and resentment regarding helplessness and anxiety about the future. The psychological aspects of "transition shock" and the need for transitional programming support and follow-up should all be assessed with each individual involved in the deinstitutionalization process.
In order to understand the difficulties that are involved in the mentally retarded person's formation of a self image, it is imperative that the environment be considered a contributing variable. Lambert (1976) looked at mentally retarded adults living in different environments and found some differences between them. Mentally retarded adults living with both parents were pleasant, mobile, had a higher level of integration at home and with others, had average vocational abilities, and were less self-sufficient. Those adults living with one parent had higher levels of integration, had less pleasing appearances, lower degree of self sufficiency and mobility, and less vocational abilities. Mentally retarded adults living in institutional settings showed little outside mobility, little interaction or integration, and were not self-sufficient. Those adults living in group situations behaved fairly much in accordance with their capacities and had the greatest self-sufficiency. Lambert's findings are consistent with the normalization movement to place mentally retarded persons in a community residence setting, but one must consider that community residential facilities vary greatly. Community residences may be homes for as few as two or as many as 100 adults or children. A typical residence has six to eight residents. Thirty-five percent of community residence clients come from institutions, 32.4% are from natural homes, 24.3% are from other community placements (nursing homes, foster families), and 8.3% are from unspecified sources according to a recent survey by Bruinihks, Hauber and Kudla (1979). Fifty-five percent are male, 45% are female and most are in the 16-30 age range. According to the
AAMD levels of functioning for classification, in 1973 community residents were: 2.5% profound; 17% severe; 28% moderate; 30% mild, and 23% nonretarded. Community residential facilities include apartment buildings, former hotels, farm houses, town houses, ranches, convents, and old larger city houses (Baker et al., 1974).

In conclusion, mentally retarded adults living in an institution may have missed much of the love and affection that they might have received if they had lived with their families, although for many they might actually have received more positive attention from concerned staff. Mentally retarded adults living with their families have the natural advantages of love, support and a more normal upbringing than do institutionalized adults. They may begin to stagnate if they are not allowed to leave home and continue their natural emotional and social developmental process. Parents who have worked hard to raise their mentally retarded children may be overprotective and unable to allow the child to develop into an adult. Mentally retarded adults in community residences are in the "most normalized, least restrictive of the three environments." They have the greatest opportunities for independence and growth. Because of the increased opportunities, however, they also have more opportunities for failure if their residence is an inadequately supported system. Without the support of training, psychological interventions, social systems and programs specifically designed to aid the mentally retarded adult after his transition from the institution, the expected growth due to the normalization process will be severely stunted.
Are mentally retarded people who live in community residences really happier than those who live with their families or in state institutions as deinstitutionalization might suggest? Do these deinstitutionalized persons have a more positive self-image than institutionalized persons and are they able to accept the societal label of "mentally retarded" in their self-identity? The purpose of this study is to demonstrate that there are no differences in the self-images of institutionalized and deinstitutionalized mentally retarded persons, although the deinstitutionalization movement implies that all aspects of life should inherently be improved by deinstitutionalization.

Environmental influences are extremely important to the formation of one's self-concept so that success must occur within the individual and his environment.
CHAPTER II
EXPERIMENT ONE

Method

Subjects. Fifty-four mentally retarded men served as subjects in this study; they were selected to sample three separate groups. The groups, distinguished by living arrangements, were: mentally retarded men currently living with members of their own family (N=18); mentally retarded men currently living at a state institution (N=18); and, mentally retarded men currently living in an established group home or supervised apartment (N=18). There were slight differences in the subject recruitment procedures used for each group. For the sample representing mentally retarded men living with members of their own family, potential subjects were identified by counselors at an occupational training sheltered workshop. These potential subjects were contacted by the experimenter and invited to volunteer for a study of "men at the workshop". The final sample of 18 volunteers for this group represents 75% of the persons originally invited to participate. The remaining 25% was not included either because of their measured IQ scores being too high to classify them as mentally retarded (N=5, IQs >70) or because they declined the invitation to participate (N=1).

The sample representing men currently living in a state institution was drawn from a state certified institution for retarded men in Massachusetts. Potential subjects were identified by the principal psychologist at the state institution and were contacted by the experimenter and
invited to volunteer for a study of "men at the state school". The final sample of 18 subjects represents 85% of the persons originally invited to participate. Three potential subjects for this group were not included either because their measured IQ score was above the level ordinarily regarded as indexing mental retardation (N=2, >70) or because they expressed an unwillingness to participate (N=1).

The sample representing men currently living in an established group home or supervised apartment was drawn from the same sheltered workshop as was the family living group sample. Potential subjects were identified by counselors at the workshop and were invited to volunteer for a study of "men at the workshop". The final sample of 18 represents 75% of the persons originally invited to participate. Six potential subjects for this group were not included either because of having IQ scores over 70 (N=2), expressing an unwillingness to participate (N=1), or failing one of the subject selection criteria specified below.

Across groups all subjects met the following selection criteria, each of which was included to reduce heterogeneity on potentially confounding variables: 1) Between the ages of 20 and 50 years; 2) Recorded IQ score of between 50 and 70; 3) Residence in current living environment for more than one year; 4) Earned a weekly paycheck; 5) Served as his own legal guardian (to allow each individual the option to participate willingly and sign consent forms); 6) Displayed good verbal and conversational skills; 7) Expressed a willingness to participate in the experiment for one hour during free or work time; 8) Displayed no major secondary disabilities (physical impairments, sight or hearing impair-
ments, or severe psychiatric difficulties; and 9) Responded during the experiment session in a way suggesting comprehension of the verbal test content.

**Pre-experimental procedures.** Prior to initiating the research, the interviewer spent at least two weeks in each of the settings meeting formally and informally with staff and potential subjects. This pre-experimental contact proved to be quite important, for during subject recruitment, conversations between subjects was the most common and effective recruitment method: after participating, each subject would report to his friends that he had spoken with the interviewer and that when asked to volunteer they should also participate.

Pilot testing was done with two subjects from both community residences and family settings. Institutional subjects were not available for pilot testing. This pilot testing was conducted because the experimenter was concerned that the experiment was too long and that subjects would have difficulties comprehending some of the questions. As a result of the testing, the procedure was shortened as well as refined: (1) a "Draw-a-Person" section was eliminated due to time and the lack of evidence of experimental utility of this task and (2) two questions from the Tennessee Self-Concept Scale and three questions from the Nowicki-Strickland Locus of Control Scale were eliminated, both because of poor subject comprehension of item content.
Procedure. The experimenter, a female psychology doctoral student, did all of the interviewing. Interviews were conducted individually in private rooms located on-site in all of the settings. For the first few minutes only of each session, a third party, typically a staff person, was present to witness the signing of consent forms.

At the beginning of each session, the subject was told that the experimenter would be asking him questions about himself and his life and that he did not have to answer any questions that he did not want to answer. The experimenter then verbally explained confidentiality and the procedures and gave each subject three release forms. These forms were to be signed after the experimenter read them aloud and asked the subject if he had any questions (see Appendix A). They documented consent: 1) to participate in the study; 2) to give permission to audio-tape record the interview part of the session, and 3) to give access to program records to validate reported dates and locations through historical records. No subject refused to sign any of the consent forms.

Subjects were then given the Slosson Intelligence Test (Slosson, 1963), described in more detail below, which was scored immediately, prior to further testing. Those who scored above (N=9) or below (N=1) the selection cutoffs established for this criterion (50 ≤ IQ ≤ 70) were thanked for their time and excused from further participation. Following the administration of the Slosson Test, subjects meeting the IQ range criterion were asked a series of true/false questions, also described in more detail below, to test for comprehension
of test verbal contents. Subjects who answered fewer than 5 of these questions correctly (N=1) were also excused from further participation.

