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THE UNIVERSITY OF ALBERTA

SOCIAL ADJUSTMENT TRAINING  
OF THE MENTALLY RETARDED

by



CHRISTINA FAYE WADDEN

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH  
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#### ABSTRACT

The present study examined the effectiveness of the socialization program, Teaching Question-Answering Skills, when used with mentally retarded persons. It was hypothesized that residents who received Question-Answering Skill Training would show a greater degree of socially appropriate behavior, as well as a lesser degree of socially inappropriate behavior.

A group of mentally retarded (mean I.Q. = 43.7), institutionalized residents (16 males, 12 females) received four weeks of structured, individualized, socialization training which focused on social and personal adjustment. The resident's improvement was measured by the Adaptive Behavior Scale. The experimental (n = 10), control 1 (n=9) and control 2 (n = 9) groups were compared on pre and posttest difference scores. The results showed no significant differences on Adaptive Behavior Scale scores after training. It was concluded that the socialization program, Teaching Question-Answering Skills was not successful in increasing socially appropriate behavior or decreasing socially inappropriate behavior of institutionalized mentally retarded individuals. Implications for the future implementation of similar training programs were discussed.

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## CHAPTER I

### INTRODUCTION

#### OBJECTIVES

The purpose of this study is to examine the effectiveness of a socialization program when used with institutionalized mentally retarded persons. The study attempts to answer the question, Is individualized training of a primarily verbal nature effective in promoting positive behavioral changes when it is used with institutionalized, mentally retarded individuals?

#### OVERVIEW

Ever since deinstitutionalization of mentally retarded persons began, researchers have searched for the factors that accounted for successful placement in the community. As a result of this research, Gunzburg (1968) identified two factors that were believed to ensure successful community placement - vocational skills appropriate for functioning in community employment situations and social and academic skills so that the individual could cope with community demands. Rosen, Clark and Kivitz (1977) have reviewed the training of social skills and have concluded that researchers have dealt only with social knowledge skills; they found that training has not included socially appropriate behavior.

Mentally retarded residents have been described by researchers as exhibiting socially inappropriate behavior such as bizarre speech and actions, poor personal appearance and childishness

(Spradlin and Girardeau, 1966). They point out that these behaviors are learned as a result of experiences within the institutional setting. The elimination of these socially inappropriate behaviors is the goal of training programs recently developed. The reduction of these behaviors themselves is not predicted to ensure successful community placement of previously institutionalized mentally retarded individuals, but the training of those skills in conjunction with vocational, academic and social knowledge skills may.

#### DEFINITION OF MENTAL RETARDATION

The term "mental retardation" is considered within this work as defined by the American Association of Mental Deficiency. That is, "mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period" (Grossman, 1973, p. 11).

## CHAPTER II

### REVIEW OF THE LITERATURE

#### HISTORICAL BACKGROUND: HABILITATION OF THE RETARDED

Rosen, Clark and Kivitz (1977) reported that "habilitation is usually defined as a process by which various professional services are utilized to help a disabled individual make maximal use of his capacities in order that he might learn to function more effectively" (p. 3). Habilitation of mentally retarded individuals is a reoccurring goal in the history of institutionalization. First sought after in the mid-nineteenth century, then challenged at the close of that century, it was sought after again, a few decades later, and was endorsed fully by some in the 1960's and 1970's.

The spirit of habilitation in the mid-nineteenth century was optimism. Early teachers of the mentally retarded, such as Sequin (1864), felt that mentally retarded persons could be trained sufficiently to permit them to function normally in a community. Whatever training occurred, however, was based on a totally Christian view of their labors. Violations of the "natural laws", with intemperance, intermarriage of relatives, "self-abuse", and greed were still believed to be the causes of mental retardation. Sequin (1864) felt they were saving idiots who "know(s) nothing, can do nothing, cannot even desire to do anything".

The first attempt to find a method of separating the subnormal (mentally retarded) from the normal children in public schools came from the Minister of Public Instruction in Paris in 1904 (Sattler, 1974). As a result of the committee formed by the Minister, Alfred Binet and Theodore Simon devised 30 tests that could be rated objectively and could differentiate the mentally retarded from the normal. These tests were not used in the treatment of the mentally retarded, but only to determine the level of intelligence of school children (Sattler, 1974).

It was soon realized that the mentally retarded could not function normally in the community, even after training. This realization created a pessimism in terms of educating the mentally retarded that was to last many decades. White and Wolfensberger (1969) described the main habilitation philosophy of this time as a shift from a "desire" between 1850 and 1880, to "make the deviant undeviant" to a "concern", from 1870 to 1890, to "shelter the deviant from society" to "alarm", between 1880 and 1900, over "protection of society from the deviant". At this time, the rising concern was over the "menace" of the mentally retarded.

Goddard (1914) concluded in a family study, that mental retardation had a genetic basis and explained the influence of heredity on mental deficiency in terms of "bad blood". He also

concluded that there was a strong relationship between feeble-mindedness and criminality, and estimated that as many as 50 percent of penal institution inmates were mentally retarded. Goddard (1913) dealt a final blow to the hope of habilitating mentally retarded individuals when he, as director of the research department at the Vineland Training School, concluded that few of the feeble-minded children at Vineland were making any significant mental development, despite their enrollment in special education programs.

Wolfensberger (1969) reported that early Twentieth Century policies were based on the assumption that the retarded were a "menace" to society. Laws were passed in some states forbidding marriage and making sterilization mandatory. Further to this, permanent custodial care of the retarded was advocated. The policy of dealing with the retarded had, by the Twentieth Century, gone from preparing the retarded to adjust to society to preventing the contamination of the race.

The eugenics alarm reached its peak by the 1920's but soon abated due to the increased understanding of nongenetic determinants of retardation, such as organic causation and the influence of environmental factors. The myth of I.Q. constancy was dispelled with data indicating increases in tested intelligence with programs of stimulation (Kirk, 1958, Skeels and Dye, 1939). Also, earlier claims of an association between crime and mental retardation were

challenged (Davies, 1930, Wallin, 1956). The attitude concerning the inability of mentally retarded persons to lead productive lives without the structure of an institutional setting was further dispelled by studies by Baller (1936), Charles (1953), Fairbanks (1933) and Kennedy (1966). These researchers presented evidence of the satisfactory adjustment of persons leaving institutions for the mentally retarded, often against medical advice, and of mentally retarded students in special classes in the public schools.

The groundwork for deinstitutionalization came during World War II when manpower needs required that many retarded persons leave institutions to serve in the armed forces, or as defense workers in factories (McCarver and Craig, 1974). From this beginning, the rights of the mentally retarded were advocated. By 1960, social unrest brought demands from minority groups for equal opportunity. The mentally retarded emerged as a minority group "with spokesmen voicing demands for an expansion of services, for availability of public school and community programs, for the improvement or complete abolition of institutions, and for the civil rights available to the ordinary citizen" (Rosen, Clark, and Kivitz, 1977, p. 11).

Nirje (1969) demanded that the mentally retarded be provided their full rights and benefits as citizens. The normalization principle as he saw it, "means making available to the mentally

retarded patterns and conditions of every day life which are as close as possible to the norms and patterns of the mainstream of society" (p. 363).

The habilitation of mentally retarded persons has developed through many stages since the mid-nineteenth century and the civil rights of mentally retarded persons are still being defined. Just recently, the American Association on Mental Deficiency published as an official policy statement, the "Rights of Mentally Retarded Persons". This document

specifies the rights to exert freedom of choice in making decisions; to live in the least restrictive environment; to obtain gainful employment and fair pay; to be part of a family; to marry and have a family; to be free to move about without deprivation of liberty by institutionalization; to speak openly; to maintain privacy; to practise a religion; to interact with peers; and to receive public supported education, vocational training, and habilitation programs (Rosen, Clark and Kivitz, 1977, p. 11).

#### FOLLOW-UP STUDIES

Follow-up studies of previously institutionalized mentally retarded individuals were carried out to investigate the general adjustment of mentally retarded individuals after a period of time in the community. Fernald (1919), for example, investigated 646 of 1,537 patients discharged from an institution over a 25 year period. Of these, 78 had died and 101 had been readmitted to the institution. The majority of the remainder had left the

institution by running away or being discharged under administrative protest. In this follow-up, Fernald found that many were leading "useful and blameless lives", being either self-supporting, or living with relatives under fairly close supervision. Fernald (1919) requested that the "limited facilities for segregation" be used for those who "can be protected in no other way".

Fernald's (1919) study was the first of its kind, and was performed at a time when mentally retarded persons were considered to be "moral imbeciles" prone to criminal tendencies, and a potential danger to the community. In fact, Davies (1930) points out that Fernald hesitated for two years before publishing this controversial study, possibly because it was at variance with the then accepted theories of mental retardation.

Other investigations were inspired by Fernald's findings. Many researchers were interested in the community adjustment of the mentally retarded. The criteria of community adjustment used in these studies were "success" or "failure" of employment, avoidance of arrest or anti-social behavior, and the ability to remain out of an institution of any sort. Two studies dealt with the adjustment of previously institutionalized persons during the War years. Hegge (1944) reported on 177 mentally retarded persons whose average age was 17, and whose average I.Q. was 71.8. Eighty-eight percent of those persons were employed, most males working



in defense plants, and most women working in their own homes. Since many of the individuals were working above the unskilled level, and had found their jobs independently (without the help of the institution), Hegge concluded that they would be employable even under normal working conditions. Coakley (1945), in a study of 37 formerly institutionalized retarded persons, found that most of these persons, as well, obtained their jobs independently or through the U.S. Employment Service.

A summary of 36 publications of follow-up studies of previously institutionalized mentally retarded individuals was provided by Eagle (1967). These included vocational placements, family care and independent living placements for a total of 7,436 releases. He found, adding the total number of successful and unsuccessful outcomes of these reports, a failure record of 39.6 percent. He also found that when considering the placement failure rate of releases from 1960 to 1967, the failure rate was 52 percent. Although the failure rate seemed "agonizingly high" to Eagle, he based his findings on many different criteria of adjustment; these included anti-social actions, undesirable personal conduct, unsatisfactory work, health problems, personality problems, voluntary return to the institution, transfer to other facilities and adverse environmental factors. If a narrower criteria of successful placement had been used, the failure rate would doubtless be much lower.