With all remaining subjects, the experimenter then collected a number of measures described in detail below. Each measure was designed to tap self-concept and included: 18 questions from the Tennessee Self-Concept Scale (Fitts, 1965); pairs of drawings representing concepts selected from the Evaluation Scale of Osgood's Semantic Differential Technique (Osgood, Suci, & Tannenbaum, 1957); 16 questions from the Nowicki-Strickland Locus of Control Scale (Nowicki & Strickland, 1973); and bi-polar adjective word pairs corresponding to the concept pairs depicted in the drawings. After the administration of these four self-concept measures, the objective part of the session ended and the tape recorder was turned on for the interview portion. The experimenter then conducted a semi-structured interview which included a set of predetermined questions, followed, when appropriate, by individual prompts.

Following the interview, each subject was thanked for his time, given a thank you pen, and given the opportunity to ask questions or chat before returning to work.

Experimental measures. Several measures were used in this work. For each, in the paragraphs below, the measure will be named, information on its psychometic properties will be provided, and procedures for its administration and scoring will be described.

The Slosson Intelligence Test (Slosson, 1963), based in part upon the Stanford-Binet (L-M) Intelligence Scale, Third Revision (Terman &
Merrill, 1973) was used as an initial screening assessment device (Appendix B). The Slosson's reported test-retest reliability coefficient is quite high: .97 over a two month interval (N=139). The 1961 version of the Slosson yielded concurrent validity coefficients against its own original criterion, the Stanford-Binet, ranging between .90 and .98 for each tested age level. In 1981, the Slosson's most usual validation criterion, the Stanford-Binet, was renormed; as a result, Stanford-Binet scaled IQ scores became markedly different. However, because the less frequently used Mental Age (MA) from the Stanford-Binet retained a high correlation with the Slosson, even after the Stanford-Binet renorming ( r = .979), Mental Age scores from the Binet are now used to validate the Slosson. The average raw score difference between the Slosson and the Mental Age from the revised Stanford-Binet L-M is 5.0. Moreover, the average raw score difference between the Slosson and scores derived from the Weschler Adult Intelligence Scale is 3.3. These data sets strongly support the validity of using the Slosson as a valid and reliable abbreviated measure for the construct of intelligence.

With the Slosson, the subject is asked questions, such as ...
"What is paper made of?", "What does scarce mean?", "How many days in a year?", beginning at approximately the chronological age level of 7.6 (MA of 47 for an adult). If he is incapable of answering questions at this level, the experimenter asks questions that are at chronologically lower levels until the subject is able to answer 10 consecutive questions correctly. The Slosson Mental Age is derived by adding the
basal age (the last age level before the first error) to all additional months (additional answers correct until the subject misses 10 consecutive items) after the number of additional months has been multiplied by 3 (the credit given for testees over 16 years old). The subject's chronological age (CA) is divided into the total number of months correct, MA, and the result is multiplied by 100 (see Appendix B). The Slosson has a maximum CA of 16 years. Since all subjects in this study were over 16 years of age, the maximum age of 16, or 162 months, was used for this IQ computation.

The Verbal Content Comprehension Measure (Honesty Scale), which was the second screening measure used in this study, included seven mildly derogatory statements from the Tennessee Self-Concept's ten item Self-Criticism Scale. These seven items, which are items people generally regard as being true of themselves, were each presented twice. They were presented once in a positively-worded fashion and once in a negatively-worded fashion. For example, "I don't always tell the truth," and "I always tell the truth." The seven item pairs were arranged, then, so that only one statement of each pair could be true. Subjects who answered true for both of the statements in the pair were given a score of 0 on that pair, while subjects who answered true for one and false for the other were given a comprehension score of 1. A cutoff score was established as demonstrating adequate verbal content comprehension and minimum distortion by the response set of acquiescence. Subjects who scored below 5 were not used for the study. This measure is presented in Table 1.
Table 1

Verbal Content Comprehension (Honesty) Measure Derived from the Tennessee Self-Concept Scale.

<table>
<thead>
<tr>
<th>Can you tell me if each sentence is true or false?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I don't always tell the truth</td>
</tr>
<tr>
<td>I always tell the truth</td>
</tr>
<tr>
<td>2. Once in a while I think of things too bad to talk about</td>
</tr>
<tr>
<td>I never think of bad things</td>
</tr>
<tr>
<td>3. I get angry sometimes</td>
</tr>
<tr>
<td>I never get angry</td>
</tr>
<tr>
<td>4. I do not like everyone that I know</td>
</tr>
<tr>
<td>I like everyone that I know</td>
</tr>
<tr>
<td>5. I gossip a little at times</td>
</tr>
<tr>
<td>I never gossip</td>
</tr>
<tr>
<td>6. At times I feel like swearing</td>
</tr>
<tr>
<td>I never feel like swearing</td>
</tr>
<tr>
<td>7. Once in a while I put off until tomorrow what I ought to do today</td>
</tr>
<tr>
<td>I do things as soon as I can</td>
</tr>
</tbody>
</table>

The third measure, and the first designed to tap self-concept, consisted of 25 items selected from two of the subscales in the Tennessee Self-Concept Scale (Fitts, 1965). The original Tennessee Self-Concept Scale, which was the parent scale for the measure used in this study, is composed of 100 self-descriptive statements to which subjects respond along a Likert-type 5-point scale, indicating how strongly they agree or disagree that individual statements are descriptive of themselves. Pilot data for the present work indicated that subjects had difficulties comprehending the response format of the standard
version; as a result, a slightly modified response format was used. The revision involved offering response options of "all of the time wrong"; "Most of the time right"; and "All of the time right", rather than standard response options ranging from "completely true" to "completely false." Two subscales were selected as being of special relevance in the present work: The Negative Self Identity Scale and the Positive Self Identity Scale. Both are described in the test manual as tapping most centrally what is ordinarily defined as self concept. On the basis of judged item content comprehensibility, ten items were selected from the 15 of the Positive Self Identity Scale. These 18 items were used as the "Self Identity" measure on this research; they are identified in Table 2. Evidence suggests satisfactory reliability for this measure: with the original subscales, reliability over a two-week interval for the Self Criticism Scale was .75 and for the Self Identity Scale was between .70 and .92 with a sample of 60 college students.

The "Self Identity Measure" then, consisted of 18 statements drawn from the Tennessee Self Concept Scale with a 5-point modified Likert-type scale response option format. As is true with the original Tennessee Self Concept Negative and Positive Identity Scales, 10 of the included 18 items were revised. Responses were scored from 1 to 5, according to standard Tennessee Self Concept scoring procedures, and summed across items. Total scores could range, then, from 18 to 90, with higher scores reflecting a more positive self identity.
Table 2
Self-Identity Measure Derived from the Tennessee Self-Concept Scale.

1. I am an attractive person
2. I consider myself a sloppy person
3. I am an honest person
4. I am a bad person
5. I am a cheerful person
6. I am a calm and easy going person
7. I am a nobody
8. My friends have no confidence in me
9. I am a friendly person
10. I like to look nice and neat all the time
11. I am a sick person
12. I have a lot of self control
13. I am a hateful person
14. I am not very loved by my family
15. I feel that my family doesn't trust me
16. I am popular with women
17. I am mad at the whole world
18. I am hard to be friendly with
Responses were scored by two undergraduate research assistants. Their scoring reliability was evaluated by having each scorer independently rescore 25% of the total number of tests scored by the other assistant (14 tests each). The number of total scores that agreed perfectly (25) was divided by the number of rescored tests (28) and multiplied by 100 yielding a coefficient of agreement of 89%. Discrepancies were resolved by a third independent rating, yielding a final coefficient of agreement of 96%.

The second measure included to tap self-concept relied minimally on verbal content. It consisted of six pairs of drawings with each pair depicting men of opposite personal characteristics. The depicted characteristics were chosen to tap the Evaluative dimension of cognitive judgment identified in Osgood's work using his Semantic Differential Technique. Characteristics represented in the drawings are fat:thin, young:old; and happy:sad. They were selected because of their frequent loading on the Evaluative dimension (Osgood, Suci & Tannenbaum, 1957) and because they could be easily translated into visual stimuli. This measure was included for two reasons. First, it was intended to be a converging measure of self-concept and secondly, it was intended as a validation check on responses expressed via word answers to the same pairs of personal characteristics when those characteristics were given in the form of word-pair choices (see description of the next measure presented below).

The drawing pairs were prepared by a professional artist to depict bipolar opposite personal characteristics (see Appendix C). Each
subject was shown each drawing pair and was instructed to choose which of each paired drawing "looked more like him." The body image sets were designed to represent the following characteristics: fat:thin; young:old; happy:sad; retarded:nonretarded; and alone:with friends. During pilot testing, the representational accuracy of these drawings was checked by asking each pilot subject to tell what each man was before selecting which one looked more like himself. All subjects were able to identify and name the appropriate personal characteristic for each man in each instance in this fourth measure.

The fifth measure was a cross-method consistency check on responses given to the personal characteristics drawings. This measure, like the drawing pairs one, was included for two reasons: it was designed to provide an additional measure of self-concept and it was designed to tap verbal comprehension and honesty. Toward the latter end, subjects who gave equivalent responses to questions delivered through both drawings and words (for example, who answered "I am young" and chose the drawing of the young man) were judged to be demonstrating item comprehension and response honesty. To separate the drawing and word choice measures from one another, they were not administered consecutively, but were instead administered with an unrelated self report measure interspersed.

With this measure, subjects were asked to choose which of several word choices was more descriptive of them: fat or thin, old or young, happy or sad, usually alone or usually with friends. (Retarded or not retarded was not used due to specific Human Rights Committee
directives.) Subjects were also asked whether they preferred to be alone or to be with friends. Subjects showing discrepancies between word and drawing pair choices (subjects who chose, for example, the "FAT" drawing and the "THIN" word description) were given 1 point for each discrepancy. Subjects who refused to select between word pairs (for example, who said "I'm just right, not too fat") but who did select a drawing were also counted as giving cross method discrepant responses.

Discrepancies were summed across all picture-word pairs, yielding a total "Discrepancy Score." Subjects with "Discrepancy Scores" greater than three could be considered to be denying, could be regarded as having misunderstood the words, or could be seen as reacting on the basis of social desirability to certain "socially conditioned word images" (for example, a subject might have said he is "old" because he didn't want to be seen "as a baby", and yet that same subject might have chosen the "young" drawing, because of its greater social desirability in visual format. In any event, word-drawing discrepancies would cast doubt on the validity of the reported information; it would not be clear whether the word or the picture choice was the more accurate one.

The fourth measure designed to tap one aspect of self-concept consisted of items selected from the Nowicki-Strickland Internal-External Locus of Control Scale (Nowicki & Strickland, 1973). Satisfactory reliability and validity for this scale is evidenced by the reported test-retest reliability over a six week period of .67 for
an 8- to 11-year-old group (N=98) and .75 for a 12- to 15-year-old group (N=54). Internal consistency using the split-half method (corrected for length using the Spearman-Brown method) averaged .69 for grades 3-12.

Sixteen items were selected from the 40 items of the Nowicki-Strickland Locus of Control Scale on the basis of comprehensibility and applicability to the mentally retarded population. The items selected for this measure may be seen in Table 3. Four of these items were stated so that negative responses reflected internality, while 12 were stated so that negative responses reflected externality. Yes answers to questions keyed in the external direction were scored 1 point, while yes answers to internally-keyed questions were scored 0. Higher scores, then, reflected greater externality. In previous research, higher externality has been found to be correlated with lower occupational levels and lower achievement, especially with males (Nowicki & Strickland, 1973).

The final measure included in this research was a semi-structured interview (see Appendix D). This interview incorporated questions about personal data (past and present), future goals and mental retardation. The interview, which lasted approximately 20 minutes, was audiotaped. Subjects were asked to answer what they could. Reluctant subjects were encouraged, but not pushed: unanswered questions were repeated once and then dropped. After the interview session, audiotapes were transcribed by two undergraduate research assistants. A set of questions about mental retardation and choice of residence was
Table 3

Items from the Nowicki-Strickland Internal-External Locus of Control Scale.

1. Do you believe that most problems will solve themselves if you just don't fool with them?
2. Are some people just born lucky?
3. Are you often blamed for things that just aren't your fault?
4. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
5. When you get punished does it usually seem its for no good reason at all?
6. Do you feel that when you do something wrong there's very little you can do to make it right?
7. Do you feel that one of the best ways to handle most problems is just not to think about them?
8. Do you feel that you have a lot of choice in deciding whom your friends are?
9. Have you ever had a good luck charm?
10. Do you believe that whether or not people like you depends on how you act?
11. Have you felt that when people were angry at you, it was usually for no reason at all?
12. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them?
13. Do you feel that it's easy to get friends to do what you want them to do?
14. Do you feel that when someone doesn't like you there's little you can do about it?
15. Are you the kind of person who believes that planning ahead makes things turn out better.
16. Most of the time, do you feel that you have little to say about what your family decides to do.
embedded in each interview for all subjects. Responses to these questions were identified and scored by a clinical social worker and the experimenter. Rater agreement on these specific questions (see Table 4), calculated by dividing the number of exact agreements (157) by the total number of answers scored (162), was .97 across the four questions (rater agreement range, .93 to 1.00). In addition to deriving separate scores for each subject on each item, an "identification with mental retardation" total score was computed for each subject by summing across his scores for each of the three identification questions.
Table 4
Mental Retardation and Residence Choice Questions Embedded in the Semi-Structured Interview

<table>
<thead>
<tr>
<th>Preferred place of residence</th>
<th>&quot;Where would be the best place for you to live?&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In a state institution</td>
<td>2. With parents or relatives</td>
</tr>
<tr>
<td>3. In a community residence</td>
<td>4. In own home (independently)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree of identification with mental retardation</th>
<th>&quot;How are you the same as someone who is mentally retarded?&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not at all; says &quot;I am not retarded&quot;</td>
<td>2. Answers, &quot;I don't know&quot;</td>
</tr>
<tr>
<td>3. Can identify mentally retarded friends; can identify some personal attributes of mental retardation.</td>
<td>4. Very much; says, &quot;I am mentally retarded&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree of identification with mental retardation</th>
<th>&quot;Have you ever been called names?&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No, no indication of any labelling</td>
<td>2. Answers, &quot;I don't know&quot;</td>
</tr>
<tr>
<td>3. Was called mentally retarded but argued this label: was mentally retarded but is not now.</td>
<td>4. Was called mentally retarded; did not argue this label</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree of knowledge about mental retardation</th>
<th>&quot;Can you describe someone who is mentally retarded?&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No, no description is accurate</td>
<td>2. Answers, &quot;I don't know&quot;</td>
</tr>
<tr>
<td>3. Uses only one correct description of mental retardation</td>
<td>4. Uses more than one correct and accurate description of mental retardation</td>
</tr>
</tbody>
</table>
Discussion

Means and standard deviations for demographic variables of subjects are presented in Table 5.

Initial analyses were conducted to determine whether there were any group differences on any of the demographic variables assessed. Data on Age, IQ, Years living in current home, and Weekly wages were subjected to one-way analyses of variance. These analyses revealed that, despite efforts to control these variables by restricting sample heterogeneity through subject selection criteria, there were significant group differences on three of them: Age ($F_{2,53} = 22.71, \ p < 0.001$); IQ ($F_{2,53} = 7.46, \ p < .001$); and Years living in current residence ($F_{2,52} = 38.734, \ p < .001$). Weekly wages were not significantly different between groups ($F_{2,46} = 2.224, \ n.s.$).