While follow-up studies such as these do provide much information on the success or failure of community-placed retarded individuals, there is still much confusion as to why some individuals succeed whereas others fail. Fernald (1919) was surprised that many of the individuals released from the institution were leading useful and blameless lives. Eagle (1967), on the other hand, was surprised at the agonizingly high failure rate he found in his review of community placement studies. The problem remained to predict what factors were necessary to take into account, to ensure an individual successful placement in the community.

#### PREDICTING SUCCESSFUL COMMUNITY PLACEMENT

As discussed, a large number of previously institutionalized mentally retarded individuals were capable of adequately functioning with independent living in the community. However, many individuals were found to have encountered problems in their vocational, economic or social adjustments, and had been reinstitutionalized. The fact that only some mentally retarded individuals succeeded in the community, suggested the need to determine, before they were discharged from the institution, what factors were related to successful community adjustment. Many studies have been directed toward this goal. Windle (1962) and McCarver and Craig (1974) have published comprehensive reviews of prognostic studies, dealing with previously institutionalized retardates.

Windle (1962) related outcome criteria, such as avoidance of reinstitutionalized, vocational placement, absence of aberrant or socially unacceptable behaviors, salary, and interpersonal relationships to five general areas of predictive characteristics. These predictive characteristics were demographic factors, individual abilities and disabilities, family and community factors, institutional experiences, and combinations of these factors. McCarver and Craig (1974) also grouped prognostic studies in accordance with predictive variables. The variables they grouped together included pre-admission variables, such as home environment, sexual behaviors and history of delinquency, and institutional variables such as reasons for admission, general behavior, age at admission, training programs, work experiences and length of institutionalization. Individual characteristics related to post-institutional adjustment are reported to be age at release, race, diagnosis, academic ability, intellectual level, personality, physical handicaps, and personal appearance. Other variables used included family interest, type of community placement at discharge, criteria for release from the institution, community attitudes toward, and the supervision of, mentally retarded persons.

Despite the comprehensive review of the many correlational studies performed to determine what factors may predict successful placement of the institutionalized mentally retarded person,

Windle (1962) and McCarver and Craig (1974) did not identify the predictive variables. Both studies point out the many methodological flaws in the reviewed studies and the discrepancies in the findings. McCarver and Craig (1974) concluded that placement was usually on a trial and error basis and evaluation was mainly subjective.

The problem in identifying the predictor variable or variables came from the contradictory results that have emerged from different investigations. One of the most widely used predictor variable, for example, is intelligence (as measured by standardized intelligence tests). McCarver and Craig (1974) found that, out of 33 studies, 12 reported a positive relationship between I.Q. and community adjustment success, and seven more suggested evidence for such a relationship. Contrary to this, 13 studies found no meaningful relationship between I.Q. and community adjustment, with one other study showing a negative relationship.

To further complicate the lack of evidence of predictor variables for successful community placements, studies attempting a cross-validation of their initial findings have also proved unsuccessful. O'Connor and Tizard (1951) found contradictory results when replicating a study combining a variety of predictive variables. Some relationships with criteria were found in the first, but not the second study. The authors explained that the discrepant findings of the two studies resulted from the unreliability

of the predictive tests used; and of the measurement of their criteria - work success.

Rosen, Floor and Baxter (1972) also reported cross-validation study results. Subjects for the study were chosen in the same manner; they were formerly institutionalized adults who had completed the same habilitation programs, were actually or functionally orphaned, and had been discharged for from six months to two years. The authors found that although predictor and criteria variables were similar to those found in the earlier study, the relationships of measures of perceptual-motor skills and employability ratings to indices of community adjustment were not substantiated.

In conclusion, many attempts have been made to predict successful habilitation of the mentally retarded. To date the results are variable and inconclusive. Therefore, the problem of what predictive criteria to use to ensure the successful community placement of institutionalized mentally retarded individuals still stands. As already discussed, there has been little in the literature to indicate the usefulness of cognitive-intellectual factors as determinants of community adjustment of retarded persons.

#### SOCIAL SKILLS AS A PREDICTIVE HABILITATION CRITERIA

Gunzburg (1968) reported that two training goals were usually emphasized to ensure successful social habilitation of mentally

retarded persons: the first was the training of vocational skills appropriate for functioning in employment situations in the community. The second was the teaching of sufficient social and academic skills so that the individual could cope with community demands. The kind of social skills taught were social knowledge skills, such as the use of public cafeterias, public transportation facilities, medical resources, and the handling of financial concepts such as budgeting. Social skills did not include the teaching of socially appropriate behavior or the extinction of socially inappropriate behavior such as dependency and submissiveness. Vocational, academic, and social knowledge skills are of great importance to successful habilitation of the retarded in order that the individual may live independently in the community. However, successful habilitation of the retarded can not occur even with vocational, academic and social knowledge skills unless inappropriate social behaviors such as over-friendliness, bizarre speech and actions, poor personal appearance, and childishness are extinguished (Rosen, Clark, and Kivitz, 1977).

Mentally retarded persons, after spending much of their lives within an institution, often appear different, or even bizarre to people living in the community. Spradlin and Girardeau (1966) discussed such behavior as learned behavior, and as a direct result of institutionalization:

There is some maladaptive behavior which is typically found in institutions. This behavior is developed and maintained by the institutional environment.

For example, the institutional environment provides very little adult attention for the child. However, when the child has a tantrum, is aggressive with others, breaks a window, or exhibits self-destructive behavior, he usually receives a great deal of attention from the attendant and professional personnel ...

Clinging or hugging of both friends and strangers is a behavior which is exhibited in high frequency in institutions for retarded persons. Yet this kind of behavior is generally unacceptable in a community ... This behavior is not an innate characteristic of retarded persons but is generated by the social reinforcements of an institutional environment. The persons in an institutional environment are apt to overlook a retarded person if the person is playing with blocks, drawing or merely talking to them in a conversational voice. However, it is most difficult to overlook a patient who is clinging to you. (pp. 290-291)

The behavioral results of this type of institutional social learning are inappropriate in the community. For example, a mentally retarded person who has a tantrum in order to express his anger, or to receive attention from his job supervisor, will probably fail in his community placement. A young girl who has learned to seek the attention of adults by overfriendliness and clinging to them, may also fail in her community placement if she appears overfriendly and clings to strangers.

These inappropriate institutional behaviors have been found

to be independent of intellectual level (Johnson, 1970). Data for over 23,000 mentally retarded individuals from 19 public institutions was obtained in a 1967 census study. Information about the residents' anti-social behaviors and intelligence were correlated. Johnson reported that the correlation between intelligence scores and problem behavior measures involving disturbed relations with peers or authority figures were too low to be of practical significance. Vogel, Kum and Meshorer (1968) reported that severe social and emotional behaviors such as throwing objects, screaming, and aggressive and destructive behaviors were also independent of intellectual level.

Johnson's (1970) conclusion that resident's anti-social behaviors and intelligence were not correlated is not well founded. Anastasi (1976) discussed the fact that "any correlation coefficient is affected by the range of individual differences in the group" (p. 125). Since these tests were administered to a highly homogeneous sample (mentally retarded individuals) the correlation between the two would be expected to be close to zero.

The point was made that vocational, academic and social knowledge skills have been the areas stressed in training the retarded toward successful community placement. It has also been noted that community placement may fail if socially appropriate behavior (and the extinction of socially inappropriate behavior) is not in addition, the goal of habilitation training. The



question remains if the retarded are amenable to change.

Baumeister (1968) offered evidence that the mentally retarded as a group were more heterogeneous in their behavior than normal intelligence groups, thus the performance of mentally retarded individuals is characterized by its high variability. He theorized that unreliability in measurement of retarded individuals' behavior may be due to real changes within the organism, presumably on a motivational, attentional, or arousal basis. Baumeister's findings may account for the seemingly inappropriate behavior and the inability of the mentally retarded to adapt appropriately to changing environmental contingencies. This would also offer problems in regards to a program set up to modify inappropriate behavior, since more variable behavior would be difficult to modify.

One prerequisite for eliminating inappropriate behavior is that the individual be responsive to social stimuli (be capable of responding to the behavior of others) (Rosen, Clark and Kivitz, 1977). Rosenberg, Spradlin, and Mabel (1961) found a high level of verbal and gestural interaction when two "high level" mentally retarded persons were together. This same interaction occurred when two "low level" mentally retarded persons were together. They found, however, that there was little interaction when high level mentally retarded persons were brought together. From this study, it seems that retardates are socially responsive.

Spradlin, Girardeau and Corte (1967) conducted a study to determine if there was social stimulus control in mentally retarded adolescents. They investigated whether or not a child would give a candy reinforcer to another child when it did not cost him to do so, since he received a candy in any event. Three-fourths of the subjects did give the candy and therefore were assumed to be under social control of the other child. This social control must have developed outside of the experimental situation, since the children were not trained to give the candy, nor were they rewarded when they did so. The authors concluded that mentally retarded persons, even of a low level, can provide social cues sufficient to control the behavior of others.

The mentally retarded have been found to be sensitive to social feedback and social control. Since one of the prerequisites for behavior change is that the individual be responsive to social stimuli, the remediation of inappropriate social behaviors should be possible. Altman and Talkington (1971) concluded in a review of several behavior modification strategies, that modeling procedures should be well suited as a training strategy for mentally retarded persons. Using modeling procedures and the influence of social control (reinforcement), habilitation training programs for the training of appropriate (and the elimination of inappropriate) social behaviors may prove successful.

## SOCIALIZATION PROGRAMS

A number of social skill training programs have been developed as a result of the recognition of the relationship between good social skills and successful community placement. Some of these programs (Roos, 1968; Boruchow and Espenshade, 1976) deal with the general goals of social competence and interpersonal skills, like the self-care skills of grooming and shopping, but they do not deal with the remediation of inappropriate social behavior, such as attention-seeking behavior. Recently, three social skills programs have been developed to deal with the remediation of inappropriate social behavior -- "Personal Adjustment Training" (PAT) (Rosen and Zisfein, 1975a, Rosen and Zisfein, 1975b, and Rosen and Hoffman, 1975), "Social Adjustment Training" (SAT) (Lee, Note 1), and "Teaching Question-Answering Skills" (QA) (Cottreau and Lee, Note 2).