Post hoc analyses on age indicated that subjects living in a state institution were significantly older than both subjects living in community residences ($t_{34} = 3.72, \ p < .001$) and subjects living with their families ($t_{34} = 6.97, \ p < .001$). Community residence subjects were also significantly older than family living subjects ($t_{34} = 2.81, \ p < .008$).

Post hoc analyses on IQ indicated that subjects living with their families had significantly higher Slosson IQ scores than did subjects living in community residences ($t_{34} = 2.30, \ p < .028$) as well as subjects living in a state institution ($t_{34} = 4.18, \ p < .000$); on Slosson IQ, the difference between state institution subjects and community residence subjects was not significant ($t_{34} = -1.34, \ n.s.$).
Table 5

Means and Standard Deviations of Demographic Variables for Each Group

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Chronological Age</th>
<th>Slosson IQ Score</th>
<th>Weekly Wages</th>
<th>Years Living in Current Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>SD</td>
<td>X</td>
<td>SD</td>
</tr>
<tr>
<td>Living with Family</td>
<td>18</td>
<td>24.27</td>
<td>5.30</td>
<td>64.89</td>
<td>5.79</td>
</tr>
<tr>
<td>Living in State</td>
<td>18</td>
<td>38.44</td>
<td>6.80</td>
<td>57.17</td>
<td>5.27</td>
</tr>
<tr>
<td>Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living in Community</td>
<td>18</td>
<td>30.00</td>
<td>6.82</td>
<td>59.94</td>
<td>7.03</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Post hoc analyses in years living in current residence indicated that subjects living with their families had lived under their current living arrangement significantly longer than had subjects living in community residences ($t_{33} = 9.02, p < .000$). Similarly, as might be expected, state institution residents had lived in the institution longer than community residence subjects had lived at community residences ($t_{33} = 7.60, p < .000$). There was no significant differences between state institution subjects and subjects living with their families on the amount of time they had lived with their families or the amount of time they had lived in their current placement ($t_{34} = -.89$, n.s.). It should be noted that, while of interest, the significant group differences on length of time in current residence were not problematic for the present study: because of the only recent emphasis on deinstitutionalization, in fact, differences on this variable had been expected. It was because of this expectation that the subject criterion cutoff of a minimum of one year in present living environment was established. This length of time was deemed sufficient to insure that the person had been in the current living environment long enough to be affected by it. The remainder of the group differences on demographic variables were potentially problematic, however, in that they indicated the presence of confounding variables obscuring the interpretation of any relationships that might exist between site of residence and self-concept variables. Subsequent analyses revealed, however, no cause for concern: unfortunately, there were no significant
group differences on any of the dependent variables tapping self-concept. Data on dependent variables are presented in Table 6.

Two of these scores are of special importance. The Discrepancy Score, it will be recalled, indexed how closely responses expressed through pictures corresponded to responses expressed through words. The Honesty Score (Verbal Content Comprehension Measure) indexed acquiescence and adequate verbal content comprehension. The fact that all three samples included in this study were characterized by relatively low Discrepancy scores (grand mean of 1.5 out of 5, or 30%) and relatively high honesty ones (grand mean of 6.2 out of 7) suggests that these data accurately captured the subject's sense of themselves.

The overall results of the drawing choices measure did not vary significantly between groups. Only the drawing with the sad man/happy man choice yielded significant differences between groups ($X^2_2 = 9.02, p < .0107$). Further analyses yielded a significant paired group difference between the family living group and the state institution group ($X^2_1 = 8.69, p < 0.005$), suggesting that family living subjects were significantly happier than state institution subjects. Percentages of responses are presented in Table 7.

Five dimensions were coded on the basis of information generated during the semi-structured interview. Each dimension was tapped by one or more questions eliciting responses that could be coded into a set of discrete categories. These dimensions, their response options, and group response percentages are presented in Tables 8 through 12.
Table 6
Descriptive Statistics of Self-Concept Measures

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>(F(2/53)df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennessee Self-Concept</td>
<td>Family</td>
<td>18</td>
<td>76.61</td>
<td>6.56</td>
<td>1.846*</td>
</tr>
<tr>
<td>Self-Identity Measure</td>
<td>State Institution</td>
<td>18</td>
<td>72.00</td>
<td>9.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Residence</td>
<td>18</td>
<td>72.39</td>
<td>7.72</td>
<td></td>
</tr>
<tr>
<td>Discrepancy Score</td>
<td>Family</td>
<td>18</td>
<td>1.33</td>
<td>1.45</td>
<td>1.846*</td>
</tr>
<tr>
<td></td>
<td>State Institution</td>
<td>18</td>
<td>1.50</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Residence</td>
<td>18</td>
<td>1.89</td>
<td>1.32</td>
<td></td>
</tr>
<tr>
<td>Locus of Control Scale</td>
<td>Family</td>
<td>18</td>
<td>6.83</td>
<td>1.79</td>
<td>8.65*</td>
</tr>
<tr>
<td></td>
<td>State Institution</td>
<td>18</td>
<td>7.77</td>
<td>1.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Residence</td>
<td>18</td>
<td>6.72</td>
<td>2.51</td>
<td></td>
</tr>
<tr>
<td>Verbal Comprehension Score</td>
<td>Family</td>
<td>18</td>
<td>6.11</td>
<td>.47</td>
<td>11.15*</td>
</tr>
<tr>
<td></td>
<td>State Institution</td>
<td>18</td>
<td>6.33</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Residence</td>
<td>18</td>
<td>6.11</td>
<td>.58</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05
Table 7

Percentages of Response to Choices to Drawings of Happy/Sad

<table>
<thead>
<tr>
<th>Drawing Item</th>
<th>Family (N=18)</th>
<th>State Institution (N=18)</th>
<th>Community Residence (N=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy</td>
<td>100%</td>
<td>61%</td>
<td>83%</td>
</tr>
<tr>
<td>Sad</td>
<td>0</td>
<td>39%</td>
<td>17%</td>
</tr>
</tbody>
</table>
The first dimension was preferred living arrangement. Subjects were asked "Where would be the best place for you to live?" Initial analyses were conducted to explore group differences in frequencies of stated preference. There were significant overall group differences ($X^2_6 = 27.37$, $p < .0001$). Chi squares between each pair of groups were all significantly different as well (family and state institutions, $X^2_3 = 14.61$, $p < .005$; community residence and state institution, $X^2_3 = 15.932$, $p < .005$; and family and community residence $X^2_3 = 14.05$, $p < .005$). These results indicated significant group differences in preferred living arrangement. Group preferences may be seen in Table 8.

In looking at Table 8, it is important to note that 44.4% of community residence subjects, 17.6% of state institution subjects, and 41.2% of family subjects preferred to stay where they live now. This indicates that 82.4% of state institution subjects, 55.6% of community residence subjects, and 58.8% of family subjects would prefer other living arrangements.

To tap feelings about handicap, three dimensions on retardation were scored on the basis of a set of questions imbedded in the interview (see Appendix for specific questions). These dimensions were scored (as previously described) with a value from 1 to 4. A "total score dimension" ranging between 3 and 12 on subject's attitudes about retardation was derived from the sum of the three dimensions. The means and standard deviations of the three dimensions are presented in Table 9 and group percentage and response option of Dimensions II, III, IV are presented in Tables 10, 11, and 12.
Table 8
Response Options and Group Percentages for Dimension I; "Where Would Be the Best Place for You to Live?"