The PAT is a group counseling program designed to teach specific social competencies to institutionalized mentally retarded individuals, preparing them for independent community living. The program is made up of three curricula, each one developed for a different purpose. The first curriculum, Basic PAT (Rosen and Zisfein, 1975a) deals with failures, degradations, and rejections associated with intellectual subnormality as well as social deficiencies associated with institutionalization. The curriculum is organized around five general units - self-evaluation, acquiescence-exploitation, self-assertion, heterosexual

behavior and independence-leadership.

The second PAT curriculum is Assertive Training (Rosen and Zisfein, 1975b). This is a specialized curriculum designed for mentally retarded persons who exhibit withdrawn, shy, passive and unqualified obedience behavior. Assertive Training teaches mentally retarded individuals the assertive responses necessary to function independently without violating the rights of others.

The third PAT curriculum is Appropriate Behavior Training (Rosen and Hoffman, 1975). This highly structured, directive group situation was designed for moderately to severely mentally retarded adults. Through the use of modeling, social reinforcement and role-playing, inappropriate social behaviors are replaced with socially appropriate behaviors. Appropriate Behavior Training is organized around five general areas relevant to inappropriate behavior - self-evaluation, speech, social interaction, expression of anger, and sexual behavior.

The effects of the Basic PAT (Zisfein and Rosen, 1975a) were studied in a group of mentally retarded young adults and socially deficient adolescents (Rosen, Clark and Kivitz, 1977). Of the 25 subjects involved in the study, 23 were residents of an institution, and the other two were living at home and were commuting daily to school classes at the institution. All subjects were enrolled in vocational habilitation and community preparation programs at the institution. Although the evaluation procedures of

the study "were constructed to reflect the target areas of the curriculum that were judged to be both measureable and responsive to therapeutic efforts" (Rosen, Clark and Kivitz, 1977, p. 328), the evaluation procedures failed to show a significant treatment effect. The authors explain the result as the unreliability of the specific measures employed. The authors noted, however, that there were anecdotal and subjective reports from some staff members concerning noticeable changes in former PAT students.

Lee developed the SAT (Note 1) based on the training formats of the PAT (Zisfein and Rosen, 1975a). The SAT is designed to help institutionalized mentally retarded individuals learn appropriate social behaviors through counselor and peer interactions, by using discrimination training, role playing, verbal instructions and discussion. This program is designed primarily for moderately and mildly retarded individuals. The SAT contains 15 group counseling sessions covering five areas of social and personal adjustment - social interaction, personal appearance and mannerism, awareness of feelings, making friends and social responsibility.

The effects of the SAT were studied by Lee (1977) with a group of moderately retarded (Mean I.Q. = 47) institutionalized residents (20 males, 24 females). To achieve maximum effect, the SAT was repeated after the initial training. Evaluation of the effect of training was measured by the Peabody Picture Vocabulary Test (Dunn, 1965), the Adaptive Behavior Scale (Nihira, Foster,

Shellhaas and Leland, 1974), and nomination by peers and ward staff. On each of the measures, the experimental group showed a significant improvement on social adjustment skills. However, the training did not reduce the inappropriate social behavior of the residents (as measured on the ABS, Part II).

Cottreau and Lee (Note 2) developed the training program "Teaching Question-Answering Skills". This program is designed to teach institutionalized, mildly and moderately retarded individuals appropriate social behaviors and to decrease inappropriate social behaviors, through modeling, social reinforcement and role play. The program is set up on the basis that many institutionalized mentally retarded persons respond to questions with excessive degrees of contradiction and inconsistency, and are easily swayed by the opinions of others. The authors suggest that this manner of responding is due to the individual's style of responding, an "impulsive tendency" to answer quickly without evaluating other possible responses to the question. The training is an attempt to teach three main skills - training for a delay in response to eliminate the impulsive tendency, training for attentive listening to the question in order to give a reflective answer, and training for assertiveness so that the individuals will "stand up" for their own opinions.

Both of the socialization programs used in the present study (QA and SAT) concentrate upon developing and strengthening constructive alternatives of behavior, based on social-learning

principles. The same training techniques - modeling, role-play and social reinforcement - were included in both socialization training programs (SAT and QA). Bandura (1969) concluded that "the combined use of modeling and reinforcement procedures is probably the most efficacious method of transmitting, eliciting, and maintaining social response patterns" (p. 161). However, the programs differ on other basic components.

The most noticeable difference is between the individual and the group training. The author reasoned that individual training allows the trainer more time to reinforce the resident, hold his attention and reinforce consistently. Group training, however, provides a socialization experience with his/her peers within the group. Also, the group training allows the trainer more efficient use of his time, since six subjects may be trained at one time.

Both socialization programs are structured, although the SAT and QA differ as to the extent of their structure. In the SAT, the degree of structure is mainly left up to the counselor, as Lee (1977) stated:

The counselor initiated the topics for discussion, encouraged general participation while discouraging irrelevant verbal and nonverbal behaviors, and held the group members to the topic. (pp. 321-322)

In the QA, however, the counselor is instructed as to what to say to the subject, and the temporal sequence, as:

When I ask a question, and you answer me, I want to make sure I can hear your answer. Say, 'yes' or 'no' in a nice clear voice".

Discourage nodding. If resident gives an unclear or inaudible answer, explain why he should have answered 'yes' or 'no' and repeat the question. Each clear, loud answer should be praised by the trainer. (Cottreau and Lee, Note 2, p. 4)

Also, in QA there are direct instructions for problem solving that require assertiveness (certain predetermined behavioral criteria in a problem solving situation) on the part of the subject.

The SAT was found to be successful in increasing social competence and interpersonal skills as measured by the ABS Part I (Lee, 1977). However, it was not found successful in decreasing maladaptive behaviors as measured by the ABS Part II (Lee, 1977).

As previously mentioned, for successful community placement the goal of social skills training is to increase social competency skills as well as to decrease socially inappropriate behavior.

Where institutionalized residents have learned more severe patterns of inappropriate behavior, a different training program may be needed. Rosen, Clark and Kivitz (1977) reported that:

This need is particularly salient where institutional behavior patterns of passivity, dependency, submissiveness, low self-esteem, attention-seeking, and inertia prevail. It is for such behaviors that more powerful and more individually tailored procedures must be used to supplement group socialization programs. (p. 288)

Therefore, socialization training that attempts to result in positive behavior change of institutionalized mentally retarded



individuals must occur on an individual basis. Group programs (Lee, 1977) have had no effect in decreasing inappropriate social behaviors which may cause individuals to fail in community placements.

#### HYPOTHESES

The purpose of the present study is to examine the effectiveness of a highly structured, four-week individualized training program designed to enhance social adjustment skills of mentally retarded individuals in an institutionalized setting. It was predicted that the retarded residents who received the individualized counselling, in contrast to those who did not receive such treatment would show a reduction in socially inappropriate behavior. It was also predicted that those residents who received training in either the Experimental or Control 1 group would show a greater degree of socially appropriate behavior compared to those residents who received no training.

Hypothesis 1 - It is hypothesized that subjects who received QA training would score significantly lower in maladaptive behavior than those subjects who received SAT training, or no training, as measured by the ABS Part II.

Hypothesis 2 - It is hypothesized that subjects who received SAT, or QA training would score significantly higher in adaptive behavior than

those subjects who received no training,  
as measured by the ABS Part I.

### CHAPTER III

## RESEARCH DESIGN AND METHODOLOGY

### RESEARCH DESIGN

The sampled residents were randomly assigned to three groups of equal numbers: the experimental, control 1 (controlling for special attention effects of training), and control 2 (no treatment) groups. This pretest-posttest control group design was "strongly recommended" by Campbell and Stanley (1963) who reported that it controls for all sources of internal validity. The way in which these factors are controlled will briefly be discussed here.

"History" is controlled in that any general historical events that might have produced a change in the experimental group, will also produce a change in the control groups. "Maturation" and "testing" are controlled insofar as they are manifested to the same degree in experimental and control groups. "Instrumentation" is controlled insofar as the person administering the pretest also gave the posttest, and were kept ignorant as to which subjects were receiving treatments, lest the knowledge bias their ratings. "Regression" is controlled insofar as mean differences are concerned, since subjects are randomly assigned to experimental conditions from the same subject pool. "Selection" differences are controlled since group equality has been assured by randomization.

## THE SAMPLE

The subjects for this study were drawn from The Michener Centre in Red Deer, Alberta. The institution, subsidized by the Province of Alberta, accommodates 1,800 mentally retarded residents. All subjects participating in this study were attending a pre-vocational training program, as well as the usual daily programs on the wards. Those residents under heavy medication during the time of the study and those severely handicapped in speech and hearing were excluded from the sample.

The original sample consisted of 36 residents. However, eight of these subjects were excluded from the results of the study because they became ill, were transferred out of the institution or were discontinued from the pre-vocational training program. The remaining participants were a total of 28 residents (16 males, 12 females) whose ages ranged from 13 to 45, with a median of 22. Their I.Q. (as measured by the Peabody Picture Vocabulary Test) ranged from 10 to 78, with a mean of 43.7. Subjects were randomly assigned to three groups of equal size, an experimental group receiving QA training, a control 1 group receiving SAT training, and a control 2 group receiving no training.

## MEASURING INSTRUMENT

Changes in participants' behavior as a result of training were examined using the American Association on Mental Deficiency's

Adaptive Behavior Scale (Nihira et al., 1974). As discussed earlier, the goal of socialization training is to increase socially appropriate behavior as well as decrease socially inappropriate behavior. The ABS was used in this study because it was designed to measure both socially adaptable behavior (Part I) and socially maladaptive behavior (Part II).

The ABS (Nihira et al., 1974) is a behavior rating scale for mentally retarded individuals. Part I of the scale was designed to evaluate an individual's skills on 10 behavior domains considered important to the development of personal independence in daily living. Part II was designed to evaluate maladaptive behavior related to personality and behavior disorders over 14 domains. For the purpose of the present study, the overall scores of Part I and Part II were used, as well as Part I Subdomains VIII (Self-Direction), IX (Responsibility) and X (Socialization). The mean reliability of the ABS Part I was reported to be .86, Part II (.57), Part I Subdomain VIII (.71), Part I Subdomain IX (.83) and Part I Subdomain X (.77) (Nihira et al., 1974).

#### PROCEDURE IN ADMINISTRATION

Prior to the start of training, all subjects received a "pre-test" on the Adaptive Behavior Scale (ABS) (Nihira, et al., 1974). The ABS was administered by the subjects' "key workers" (residential staff assigned to take care of the daily programming aspects of the residents).

The 36 sampled residents were assigned to Experimental, Control 1 and Control 2 groups of equal size. The Experimental group received training individually on QA for four weeks, 25 minutes per session, approximately five sessions per week. The Control 1 group (two groups of six residents each) received training in SAT for four weeks, 30 minutes per session, approximately four sessions per week. The Control 2 group received no training, but were involved in their usual ward activities or programs during the training sessions for the Experimental subjects. Time spent in each training program for each subject was equal. The QA program was repeated once in order to make this possible. Sample lessons of the QA are found in Appendix A, while sample lessons of the SAT are found in Appendix B.

Training of subjects was carried out by two counselors, who each trained an equal number of subjects in the Experimental and Control 1 groups. These counselors (females) had a Bachelor of Arts degree in Psychology, and their experience in the mental retardation area ranged from approximately one to three years. Neither of these counselors participated in the pre or post-testing of the subjects. Upon completing the programs, subjects were post-tested by the same institutional staff who participated in the pretesting. The evaluating staff were not informed as to which residents were participating in the experimental group.

## CHAPTER IV

### RESULTS

#### EXCLUSION OF SUBJECTS.

Eight participants were excluded from the study because they became ill, were transferred out of the institution, or were discontinued from the pre-vocational training program. These eight participants were excluded from the final analysis of the data. The remaining participants were a total of 28 residents, with 10 subjects in the Experimental (QA) group, nine in the Control 1 (SAT) group, and nine in the Control 2 (no treatment) group.

#### EFFECTS OF TRAINING

t - test comparisons of groups' pretest scores on the ABS were carried out to ensure that the groups did not vary significantly before training. As can be seen from Table 1, there were no statistically significant differences in pretest scores for the experimental and control groups.

The experimental and control groups were compared on the dependent variable - Adaptive Behavior Scale, using a 2 x 3 way analysis of variance. This design permitted comparisons of the differences in the overall performance of the subjects in the three groups, as well as evaluation of the changes in performance shown by the subjects during the experimental session.

Note: See Appendix C for Raw Data

TABLE 1

Summary of t - tests for Differences in Pretest Means

	Experimental, Control 1	Experimental, Control 2	Control 1, Control 2
ABS Part I	.10	1.86	1.98
ABS Part II	1.23	.61	1.50
ABS Part I Subdomain VIII	.50	1.14	.71
ABS Part I Subdomain IX	.56	2.17	1.71
ABS Part I Subdomain X	.34	1.00	1.33



### ABS Part I Adaptive Behavior

The mean, standard deviation and summary results of the analysis comparing ABS Part I Adaptive Behavior scores are given in Table 2. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = 1.03, p = n.s.$ ] [ $F(1, 25) = .44, p = n.s.$ ] [ $F(2, 25) = .52, p = n.s.$ ].

### ABS Part II Maladaptive Behavior

The mean, standard deviation and summary results of the analysis comparing ABS Part II Maladaptive Behavior scores are given in Table 3. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = 1.45, p = n.s.$ ] [ $F(1, 25) = .07, p = n.s.$ ] [ $F(2, 25) = .03, p = n.s.$ ].

### ABS Part I Subdomain VIII Self-Direction

The mean, standard deviation and summary results of the analysis comparing ABS Part I Subdomain VIII Self-Direction scores are given in Table 4. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = .33, p = n.s.$ ] [ $F(1, 25) = 1.46, p = n.s.$ ] [ $F(2, 25) = .00, p = n.s.$ ].

### ABS Part I Subdomain X Socialization

The mean, standard deviation and summary results of the analysis comparing ABS Part Subdomain X Socialization scores are given in Table 5. No statistically significant differences were

TABLE 2  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Adaptive Behavior Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	198.20	31.81	206.00	23.37
Control 1	199.22	35.31	195.89	40.14
Control 2	182.00	26.06	186.11	23.94

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	1640.15	1.03
Error <sub>b</sub>	25	1586.59	
Within Groups	28		
Trials	1	128.90	.44
Trials X Conditions	2	150.70	.52
Error <sub>w</sub>	25	289.60	

TABLE 3  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part II Maladaptive Behavior Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	30.30	18.20	34.10	22.17
Control 1	23.22	12.29	25.67	14.28
Control 2	35.11	23.81	40.33	27.84

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	801.36	1.45
Error <sub>b</sub>	25	551.63	
Within Groups	28		
Trials	1	204.45	.07
Trials X Conditions	2	8.68	.03
Error <sub>w</sub>	25	287.63	

TABLE 4

Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain VIII Self Direction Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	13.30	3.27	14.10	2.33
Control 1	12.78	5.09	13.67	5.50
Control 2	11.89	3.72	12.78	4.27

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	9.02	.33
Error <sub>b</sub>	25	27.01	
Within Groups	28		
Trials	1	10.29	1.46
Trials X Conditions	2	.01	.00
Error <sub>w</sub>	25	7.03	

TABLE 5  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain X Socialization Scores

	Pretest Means	Pretest SD	Posttest Means	Posttest SD
Experimental	18.10	4.28	18.30	4.32
Control 1	18.56	2.96	18.22	3.56
Control 2	16.67	4.27	16.89	3.95

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	14.13	.71
Error <sub>b</sub>	25	19.92	
Within Groups	28		
Trials	1	.02	.00
Trials X Conditions	2	.45	.04
Error <sub>w</sub>	25	11.10	

found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = .71, p = n.s.$ ] [ $F(1, 25) = .00, p = n.s.$ ] [ $F(2, 25) = .04, p = n.s.$ ].

#### ABS Part I Subdomain IX Responsibility

The mean, standard deviation and summary results of the analysis comparing ABS Part I Subdomain IX Responsibility scores are given in Table 6. A statistically significant difference was found between groups [ $F(2, 25) = 3.69, p < .05$ ]. No other statistically significant differences were found [ $F(1, 25) = .00, p = n.s.$ ] [ $F(2, 25) = 1.12, p = n.s.$ ].

Both of the two main hypotheses were rejected. Subjects who received QA training did not score significantly lower in maladaptive behavior than those subjects who received SAT training, or no training, as measured by the ABS Part II. Also, subjects who received QA, or SAT training did not score significantly higher in adaptive behavior than those subjects who received no training, as measured by the ABS Part I. The ABS Part I Subdomain IX Responsibility scores did show a statistically significant between group effect, but it is of no practical significance since this subdomain is made up of only two items.

TABLE 6

Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain IX Responsibility Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	4.10	1.20	4.40	1.07
Control 1	3.89	1.45	4.22	1.20
Control 2	3.11	1.36	2.78	1.20

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	9.17	3.69*
Error <sub>b</sub>	25	2.48	
Within Groups	28		
Trials	1	.02	.02
Trials X Conditions	2	.72	1.12
Error <sub>w</sub>	25	.64	

\*  $p < .05$

## CHAPTER V

### DISCUSSION

As was seen in Chapter IV, neither of the main hypotheses were supported. Training of institutionalized mentally retarded residents on a highly structured, individualized training program was not found to enhance social adjustment skills. Also, this study did not support Lee's (1977) finding that SAT training increased socially appropriate behavior.

Several factors may account for the present research findings. One involves the measuring instrument used to determine the effect of training on inappropriate behavior. (Inappropriate social behavior was not decreased by training as measured by the ABS Part II (Nihira et al., 1974). Lee (1977) found the same result on the ABS Part II when training using the SAT. In terms of that study, Lee (1977) reported that it was "puzzling, to find no significant differences between the experimental and control groups" (p. 321) in the ABS Part II. Lee's results as well as those of the present study may be explained as occurring because of the low mean reliability of the ABS Part II, which is reported to be .57 (Nihira et al., 1974). Changes may have been disguised due to the low reliability coefficient. Additional inappropriate behavior measuring instruments, with higher reliability coefficients may have been more sensitive to changes produced by training. An alternative explanation would be that these training programs have no effect on inappropriate behavior.



Another factor that may account for the present findings pertains to the length of training time. Lee (1977), as reported earlier, found a statistically significant training effect when training institutionalized mentally retarded individuals on the SAT, as measured on the ABS Part F (Nihira et al., 1974). This result was hypothesized to occur in the present study. However, Lee's (1977) study and the present study differ in terms of the length of training. Lee doubled the length of training time in his study by giving the SAT program to the subjects twice. The training programs (SAT and QA) used in the present study were matched in terms of length of training, but this training time was half of the training time reported in Lee's study. Training time was not made equal to that of Lee's (1977) study because it was not pointed out to be an important factor in program effectiveness. From this, length of training may be considered a factor that may contribute to treatment effectiveness.

Another factor that may account for the present research findings pertains to the design controls of the study. Key workers who rated subjects on the pre and posttests of the study were not informed that the residents were attending a special program. This was possible since subjects attended the program during the time they spent at a pre-vocational training program. Lee (1977) reported that ward staff who rated subjects on pre and posttests of the ABS probably knew which residents were experimentals and

which were controls. Therefore, the significant results reported by Lee (1977) could have been derived from the rater's knowledge of the experimental condition.

Another design control of the present study was the addition of a control group to control for special attention effects of training. Lee's (1977) study in which he employed no control group to account for special attention effects found significant training effects. These could have resulted from the special attention affects that the experimental group was given since the residents left the ward three times a week for a special program.