<table>
<thead>
<tr>
<th>Response Options</th>
<th>Family (N=18)</th>
<th>State Institutions (N=18)</th>
<th>Community Residence (N=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In a state institution</td>
<td>0.0%</td>
<td>17.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2. In a community residence</td>
<td>0.0%</td>
<td>23.5%</td>
<td>44.4%</td>
</tr>
<tr>
<td>3. In his own place (apartment, boarding house)</td>
<td>58.8%</td>
<td>6.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>4. With family</td>
<td>41.2%</td>
<td>52.9%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>
Table 9
Means and Standard Deviations of Dimensions II, III, IV and V.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Family X</th>
<th>SD</th>
<th>State Institution X</th>
<th>SD</th>
<th>Community Residence X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension II - Acceptance of retardation</td>
<td>2.44</td>
<td>1.42</td>
<td>2.22</td>
<td>1.11</td>
<td>1.61</td>
<td>.91</td>
</tr>
<tr>
<td>Dimension III - Identification of retardation</td>
<td>2.22</td>
<td>1.47</td>
<td>2.05</td>
<td>1.11</td>
<td>2.11</td>
<td>1.23</td>
</tr>
<tr>
<td>Dimension IV - Description of retardation</td>
<td>2.67</td>
<td>1.32</td>
<td>1.89</td>
<td>1.13</td>
<td>2.22</td>
<td>1.17</td>
</tr>
<tr>
<td>Dimension V - Total summed scores of retardation dimensions</td>
<td>7.33</td>
<td>3.06</td>
<td>6.17</td>
<td>2.55</td>
<td>5.94</td>
<td>2.15</td>
</tr>
</tbody>
</table>
Table 10
Response Options and Group Percentages of Dimension II - Degree of Acceptance of Retardation Embedded in Semi-Structured Interview.

<table>
<thead>
<tr>
<th>Variable: Is able to link self with mental retardation - Response Option</th>
<th>Family</th>
<th>State Institution</th>
<th>Community Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not at all; says, &quot;I am not retarded&quot;</td>
<td>44.4%</td>
<td>33.3%</td>
<td>61.1%</td>
</tr>
<tr>
<td>2. Answers, &quot;I don't know&quot;</td>
<td>5.6%</td>
<td>27.8%</td>
<td>22.2%</td>
</tr>
<tr>
<td>3. Can identify mentally retarded friends; can identify some personal attributes of mental retardation</td>
<td>11.1%</td>
<td>22.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>4. Very much; says, &quot;I am mentally retarded&quot;</td>
<td>38.9%</td>
<td>16.7%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>
Table 11

Response Options and Group Percentages of Dimension III - Degree of Identification of Retardation Embedded in Semi-Structured Interview

<table>
<thead>
<tr>
<th>Variable: Has been identified as mentally retarded - Response Options</th>
<th>Family</th>
<th>State Institution</th>
<th>Community Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No; no identification of any labeling</td>
<td>35.5%</td>
<td>44.4%</td>
<td>50.0%</td>
</tr>
<tr>
<td>2. Answers, &quot;I don't know&quot;</td>
<td>5.6%</td>
<td>16.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td>3. Was labeled mentally retarded but argues this label; claims was mentally retarded, but is not now</td>
<td>0.0%</td>
<td>27.8%</td>
<td>27.8%</td>
</tr>
<tr>
<td>4. Was labeled mentally retarded by kids, or parents told him he was mentally retarded; does not/did not argue this label</td>
<td>38.9%</td>
<td>11.1%</td>
<td>16.6%</td>
</tr>
</tbody>
</table>
Table 12

Response Options and Group Percentages of Dimension IV - Degree of Accuracy of Description of Retardation Embedded in Semi-Structured Interview.

<table>
<thead>
<tr>
<th>Variable: Can describe accurately a mentally retarded person - Response Options</th>
<th>Family</th>
<th>State Institution</th>
<th>Community Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No; no description is accurate</td>
<td>33.3%</td>
<td>50.0%</td>
<td>33.3%</td>
</tr>
<tr>
<td>2. Answers, &quot;I don't know&quot;</td>
<td>5.6%</td>
<td>27.8%</td>
<td>33.3%</td>
</tr>
<tr>
<td>3. Uses only one correct and accurate description of mental retardation</td>
<td>22.2%</td>
<td>5.6%</td>
<td>11.2%</td>
</tr>
<tr>
<td>4. Uses more than one correct and accurate description of mental retardation</td>
<td>38.9%</td>
<td>16.6%</td>
<td>22.2%</td>
</tr>
</tbody>
</table>
There was not a significant difference between groups on any of the individual dimensions; Dimension II - Acceptance of retardation ($F_{2,53} = 2.448$, n.s.); Dimension III - Identification of retardation ($F_{2,53} = .079$, n.s.); and Dimension IV - Description of retardation ($F_{2,53} = 1.866$, n.s.).

When subjected to a one-way analysis of variance, the "total score dimension" was not significantly different between groups ($F_{2,53} = 1.462$, n.s.). Because of marked nonnormality of the distribution of total scores, the data was subdivided into grouped categories of high denial/low acceptance of retardation (3 to 6, total score); moderate denial/acceptance (7 to 9, total score); low denial/high acceptance of retardation (10 to 12, total score) and subjected to a distribution free analysis. The grouped categories of this "total score" were significantly different between groups ($X^2 = 10.308$, $p < .05$). Although the paired groups of family and community residence differed significantly ($X^2 = 8.825$, $p < .025$), there were no other significant differences between pairs of groups; state institution and community residence ($X^2 = 2.2$, n.s.); state institution and family ($X^2 = 4.83$, n.s.). Grouped total score frequencies are presented in Figure 1 and total score frequencies are presented in Figure 2.

As shown in the figures above, the majority of subjects across groups would be categorized as high denial/low acceptance of mental retardation (55.6%, N=30), while the minority (14.8%, N=8) would be low denial/high acceptance of mental retardation. While 11% (N=6) of family living subjects acknowledged or accepted retardation, 0% (N=0) of
Fig. 1. Dimension V - Grouped total score frequencies.

Fig. 2. Dimension V - Total score frequencies
DIMENSION V - GROUPED TOTAL SCORE FREQUENCIES

FIGURE 1

DIMENSION V - TOTAL SCORE FREQUENCIES

FIGURE 2
community residence subjects acknowledged mental retardation, suggesting environmental differences of identification, acknowledgement and acceptance of mental retardation.
CHAPTER III
EXPERIMENT TWO

Experiment Two was conducted to assess properties of three different living environments for the mentally retarded person. The three environments studied corresponded to those sampled in Experiment One: the family, the state institution, and the community residence. The property assessed was caretaker attitudes toward mental retardation.

The purpose of this study was to explore whether there would be differences in caretaker attitudes, presumably reflected more generally in the setting's social environment, which might correspond to the self-perceptions of mentally retarded persons living in that environment.

Data showing group differences in attitudes have been reported. Gottlieb and Corman (1980), for instance, surveyed public attitudes towards mentally retarded children and found a preference for segregating them on the parts of respondents, parents of "normal" school-age children, and people who had had no previous contact with mentally retarded people. It seems reasonable to expect that the attitudes of people who control the living environment will influence their behavior towards the retarded and in turn, the retarded person's sense of himself. This study was conducted to test for group difference, or the lack of group differences, in attitudes, which might be helpful in understanding the results from Experiment One.
Method

Subjects. Subjects for this study were 100 volunteers currently serving as caretakers in one of three environmental settings: natural family homes, community residential or community occupational programs, or state institutions. Volunteers for the natural family home group (N=21) were solicited at a parent's meeting of the Worcester Area Association for Retarded Children. Subjects were asked to fill out a questionnaire at the end of the meeting. Volunteers for the state institution group (N=35) were informed about the study by a sign left at each residential building of the state institution. Subjects were solicited through a cover letter of explanation requesting their assistance with the study and a questionnaire, both of which were attached to each staff member's weekly paycheck. In the letter, staff were requested to complete the questionnaire and to leave it at a designated location for the experimenter. Volunteers for the community residence group (N=44) were solicited in two settings; at a staff meeting for community residence staff of the Worcester Area Association for Retarded Children, Inc., and at an occupational sheltered workshop. The experimenter was present to ask for volunteers at the community residence staff meeting. At the sheltered workshop, volunteers were solicited by leaving the questionnaire in the staff lounge of the center with a sign asking for volunteers.