#### IMPLICATIONS FOR FUTURE RESEARCH

To further examine the effectiveness of social adjustment training, it would be interesting to examine the effect of training time. It is recommended that future research consider a length of training time comparable to that reported by Lee (1977).

Another implication for future research pertains to the research design used. In the present study, training was not found to be effective in enhancing social adjustment skills on institutionalized mentally retarded persons. It is not clear why the training did not have an effect on social behavior. Length of training time, and a low reliability measure of inappropriate behavior have been considered as contributing factors. In order to identify other factors that may have affected the present result, a single-case experimental design (Hersen and Barlow, 1976)

would be appropriate. Hersen and Barlow (1976) reported that by using a single case approach, relevant therapeutic variables may be isolated, that can answer the question of why a treatment works. When all of the relevant variables have been isolated, they may be combined to form a more powerful treatment "package" (Hersen and Barlow, 1976). The treatment program would then be the result of a series of single case designs, with the reasons why it should be effective known. The magnitude of the effect would be the only factor needed to be demonstrated and could be accomplished by using a group design, as was used in the present study.

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APPENDIX A

TEACHING QUESTION ANSWERING SKILLS: SAMPLE LESSONS

## Lesson #1

"For the next few weeks we are going to be talking to each other and you will learn to ask questions in nice ways. You will also learn how to answer questions and to tell me what you think and how you feel. I hope you will enjoy the lessons and have some fun".

### Warm-up Phase

### Training Phase

Target Skill: Answering Clearly.

"When I ask a question, and you answer me, I want to make sure I can hear your answer. Say 'yes' or 'no' in a nice, clear voice".

Discourage nodding. If resident gives an unclear or inaudible answer, explain why he should have answered 'yes' or 'no' and repeat the question. Each clear, loud answer should be praised by a trainer.

Question 1 - "Are you a boy"?

Question 2 - "Do you live in Red Deer"?

Question 3 - "Do you have blue hair"?

Question 4 - "Are your shoes red"?

Question 5 - "Do you have 10 fingers"?

Question 6 - "Do you like to watch T.V."?

Question 7 - "Do you have many friends"?

"You have been doing very well. It is nice to hear you answer in a nice clear voice. Now let's practice something else. This time, when you answer, I want you to look at me. Answer 'yes' or 'no' in a clear voice and look at me when you answer". Use slight physical guidance if necessary (i.e., tipping chin if resident is looking down, or turning away).

Question 8 - "Do you like to swim"?

Question 9 - "Do some dogs fly in the air"?

Question 10 - "Do you like snow"?

Question 11 - "Do you get mad very often"?

Question 12 - "Would you like to live in a really big city"?

Question 13 - "Do you like to get up in the morning"?

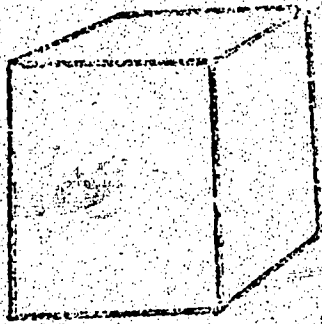
Question 14 - "Is it a good idea to smoke"?

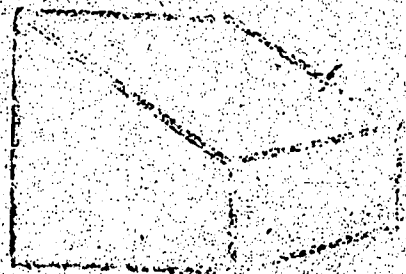
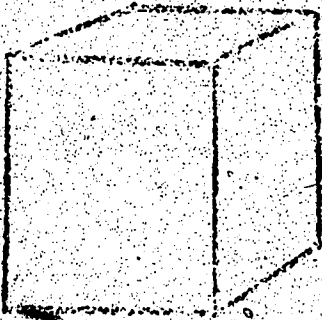
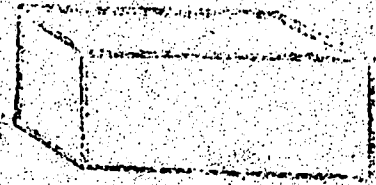
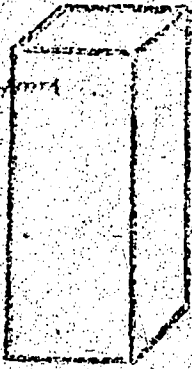
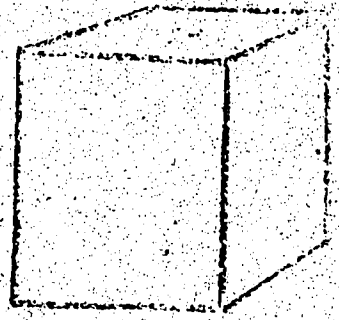
Question 15 - "Are big cars better than small cars"?

In all subsequent lessons, the resident is expected to answer in a clear, loud voice, and look at the trainer.

#### Assertion Task

Picture Selection: Resident is asked to look at a standard picture. He is then presented with a pair of pictures, one identical and the other one different. Say, "This is the same picture as this, isn't it"? (When the pictures are different) and "This picture is different, isn't it"? (When the pictures are the same).





## Lesson # 7

Warm-up PhaseTraining

Review: Repeat 2 examples from Session #6.

Target Skill: Answering Questions in a Consistent Way.

This lesson is intended to teach the resident not to answer 'yes' or 'no' in a haphazard, random, or impulsive fashion.

When the resident answers the first question of the set, ask him if he is really sure, before asking the second question.

Set #1 "Do you like cats"? Yes or No

"Are you really sure"?

"Do you hate cats"? Yes or No

If resident contradicts himself, point out the contradiction.

(i.e., "You said you liked cats; you should not say you hate cats).

If the resident is still contradicting himself after two repetitions, go on to next example. When resident responds without contradicting, praise by saying "good, you are really listening and thinking"!

Set #2 "Are you happy"? Yes or No

"You are sure"?

"Are you sad"? Yes or No

Set #3 "Do you like winter better than summer"?

"Do you like summer better than winter"?



Starting at Set #3, tell the resident to really think about his answer because you will be checking back on some of his answers later. As an example, go back to Set #1 and check on only one of the questions (i.e., Do you like cats vs Do you hate cats?) to see if the answer is consistent with his earlier response to the question. Repeat this review several times during the training part of Sets #3 - 10.

- Set #4 "Are most people good to you?"  
 "Are most people mean to you?"
- Set #5 "Are white cars nicer than black cars?"  
 "Are black cars nicer than white cars?"
- Set #6 "Are parties good for people?"  
 "Are parties bad for people?"
- Set #7 "We should eat one apple every day".  
 "We should not eat any apples".
- Set #8 "Are you a tall person?"  
 "Are you a short person?"
- Set #9 "Do you think football is a better game than swimming?"  
 "Do you think swimming is a better game than football?"
- Set #10 "When you get in a fight it is your fault".  
 "When you get in a fight is it someone else's fault?"

#### Assertion Task

This task involves answering 'yes' or 'no' to questions about certain visual stimulus.

The purpose here is to get resident to answer consistently.  
That is, he must not answer 'yes' to all the questions in each set.

A. Is this line longer than this line?

Is this line shorter than this line?

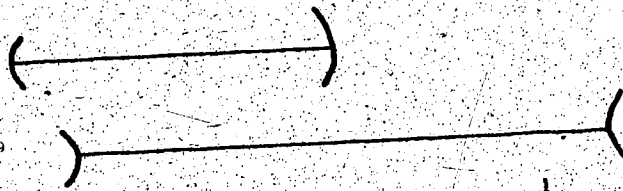
Is this line the same as this line?



B. Is this line the same as this line?

Is this line shorter than this line?

Is this line longer than this line?



C. Is this line shorter than this line?

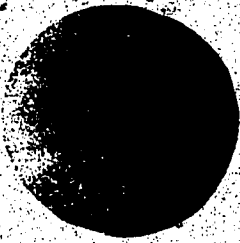
Is this line longer than this line?

Is this line the same as this line?



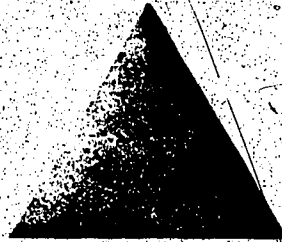
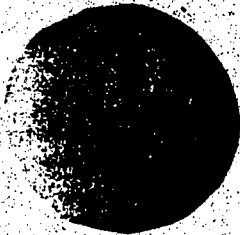
D. Are these two colors the same?

Are these two colors different?



E. Are these two colors the same?

Are these two colors different?



## Lesson #8

Warm-up PhaseTraining

Review: Repeat 2 sets from Session #7

Target Skill: Resistance to Countersuggestion

Sometimes residents are easily influenced by external cues. In answering questions, the resident may easily be influenced by the countersuggestions. This lesson is intended to help residents resist this type of influence. Say, "Now, I am going to ask you some questions. Don't be 'fooled' by what I say. O.K.? Just listen and think carefully".

Praise after each consistent response.

Question 1 - "Are you a boy/girl"? (State question so it requires an affirmative answer).

Countersuggestion: "You are a girl/boy aren't you"?

(Opposite of above).

Contradiction: "Are you a boy/girl" (same as Countersuggestion).

Repetition of Question: "Are you a boy/girl"?

(Original question).

Question 2 - "Are you short/tall?"

Countersuggestion: "You are short/tall aren't you?"

Contradiction: "Are you short/tall?"

Repetition of Original Question: "Are you short/tall?"

Question 3 - "Do you like apple pie?"

Countersuggestion: "No, you hate/like apple pie don't you?"

Contradiction: "Do you hate/like apple pie?"

Original Question: "Do you like apple pie?"

Question 4 - "Do you laugh at funny stories?"

Countersuggestion: "You cry when you hear funny stories, don't you?"

Contradiction: "Do you cry at funny stories?"