Experimental measure. A 30-item questionnaire was developed to assess attitudes toward retardation (see Appendix E). Seven questions were
drawn from a 24-item Likert scale measuring attendants at an institution for the mentally retarded (Bartlett, Quay & Wrightsman, 1960). For the parent scale of these items, split-half reliability was reported to be .80, after correction by Spearman-Brown prophecy formula, based on the responses of 68 hospital attendants. Test-retest reliability over a two week interval was .71 for 17 attendants. Unfortunately, little evidence of validity (r = .22 against .40 as a criterion) was found.

The remaining twenty-three questions for the present measure were based on an interview with mentally retarded subjects. Questions were developed following these interviews that seemed to tap dimensions of importance to mentally retarded individuals as well as issues of current importance in the field (for example, "A mentally retarded person is able to live alone?"). A Likert Scale was used for these questions as well, with answers ranging from (1) strongly agree, to (5) strongly disagree. To control for the response set of acquiescence, 14 items were reversed. A total score which could range from 30 to 150 was derived for each individual by summing across items.

Procedure. Volunteers were told that the experimenter was interested in studying differences in attitudes toward mentally retarded individuals, and were assured of confidentiality of response. In addition to completing the questionnaire, subjects were also asked several questions about certain demographic characteristics (age, sex, occupation, years in current occupation, years experience with mentally retarded individuals, and educational level. The members of the
parents' group were coded as "parents" regardless of reported occupations.

Results and Discussion

Descriptive statistics for the demographic variables of caretaker groups are presented in Tables 13 and 14. Means and standard deviations for age, years experience with mentally retarded persons and years in current occupation are presented in Table 14.

Initial analyses were conducted to determine whether there were any group differences on any of the demographic variables assesses. Data on age, years experience with mentally retarded people, and years in current occupation were subjected to one way analyses of variance. There were significant group differences on all of these variables: Age ($F_{2,99} = 10.156, p < .0001$); Years of experience with mentally retarded people ($F_{2,99} = 41.993, p < .000$); and Years in current occupation ($F_{2,99} = 7.309, p < .0011$). Parents were significantly older than were subjects in the other two groups on Duncan Multiple Range Test at .050 and the Tukey HSD at .050.

As might be expected, parents also had more years experience with mentally retarded people (their own children) and more years in their current occupation (of parent).

The remaining categorical demographic variables of current occupation, educational level, and sex were subjected to Chi Square Analyses. There were significant group differences: occupational levels ($\chi^2_{14} = 115.37614, p <.0000$) and educational levels ($\chi^2_{14} = 45.34184, p < .0000$); sex was not significantly different between groups ($\chi^2_{14} = 3.59263, \text{n.s.}$).
Table 13
Group Percentages for Occupation, Sex and Education of Caretakers

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>Family (N=21)</th>
<th>State Institutions (N=35)</th>
<th>Community Residences (N=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Staff</td>
<td>--</td>
<td>--</td>
<td>40%</td>
<td>14%</td>
</tr>
<tr>
<td>Direct Care</td>
<td>--</td>
<td>--</td>
<td>28%</td>
<td>45%</td>
</tr>
<tr>
<td>Administrative</td>
<td>--</td>
<td>--</td>
<td>6%</td>
<td>14%</td>
</tr>
<tr>
<td>Other work with mentally retarded people</td>
<td>--</td>
<td>--</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>Parent</td>
<td>100%</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Other (Kitchen maintenance)</td>
<td>--</td>
<td>--</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>33%</td>
<td>46%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>62%</td>
<td>54%</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>5%</td>
<td>--</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School or less</td>
<td>24%</td>
<td>37%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>28%</td>
<td>40%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Graduate School</td>
<td>29%</td>
<td>23%</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>No Answer</td>
<td>19%</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>
Table 14

Means and Standard Deviations of Age, Years in Current Occupation, Years Experience with Mentally Retarded Persons of Caretaker Groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Age</th>
<th></th>
<th>Years/Occupation</th>
<th></th>
<th>Years/Experience</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>SD</td>
<td>X</td>
<td>SD</td>
<td>X</td>
<td>SD</td>
</tr>
<tr>
<td>Family</td>
<td>43.28</td>
<td>21.47</td>
<td></td>
<td>12.05</td>
<td>13.26</td>
<td>21.62</td>
<td>11.80</td>
</tr>
<tr>
<td>State Institution</td>
<td>33.20</td>
<td>11.34</td>
<td></td>
<td>4.51</td>
<td>4.56</td>
<td>5.00</td>
<td>4.80</td>
</tr>
<tr>
<td>Community Residence</td>
<td>27.00</td>
<td>10.24</td>
<td></td>
<td>5.91</td>
<td>4.95</td>
<td>6.70</td>
<td>5.29</td>
</tr>
</tbody>
</table>
The questionnaire data were subjected to several analyses. Because this was a new test, items were subjected to a Pearson item-mean correlation to assure internal consistency for items included in subsequent analyses. To obtain mean scores for each subject, a score was derived from the sum of his or her individual item scores; the mean score was derived from this total score by dividing it by the number of answers. For each subject, this mean was correlated with his or her scores on each item. To insure scale homogeneity, a cutoff of .40 was set to select items that were consistently tapping an underlying attitude toward retardation. These items correlating .40 or above with the initial mean were identified and then used to develop a new mean for each subject. Means, standard deviations, and correlation of intercorrelated items with purer means may be seen in Table 15. To test for group attitudinal differences, this new, purer score for each subject was entered into a one way analysis of variance. There was a significant difference between groups ($F_{2,99} = 6.024, p < .0034$). Post hoc analyses indicated that subjects in the parent's group had significantly more positive attitudes than did subjects in either the state institution or the community residence groups (on Duncan Multiple Range at .050, Scheffe at .050, and the Tukey HSD at .050).

Part of these results were not surprising: the attitudinal difference between the parent's group and both community and institution caretakers could be expected, since parents have different feelings about their own children than do paid caretakers. The surprising result, however, lies in the fact that an attitudinal difference would be
Table 15
Means, Standard Deviations and Correlation of Intercorrelated Items with Purer Means.

<table>
<thead>
<tr>
<th>Intercorrelated Items</th>
<th>$\bar{X}$</th>
<th>SD</th>
<th>Correlation with means</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A mentally retarded person ...)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Is kind</td>
<td>2.32</td>
<td>.92</td>
<td>.62</td>
</tr>
<tr>
<td>2. Is pleasant</td>
<td>2.42</td>
<td>.92</td>
<td>.66</td>
</tr>
<tr>
<td>4. Is trustworthy</td>
<td>2.64</td>
<td>.88</td>
<td>.63</td>
</tr>
<tr>
<td>5. Cares that he looks nice</td>
<td>2.67</td>
<td>.97</td>
<td>.63</td>
</tr>
<tr>
<td>7. Is friendly</td>
<td>2.08</td>
<td>.91</td>
<td>.57</td>
</tr>
<tr>
<td>8. Denies that he is retarded</td>
<td>2.82</td>
<td>.90</td>
<td>.54</td>
</tr>
<tr>
<td>11. Is reasonable</td>
<td>2.79</td>
<td>.77</td>
<td>.62</td>
</tr>
<tr>
<td>13. Has a positive self-image</td>
<td>3.08</td>
<td>.85</td>
<td>.47</td>
</tr>
<tr>
<td>17. Acknowledges that he is mentally retarded</td>
<td>2.85</td>
<td>.88</td>
<td>.47</td>
</tr>
<tr>
<td>18. Feels helpless because he is retarded</td>
<td>2.46</td>
<td>.93</td>
<td>.46</td>
</tr>
<tr>
<td>20. Can be identified as mentally retarded by his looks</td>
<td>2.70</td>
<td>1.06</td>
<td>.46</td>
</tr>
<tr>
<td>21. Is able to express feelings appropriately</td>
<td>2.82</td>
<td>1.05</td>
<td>.51</td>
</tr>
<tr>
<td>22. Should be separated from society</td>
<td>1.62</td>
<td>1.03</td>
<td>.53</td>
</tr>
<tr>
<td>24. Has a negative self-image</td>
<td>2.84</td>
<td>.88</td>
<td>.61</td>
</tr>
<tr>
<td>25. Is able to accept being mentally retarded</td>
<td>2.93</td>
<td>.93</td>
<td>.47</td>
</tr>
<tr>
<td>30. Would prefer to live alone</td>
<td>2.80</td>
<td>.93</td>
<td>.45</td>
</tr>
<tr>
<td>Mean = $\frac{\text{Sum}}{# \text{ of answers}}$</td>
<td>2.61</td>
<td>.50</td>
<td>--</td>
</tr>
</tbody>
</table>
expected between state institution and community residence staff due to differences in work environments and underlying treatment philosophies which are supposedly different between the two settings. Nevertheless, between these two staffs, basic attitudes were very similar. This lack of significant differences between the state institution and community residence staffs corresponds to the lack of self-concept differences between mentally retarded subjects in the institution and community residence settings. Perhaps, the social environments in the two settings, as conveyed via staff attitudes, are not different enough to cause differences in residents' self-concepts. It may be, then, that at this point in time, the community residence is only a mini institution which does not socio-emotionally differ from traditional state institutions.
CHAPTER IV
DISCUSSION