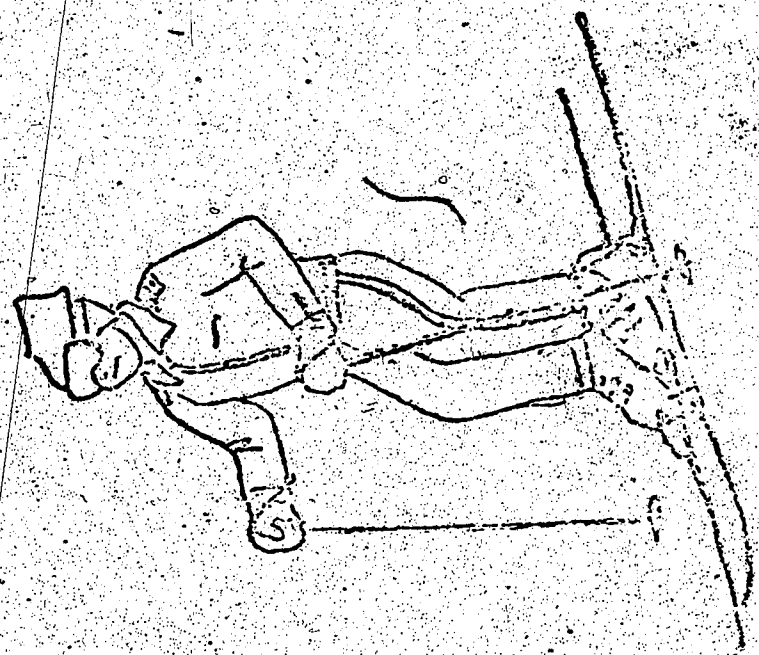
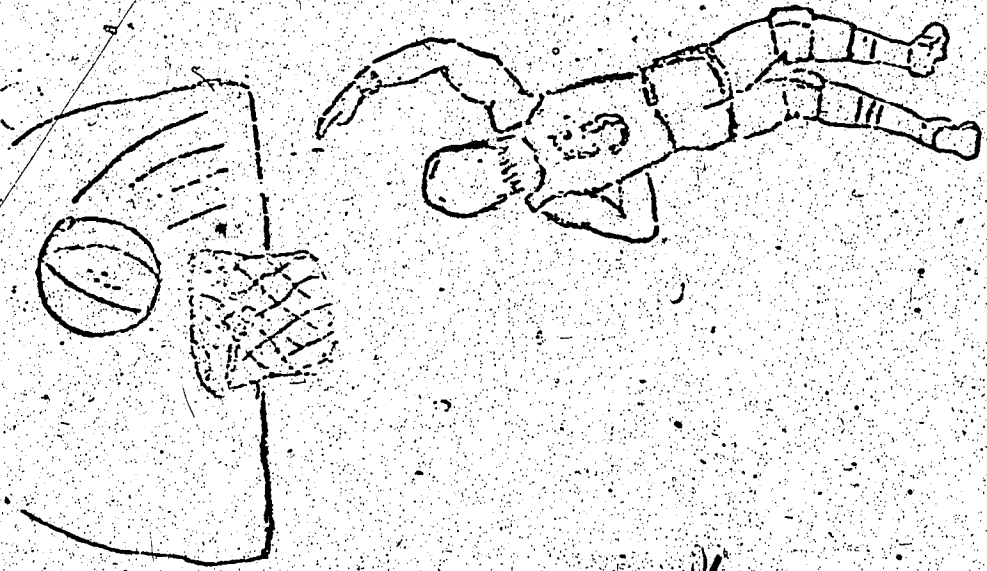
Original Question: "Do you laugh at funny stories?"

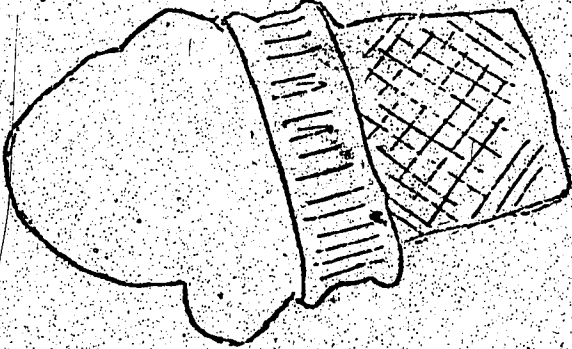
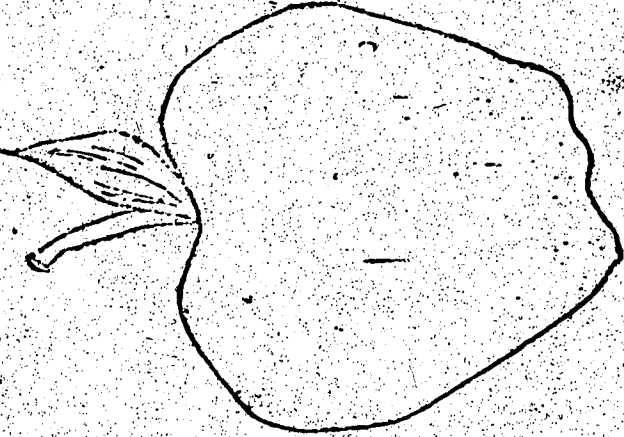
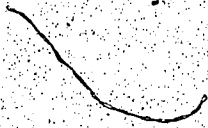
#### Assertion Task

Picture Judgement: A stimulus card depicting three sports (hockey, basketball, baseball) is presented. The resident is asked which of these three sports he likes best. Trainer then expounds on the merits of another sport and says he likes it better. Trainer then asks a leading question, "Don't you like this sport better?" in a voice trying to convince resident of same. Then he repeats his earlier question, "Which sport do you like best?" If resident refuses to be swayed say, "Very good, you made up your own mind and didn't change what you said." If

he did change, explain that sometimes it is nice to "stick" to what you said. Then say, "We'll try another example, but this time don't change your mind so easily."

Present another card showing three kinds of food (apple, pie, ice cream cone), and repeat the above instructions.



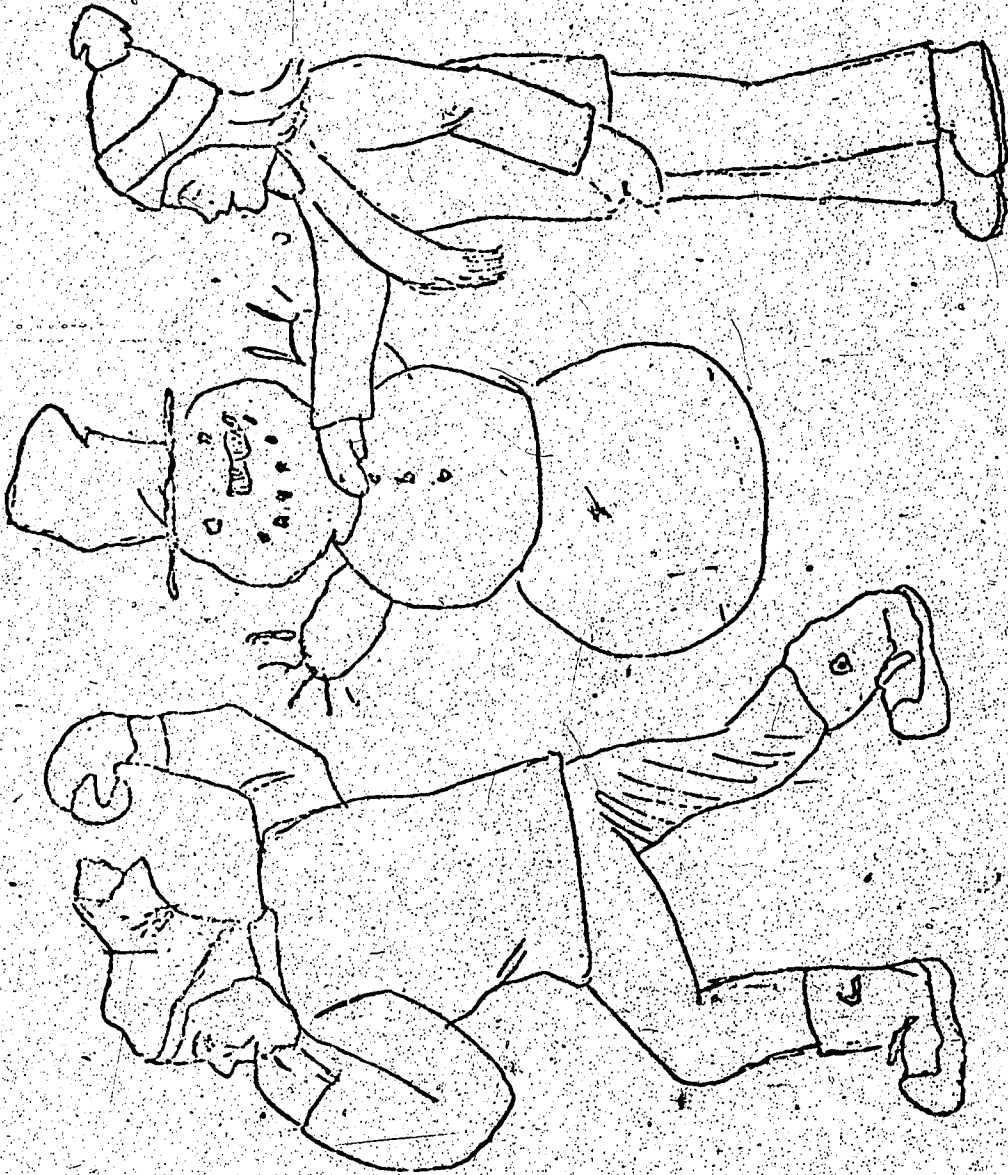




Warm-Up #3: Winter

Possible questions

1. "What is Betty doing?"
2. "What is Bob doing?"
3. Discuss winter clothing and why they must wear warm clothing.
4. "Do you like winter? What do you like about winter?"
5. "Do you like snow? What are some games you can play in the snow?"
6. "Is winter better than summer?"



APPENDIX B

SOCIAL ADJUSTMENT TRAINING: SAMPLE LESSONS

## Session # 1 Introduction and Teaching the Terms "Weird" and "OK"

Session #1 consists of two parts. Part One is intended to introduce each team member, and Part Two is intended to teach R's the meanings of "weird" and "OK" by designating inappropriate and appropriate behaviors, respectively. Behaviors that are deviant from defined norms (e.g., over friendliness, hand flipping, bizarre speech and actions) are labelled "weird" and behaviors that are acceptable are labelled "OK".

### Part One: Introducing Oneself

#### Procedures

1. Counselor (C), looking at the residents (R's), says the following:

"Does everyone know each other? I will introduce myself first. My name is \_\_\_\_\_, and I am a \_\_\_\_\_. During the next few weeks, we are going to be meeting three times a week to get to know each other better. Our meeting will be called group counseling. In our group counseling meeting, we will talk about a lot of things such as how we get along with each other, how we can make friends, how to take care of ourselves, and things like that. I hope you will like coming to these group counseling meetings. Now, I think each of you should introduce yourselves to everyone."

2. C models the appropriate response by introducing himself again to everybody. ("My name is \_\_\_\_\_, and I live in Red Deer.")
3. Every R, in turn, introduces himself.
4. C asks a question again, "Now, do you remember what my name is?" If there is a correct response from the group, C reinforces R by saying, "That's correct. My name is \_\_\_\_\_." If there is not a satisfactory response from the group, C re-introduces himself again and reminds the group members not to forget.
5. C asks, "What is our meeting here called?" If there is a correct response from the group, C repeats the response. If there is no satisfactory response, C says that this is called group counseling and asks the group members not to forget.

#### Part Two: Teaching the Terms "Weird" and "OK"

##### Procedures

1. C explains that the manner in which a person dresses, walks, eats, and talks, creates an impression upon others. Impression is defined as "what people think of you because of the way you dress, talk, and walk." If a person is to be seen as OK or is to make a "good" impression on others, he must dress, talk, and behave nicely (properly); otherwise, others will see him as weird.

2. C gives a female's dress to a male R and asks:

"If you wear this, is this weird or OK?" (C says,

"That's right. It's weird because boys do not wear girl's dresses, right?")

3. C gives a pair of boy's pants to a boy and asks:

"If you wear this, is this weird or OK?" (C says,

"That's right. It's OK, because he is a boy and he should wear boy's pants.")

4. C shows a dress that is extremely shabby and unkempt and

asks:

"If you wear this, is it weird or OK?" (C says,

"That's right. It's weird, because it is too dirty.")

5. C shows a dress that is clean and neatly ironed and asks a female R:

"If you wear this, is it weird or OK?" (C says,

"That's right. It's OK, because it is clean and neat.")

6. C shows a video tape segment in which a man urinates in the garden, and asks:

"If you do this, is it weird or OK?" (C says,

"That's right. It's weird, because we are not supposed to pee pee in the garden.")

C then asks where the proper place is. The correct answer (i.e., washroom) is praised.

7. C role-plays a man who flips his hand repetitiously and asks:  
"Is this weird or OK?" (C says, "That's right. It's weird.")
8. C role-plays a person who speaks extremely loud (e.g., "I have been to church today"), and asks whether this is weird or OK? C also asks why it is weird.
9. C role-plays a person who picks up a cigarette butt and puts it in his pocket and asks whether this is weird or OK.
10. C shows a video tape segment in which a man enters a ladies washroom and asks whether this is weird or OK.
11. C role-plays a resident who approaches another R and says, "Hi, my name is Humpty Dumpty. What is your name?" C then asks whether this is weird or OK.
12. C role-plays a resident who approaches another R and says, "Hi, how are you?" in the appropriate manner. C then asks whether this is weird or OK.
13. C role-plays a resident who is sitting in a chair with his head bowed and asks, "Is this weird or OK?" (C then says, "It is weird, because a person should not bow his head like this.")
14. C role-plays a resident who sits properly in a chair and asks: "Is this weird or OK?" (C then says, "It is OK, because ...")

15. C role-plays a resident who talks loudly to himself and asks: "Is this weird or OK?" (C then says, "It's weird, because he is talking loudly to himself.")
16. C asks R's to verbally report or demonstrate any weird behaviors they have seen. Ask three R's to report, and after each report, C says: "Thank you. That is really weird and you've done a good job of telling us the weird behavior you have seen."



## Session #6 Dress

In Session #6, the focus is on teaching R's appropriate attire. It is assumed that R's have already acquired basic self-help skills prior to this session. Again, any deviations from defined norms are labelled weird.

### Procedures

1. C explains that the manner in which a person dresses creates an impression upon others. Impression is defined as "what people think of you because of the way you dress, talk, and walk." If a person is to be viewed as OK, he must dress according to socially accepted rules. C further explains that proper, OK dressing is important because:
  - a) It makes you look nice (it improves your appearance).
  - b) It helps make a good (favorable) impression when meeting and keeping friends.
  - c) It keeps you healthy and happy.
2. C asks the group to state a weird way of attiring. If there is a satisfactory answer from the group, C repeats or expands R's response. If there is not a satisfactory answer, C presents several pictures cut from magazines, depicting either OK or weird ways of attiring. C then asks the group members to indicate whether they are weird or OK. The pictures should depict the following:
  - a) unkempt vs. clean.
  - b) ill-fitting vs. well-fitting

- c) sex inappropriate vs. sex appropriate.
- d) weather inappropriate vs. weather appropriate.
- e) occasion inappropriate vs. occasion appropriate.

C emphasizes that it is not only important to choose appropriate dress but also to wear it properly. For example, if a person wears good quality clothes but has his zipper or buttons often undone or his underwear showing all the time, then his attire would be considered weird.

4. C asks each member to come out to the front and requests the remaining members to answer whether their clothing is weird or OK when the following questions are asked by C:

- a) Is his clothing appropriate for his sex?
- b) Is his clothing appropriate for his age?
- c) Is his clothing appropriate for the weather?
- d) Is his clothing appropriate for the occasion?
- e) Does his clothing fit well?
- f) Is his clothing clean?
- g) Is his clothing neatly ironed?
- h) Is he buttoned correctly. Is any button missing?
- i) Is his underwear showing?
- j) Does he need a belt, and if so, is it properly done up?
- k) Other: socks, shoes, etc.

Repeat #4 in a pair evaluation situation. C pairs the group members and requests them to evaluate whether the other R's attire is weird or OK with respect to the following:

- a) Is his clothing OK (appropriate) for his sex, age, weather, and occasion?
- b) Does his clothing fit well?
- c) Is his clothing clean or shabby?
- d) Is his clothing neatly ironed?
- e) Is he buttoned correctly? Is any button missing?
- f) Is his underwear showing?
- g) Other: socks, shoes, etc.

If R's answer according to how these questions are stated, their answers will either be "yes" or "no". They must then equate these answers with OK or weird. R's who received any weird comments are checked by C, and if this is confirmed, they are sent to a suitable area (ladies' room, mens' room) to correct their appearance and allowed to return when they look OK. Subsequently, C praises the improved appearance of R, and asks the other group members to praise the improvement.

C explains that the "impression" created by appearance is not just determined by dress alone; it is also affected by grooming and general self-care. The foregoing explanation can be achieved by asking the following hypothetical question:

"If a person wears an outfit of good, clean quality, but is poorly groomed (unshaven face, untrimmed moustache, poorly groomed hair, smelly mouth, etc.), does he look weird or OK?"

If there is a satisfactory response from the group, C repeats and expands the response. If the response from the group is not satisfactory, C explains that grooming and other self-care (care of face, shaving, moustache, care of teeth, care of hair, care of nails, etc.) significantly influences people's impressions of him.

C presents four pictures taken from magazines which contrast trimmed vs. untrimmed moustaches and well combed vs. poorly combed hair and says: "Look at this person. Do you like him? What impression do you have of him? What is weird about him?"

If the response from the group is not satisfactory, C indicates that the person is wearing a good outfit, but is poorly groomed — that is, he has a poorly groomed moustache and hair.

8. C announces to the group members that:

- a) they will be checked about their dress and grooming hereafter;
- b) they must come to the group counseling session properly dressed and groomed;
- c) they will be sent away to correct their clothing or grooming if it is poor.

9. At the beginning of any SAT training sessions hereafter, C should check every group member concerning appropriate attire (see #4), and praise R's for their improved attire as well as grooming. Those who show unacceptable, weird dressing or grooming are sent to a suitable area (ladies' room, men's room) to correct their appearance and are allowed to return when they look OK. When R's return with a better appearance, C should praise them in front of the entire group so that desirable, vicarious learning may occur.

APPENDIX C

RAW DATA

RAW DATA - EXPERIMENTAL (QA) GROUP

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
1	213	192	18	76	12	11	4	4	21	10
2	221	219	66	31	17	18	4	3	21	19
3	162	207	52	8	8	13	3	6	16	24
4	133	157	23	27	11	14	2	3	10	14
5	180	196	25	31	11	14	5	4	14	17
6	203	202	10	28	17	16	5	5	24	22
7	208	219	34	40	14	15	3	4	15	22
8	233	240	14	8	14	15	6	6	19	19
9	197	231	18	25	11	15	5	5	19	21
10	232	197	43	67	18	10	4	4	22	15

RAW DATA - CONTROL 1 (SAT) GROUP

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
11	172	172	27	20	7	6	3	3	19	16
12	222	222	43	25	15	18	5	5	17	19
13	218	218	29	27	15	16	5	5	19	21
14	153	153	25	15	15	7	3	4	17	13
15	221	221	6	12	18	18	6	4	24	21
16	134	134	36	33	3	7	2	2	16	16
17	205	205	21	29	18	17	5	5	21	21
18	176	176	12	58	10	14	2	4	14	14
19	262	262	10	12	14	20	4	6	20	23



RAW DATA - CONTROL 2 (NO TREATMENT) Group

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
20	191	184	59	61	11	8	3	3	19	15
21	126	187	56	44	5	11	1	2	9	13
22	183	211	76	75	13	15	2	3	11	20
23	219	229	8	6	15	16	5	5	23	24
24	204	197	43	29	18	16	5	3	18	15
25	179	161	26	75	9	6	2	1	18	16
26	169	176	23	1	13	19	3	2	19	16
27	193	198	13	18	13	14	4	4	16	21
28	174	152	13	52	10	10	3	2	17	12

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SOCIAL ADJUSTMENT TRAINING  
OF THE MENTALLY RETARDED

by

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CHRISTINA FAYE WADDEN

A THESIS

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled } Social Adjustment Training  
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submitted by Christina Faye Wadden

in partial fulfilment of the requirements for the degree of  
Master of Education

.....  
Supervisor  
.....  
.....  
.....