In terms of procedural execution, these experiments were unproblematic. Subjects seemed to understand and respond appropriately to most measures. The Slosson Intelligence Test (Slosson, 1963) proved to be a highly acceptable screening device. Problems with experimental measures in general were minor: the state institution subjects reacted too positively to the drawing of a man with people in the question "Do you prefer to be alone or with friends", because of the presence of a woman in the drawing; subjects did not comprehend the Tennessee Self Concept Scale item "I am a sick person", but all answered with "Sometimes, most of the time, never, etc.,...I get sick"; and not one subject had ever heard the term developmentally disabled. In the caretaker's questionnaire of Experiment Two, people wrote comments about how it was not correct to stereotype mentally retarded people.

The only real difficulties encountered in executing these experiments were with the Institutional Review Human Rights Committees at the very onset. Since these committees had not set formats or guidelines for doing research, the research project was delayed unnecessarily.

There were two major problems with the experimental design. First, there are no established tests to measure self-concept with mentally retarded persons. In this study the standardized tests used did not retain
their true validity since only portions were used and response options were adapted. The standardized assessment tools (Nowicki-Strickland Locus of Control Scale and the Tennessee Self-Concept Scale) should be used in their entirety in order to retain their validity and reliability, but this study was more concerned in looking at ways of adapting self-concept measures for the "non-standardized" mentally retarded population. It would be a crucial future step to establish for each tool norms especially for this population. This is directly related to the second problem, the wide variations in subject variables. Even though a strict criteria for subject characteristics was used, variability was still high between individuals and groups. Variability is often very high in extreme groups such as mildly retarded men and this may mask other differences and still make it impossible to show a normal distribution.

In establishing norms for the mentally retarded population, it would be important to also include individuals with physical, emotional and behavioral problems to make the distribution appear "more normal".

This study demonstrated significant differences with the self-image of mentally retarded individuals living with their families as compared with those living in institutional and community settings, but relatively no difference was found between community residence and state institution subjects on various measures of self-concept and stigma identification. These results suggest that, although a physical and social change has occurred through deinstitutionalization, a corresponding emotional/psychological change has not followed. The results from Experiment Two found that parents' attitudes toward retarded
individuals differed significantly from both state institution and community residence caretakers, while there were no differences between the latter two groups. This lack of differences was expected, since these caretaker groups come from philosophically different programs. Because caretaker's attitudes are not different in the two environments, it is not surprising that the self-concept of the mentally retarded subjects is also not different.

The differences between the more positive self-image of the family living group and the less positive self-image of the state institution and community residence groups might have clinical implications for future programming. Present family models include having the individual live with the natural family, with adopted or foster families, or with relatives. Institutions could remake institutional wards into family-like units with common facilities, family style dining and specific staff. Both institutions and community residences could initiate programs such as foster families for holidays and weekend placements, or "adopt-a-resident" programs where families could advocate for individuals. This might alter the normalization principle to include "family" in the broadest sense.

To attempt to make staff more fulfilled from their work, it is important that they can see and are told about client improvements. Parents receive positive feedback from schools, doctors, service plans and can proudly assume responsibility for much of the progress. Staff also need to receive positive feedback about their clients from other professionals to feel more fulfilled in their employment. Job
satisfaction might increase motivation and positive feelings toward clients. Staff members as advocates for certain individual clients is important in developing the pride and satisfaction needed for effective change. Staff would also benefit greatly from positive role models, increased salaries, intensive group training with other staff to form alliances, and with incentive programs which might increase motivation and lessen staff turnover/burn-out.

Despite the normalization principle, Humm Delgado (1979) found that community residence staff still viewed themselves in the parental role; nonetheless, they emphasized independence in order to enable the resident to move upwardly out of the group home into a more normalized setting (supervised apartment, boarding house, independent living). In a similar fashion, the current emphasis of the community residence philosophy, more generally, is on the developing individual. This philosophical emphasis in and of itself, however, is not sufficient. Programming is needed to assist the individual with the appropriate emotional/psychological development.

Although there are problems with deinstitutionalization, it is clearly preferable to the alternative of continued institutional residence. Deinstitutionalization is one of the most important steps in the "re-humanizing" of the mentally retarded person and needs to be supported and strengthened. Although this study found insignificant differences in the self-concept of the institutional and community residence populations, measures of adaptive behavior community living skills and independent functioning should yield vastly
different results. The present data are not intended to indicate deinstitutionalization as a failure. Rather, they are intended to indicate where it may be at present, an incomplete success.

This study was an initial look at ways to assess self-concept with mentally retarded persons. Many questions were raised that could not be answered in this study, but point out directions for future research. It would be important to determine what variables could be causing the differences between family and community residence or state institution groups. Some suggestions might be the lack of personal attention in institutions or community residences, the lack of valid accurate comparison groups (state institution subjects may be comparing themselves to lower functioning mentally retarded individuals while community residence subjects may be comparing themselves to staff), the lack of feelings of being able to effectively change the situation and the lack of positive motivation to accept the stigma of mental retardation.

It would also be important to study whether denial of mental retardation is adaptive to individuals between groups or within groups. Perhaps it is important to remember Heshusius' "Double bind" about accepting the label "mentally retarded" (Heshusius, 1981). One might assume the acceptance or the denial of the label does not contribute to a positive self-identity, but it would be important to also remember that more subjects could identify with mental retardation and also could report that they were happy with themselves. The security, understanding, and unconditional positive regard that
parents provide might make dealing with stigma less threatening and more acceptable to the family-based subject. It would be interesting to look at whether individuals who deny their retardation: engage in more antisocial behavior; are more withdrawn; associate more or less with nonretarded persons; are more depressed; demonstrate behaviors that might make them appear more deviant to the community.

The immediate problem in researching issues of stigma and its relationship to a positive self-image was demonstrated in the inability of this study to directly ask the subject whether or not he was mentally retarded. If mentally retarded adults are to accept and understand this label, it is crucial that staff, program administrators and parents are also able to accept the label without passing along negative feelings. Although labelling is not beneficial and should be abolished, mentally retarded persons will always be labelled by society and must be able to establish some pride or acceptance in group identification (as did Blacks in the 1960's). Understanding the feelings that accompany normalization of discrimination and prejudice will be useful in allowing the individual to feel more satisfied with himself as a human being.

The field of mental retardation has greatly progressed in the last century and even in the last decade. In the early 1900's, the development of scientific measurement of intelligence affected the field by providing tools to define mental retardation. The 1930's saw the involvement of the federal government in establishing health and educational programs which could benefit the mentally retarded
person. The National Association of Retarded Citizens, which began developing public awareness of mental retardation in 1950, was influential in obtaining funding for training personnel and research in mental retardation. Major movement forward of the field occurred in the 1960's because of the President's Commission on Mental Retardation (PL.88-164), the use of behavior modification with mentally retarded persons and increased genetics research. This thrust from the federal government gave the 1970's the impetus to carry out the crucial concepts of normalization, deinstitutionalization, mainstreaming, lease restrictive environment, developmental models and citizen advocacy (Sellin, 1979). The 1980's should be the time for increased public involvement and refinement of existing principles. With the new public awareness and the physical movement toward normalization, the next move must be the emotional movement towards normalization. It must be a movement not only in body, but in mind. Programs to develop the emotional functioning of the mentally retarded individual are needed. Until the mentally retarded individual is considered a full member of society and not a stigmatized minority, it is important to provide assistance to overcome the stigma and pain associated with being considered deviant.

According to Schutz, Vogelsberg and Rusch (1980), "The success of deinstitutionalization may be undermined by either failure to utilize the most effective behavioral training procedures or failure to develop community support for the goals, procedures, and results of these programs to train persons to live in community residential
settings" (pg. 118). One answer could be as simple as the development of a cognitive behavioral training program for deinstitutionalized adults re-entering the community. The individual must be taught ways to deal with poor self-esteem, feelings of inferiority, helplessness and stigma on an emotional or cognitive basis so that the symptoms are not manifested on a physical basis (physical aggression, property destruction, withdrawal). If the individual could learn more appropriate ways to identify and deal with emotional reactions using a problem solving or cognitive behavioral method, the overall psychological well being of the individual would improve. It is crucial to the success of the mentally retarded individual that the psychological aspects of deinstitutionalization be an integral concern of the deinstitutionalization movement. When this occurs, deinstitutionalization will be even more powerful and effective.


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McAfee, R. and Cleland, C. The discrepancy between self concept and ideal self as a measure of psychological adjustment in educable mentally retarded males. American Journal of Mental Deficiency, 1965, 70, 1, 63-68.


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APPENDIX A

INFORMED CONSENT AGREEMENT

I am presently a student at the University of Massachusetts in Amherst. I am doing a study on adults from ______________________ and you were recommended to me as someone who might be willing to participate. I will be asking you questions about you and your life and I need you to answer them as honestly as possible. No one will know which answers are yours because I will not be using your name. I will be tape recording this interview so that I can share this with my two assistants. I will need your permission to tape record this interview and for you to participate in this study. I will be asking you personal questions and if at any time these questions make you very uncomfortable or are too upsetting, you do not have to answer. If you have any questions or problems as we continue, please feel free to ask me. Do you have any questions?

I agree to allow Linda Scott to interview me for her research project at the University of Massachusetts. I understand that my name will not be used in the study to insure confidentiality. I also understand that I may withdraw my permission at any time and discontinue participation.

_________________________  ________________________
Signature                          Date

I also agree to allow her to tape record our interview. I understand that I may withdraw my permission at any time and discontinue participation.

_________________________  ________________________
Signature                          Date

I also agree to allow Linda Scott access to my program records for informational purposes only. I understand that I may withdraw my permission at any time.

_________________________  ________________________
Signature                          Date
SLOSSON INTELLIGENCE TEST (SIT)

FOR
CHILDREN AND ADULTS

Copyright © 1963, Richard L. Slosson, M.A.

SCORE SHEET

IQ = MA x 100

CA

IQ

Name

Address

School

Examiner

Present date

Birth date

Age or CA

Finding the MA

Basal age

(Calculated from present date

Added months

Finding the IQ

CA (months)

Finding the IQ

0 (MA in months)

"The CA never exceeds 16 years or 192 months.

CONVERTING

YEARS TO MONTHS:

1-36

7-108

13-160

19-252

21-324

13-160

19-252

21-324

Present date

Birth date

Age or CA

Years

Month

Day

Years

Month

Day

Years

Month

Day

Present date

Birth date

Age or CA

Finding the MA

Basal age

(Calculated from present date

Added months

Finding the IQ

CA (months)

Finding the IQ

0 (MA in months)

"The CA never exceeds 16 years or 192 months.

CONVERTING 1-12

4-48

7-84

10-120

13-160

16-216

19-252

22-300

24-324

1-36

7-108

13-160

19-252

21-324

Years

Month

Day

Years

Month

Day

Years

Month

Day

Present date

Birth date

Age or CA

Finding the MA

Basal age

(Calculated from present date

Added months

Finding the IQ

CA (months)

Finding the IQ

0 (MA in months)

"The CA never exceeds 16 years or 192 months.
APPENDIX C
APPENDIX D
APPENDIX D
QUESTIONNAIRE

1. Tell me about yourself.
2. If I were blind, could you describe what you look like?
3. How do your friends describe you?
4. How do you get along with people at work?
5. How do you get along with people at your house/building?
6. How do you get along with strangers?
7. Tell me about your family.
8. Who in your family is the most like you? Why?
9. How long have you lived here at ____________?
10. Where did you live before that? Before that?
11. Where do you think you will be living in 5 years?
12. Where would be the best place for you to live? (If no answer)
    In a community residence, With your parents, On your own
    in an apartment, In a state school.
13. What kind of work do you do now?
14. What kind of job would you like to have?
15. How much money do you make each week?
16. What kind of job do you think you'll have in 5 years?
17. Tell me about a friend you have. How are you the same as him? Different?
18. Do you take any medications?
19. How would you describe someone who is physically handicapped?
20. How are you the same/different from a person who is physically handicapped?
21. What types of problems might a person who is physically handicapped have?
22. How would you describe a person who is developmentally disabled?
23. Do you know anyone who is mentally retarded?
24. How would you describe a person who is mentally retarded?
25. What things can a mentally retarded person do?
26. What things can't a mentally retarded person do?
27. What does it mean to be mentally retarded?
28. What types of problems does a mentally retarded person have?
29. Have you ever been called names? What? Did anyone ever call you mentally retarded? How did it make you feel?
30. Do you go places by yourself? Where?
31. Can you tell me something good about yourself?
32. Can you tell me something bad about yourself?
33. What things make you sad?
34. What things make you happy?
35. Do you have a person or a counselor that you can talk with if you are feeling upset?
36. Is there anything you would like to ask me now that we are finished?

Thank you!
## APPENDIX E

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Mildly Agree</th>
<th>Neither Agree or Disagree</th>
<th>Mildly Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is kind</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Is unpleasant</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Is warm</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Is trustworthy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Cares that he looks nice</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Is stubborn</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Is friendly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Denies that he is retarded</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Cannot make decisions about his life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Feels that he is different</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Is reasonable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Has emotional problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Has a positive self image</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Prefers to be with other mentally retarded people instead of non-retarded people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Is able to live alone</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Needs more psychological services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Acknowledges that he is mentally retarded</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
18. Feels helpless because he is retarded
19. Has control of his future
20. Can be identified as mentally retarded by his looks
21. Is able to express feelings appropriately
22. Should be separated from society
23. Is able to benefit from psychotherapy
24. Has a negative self image
25. Is able to accept being mentally retarded
26. Needs more support services
27. Would prefer to live with his family
28. Would prefer to live in an institution
29. Would prefer to live alone in the community
30. Would prefer to live in a community residence

Thank you for your cooperation. Please include the following information:

1. ___ Clinical Staff
   ___ Direct Care Staff
   ___ Administrative Staff
   ___ Other (please specify)
   ___ Parent
   ___ Human Service Organization
   ___ Other (please specify)

2. Years in current field of occupation __________

3. Years experience with mentally retarded persons __________
5. Highest level of education completed:

   ___ Grade School
   ___ High School
   ___ Some college
   ___ College
   ___ Some graduate school
   ___ Master's degree
   ___ Doctorate degree

Thank you. Please return to Linda Scott