Date November 15, 1978

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#### ABSTRACT

The present study examined the effectiveness of the socialization program, Teaching Question-Answering Skills, when used with mentally retarded persons. It was hypothesized that residents who received Question-Answering Skill Training would show a greater degree of socially appropriate behavior, as well as a lesser degree of socially inappropriate behavior.

A group of mentally retarded (mean I.Q. - 43.7), institutionalized residents (16 males, 12 females) received four weeks of structured, individualized, socialization training which focused on social and personal adjustment. The resident's improvement was measured by the Adaptive Behavior Scale. The experimental (n = 10), control 1 (n=9) and control 2 (n = 9) groups were compared on pre and posttest difference scores. The results showed no significant differences on Adaptive Behavior Scale scores after training. It was concluded that the socialization program, Teaching Question-Answering Skills was not successful in increasing socially appropriate behavior or decreasing socially inappropriate behavior of institutionalized mentally retarded individuals. Implications for the future implementation of similar training programs were discussed.

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## CHAPTER I

### INTRODUCTION

#### OBJECTIVES

The purpose of this study is to examine the effectiveness of, a socialization program when used with institutionalized mentally retarded persons. The study attempts to answer the question, Is individualized training of a primarily verbal nature effective in promoting positive behavioral changes when it is used with institutionalized, mentally retarded individuals?

#### OVERVIEW

Ever since deinstitutionalization of mentally retarded persons began, researchers have searched for the factors that accounted for successful placement in the community. As a result of this research, Gunzburg (1968) identified two factors that were believed to ensure successful community placement - vocational skills appropriate for functioning in community employment situations and social and academic skills so that the individual could cope with community demands. Rosen, Clark and Kivitz (1977) have reviewed the training of social skills and have concluded that researchers have dealt only with social knowledge skills; they found that training has not included socially appropriate behavior.

Mentally retarded residents have been described by researchers as exhibiting socially inappropriate behavior such as bizarre speech and actions, poor personal appearance and childishness

(Spradlin and Girardeau, 1966). They point out that these behaviors are learned as a result of experiences within the institutional setting. The elimination of these socially inappropriate behaviors is the goal of training programs recently developed. The reduction of these behaviors themselves is not predicted to ensure successful community placement of previously institutionalized mentally retarded individuals, but the training of those skills in conjunction with vocational, academic and social knowledge skills may.

#### DEFINITION OF MENTAL RETARDATION

The term "mental retardation" is considered within this work as defined by the American Association of Mental Deficiency. That is, "mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period" (Grossman, 1973, p. 11).

## CHAPTER II

### REVIEW OF THE LITERATURE

#### HISTORICAL BACKGROUND: HABILITATION OF THE RETARDED

Rosen, Clark and Kivitz (1977) reported that "habilitation is usually defined as a process by which various professional services are utilized to help a disabled individual make maximal use of his capacities in order that he might learn to function more effectively" (p. 3). Habilitation of mentally retarded individuals is a reoccurring goal in the history of institutionalization. First sought after in the mid-nineteenth century, then challenged at the close of that century, it was sought after again, a few decades later, and was endorsed fully by some in the 1960's and 1970's.

The spirit of habilitation in the mid-nineteenth century was optimism. Early teachers of the mentally retarded, such as Sequin (1864), felt that mentally retarded persons could be trained sufficiently to permit them to function normally in a community. Whatever training occurred, however, was based on a totally Christian view of their labors. Violations of the "natural laws", with intemperance, intermarriage of relatives, "self-abuse", and greed were still believed to be the causes of mental retardation. Sequin (1864) felt they were saving idiots who "know(s) nothing, can do nothing, cannot even desire to do anything".

The first attempt to find a method of separating the subnormal (mentally retarded) from the normal children in public schools came from the Minister of Public Instruction in Paris in 1904 (Sattler, 1974). As a result of the committee formed by the Minister, Alfred Binet and Theodore Simon devised 30 tests that could be rated objectively and could differentiate the mentally retarded from the normal. These tests were not used in the treatment of the mentally retarded, but only to determine the level of intelligence of school children (Sattler, 1974).

It was soon realized that the mentally retarded could not function normally in the community, even after training. This realization created a pessimism in terms of educating the mentally retarded that was to last many decades. White and Wolfensberger (1969) described the main habilitation philosophy of this time as a shift from a "desire" between 1850 and 1880, to "make the deviant undeviant" to a "concern", from 1870 to 1890, to "shelter the deviant from society" to "alarm", between 1880 and 1900, over "protection of society from the deviant". At this time, the rising concern was over the "menace" of the mentally retarded.

Goddard (1914) concluded in a family study, that mental retardation had a genetic basis and explained the influence of heredity on mental deficiency in terms of "bad blood". He also

concluded that there was a strong relationship between feeble-mindedness and criminality, and estimated that as many as 50 percent of penal institution inmates were mentally retarded. Goddard (1913) dealt a final blow to the hope of habilitating mentally retarded individuals when he, as director of the research department at the Vineland Training School, concluded that few of the feeble-minded children at Vineland were making any significant mental development, despite their enrollment in special education programs.

Wolfensberger (1969) reported that early Twentieth Century policies were based on the assumption that the retarded were a "menace" to society. Laws were passed in some states forbidding marriage and making sterilization mandatory. Further to this, permanent custodial care of the retarded was advocated. The policy of dealing with the retarded had, by the Twentieth Century, gone from preparing the retarded to adjust to society to preventing the contamination of the race.

The eugenics alarm reached its peak by the 1920's but soon abated due to the increased understanding of nongenetic determinants of retardation, such as organic causation and the influence of environmental factors. The myth of I.Q. constancy was dispelled with data indicating increases in tested intelligence with programs of stimulation (Kirk, 1958, Skeels and Dye, 1939). Also, earlier claims of an association between crime and mental retardation were

challenged (Davies, 1930, Wallin, 1956). The attitude concerning the inability of mentally retarded persons to lead productive lives without the structure of an institutional setting was further dispelled by studies by Baller (1936), Charles (1953), Fairbanks (1933) and Kennedy (1966). These researchers presented evidence of the satisfactory adjustment of persons leaving institutions for the mentally retarded, often against medical advice, and of mentally retarded students in special classes in the public schools.

The groundwork for deinstitutionalization came during World War II when manpower needs required that many retarded persons leave institutions to serve in the armed forces, or as defense workers in factories (McCarver and Craig, 1974). From this beginning, the rights of the mentally retarded were advocated. By 1960, social unrest brought demands from minority groups for equal opportunity. The mentally retarded emerged as a minority group "with spokesmen voicing demands for an expansion of services, for availability of public school and community programs, for the improvement or complete abolition of institutions, and for the civil rights available to the ordinary citizen" (Rosen, Clark, and Kivitz, 1977, p. 11).

Nirje (1969) demanded that the mentally retarded be provided their full rights and benefits as citizens. The normalization principle as he saw it, "means making available to the mentally

retarded patterns and conditions of every day life which are as close as possible to the norms and patterns of the mainstream of society" (p. 363).

The habilitation of mentally retarded persons has developed through many stages since the mid-nineteenth century and the civil rights of mentally retarded persons are still being defined. Just recently, the American Association on Mental Deficiency published as an official policy statement, the "Rights of Mentally Retarded Persons". This document

specifies the rights to exert freedom of choice in making decisions; to live in the least restrictive environment; to obtain gainful employment and fair pay; to be part of a family; to marry and have a family; to be free to move about without deprivation of liberty by institutionalization; to speak openly; to maintain privacy; to practise a religion; to interact with peers; and to receive public supported education, vocational training, and habilitation programs (Rosen, Clark and Kivitz, 1977, p. 11).

#### FOLLOW-UP STUDIES

Follow-up studies of previously institutionalized mentally retarded individuals were carried out to investigate the general adjustment of mentally retarded individuals after a period of time in the community. Fernald (1919), for example, investigated 646 of 1,537 patients discharged from an institution over a 25 year period. Of these, 78 had died and 101 had been readmitted to the institution. The majority of the remainder had left the



institution by running away or being discharged under administrative protest. In this follow-up, Fernald found that many were leading "useful and blameless lives", being either self-supporting, or living with relatives under fairly close supervision. Fernald (1919) requested that the "limited facilities for segregation" be used for those who "can be protected in no other way".

Fernald's (1919) study was the first of its kind, and was performed at a time when mentally retarded persons were considered to be "moral imbeciles" prone to criminal tendencies, and a potential danger to the community. In fact, Davies (1930) points out that Fernald hesitated for two years before publishing this controversial study, possibly because it was at variance with the then accepted theories of mental retardation.

Other investigations were inspired by Fernald's findings. Many researchers were interested in the community adjustment of the mentally retarded. The criteria of community adjustment used in these studies were "success" or "failure" of employment, avoidance of arrest or anti-social behavior, and the ability to remain out of an institution of any sort. Two studies dealt with the adjustment of previously institutionalized persons during the War years. Hegge (1944) reported on 177 mentally retarded persons whose average age was 17, and whose average I.Q. was 71.8. Eighty-eight percent of those persons were employed, most males working

in defense plants, and most women working in their own homes. Since many of the individuals were working above the unskilled level, and had found their jobs independently (without the help of the institution), Hegge concluded that they would be employable even under normal working conditions. Coakley (1945), in a study of 37 formerly institutionalized retarded persons, found that most of these persons, as well, obtained their jobs independently or through the U.S. Employment Service.

A summary of 36 publications of follow-up studies of previously institutionalized mentally retarded individuals was provided by Eagle (1967). These included vocational placements, family care and independent living placements for a total of 7,436 releases. He found, adding the total number of successful and unsuccessful outcomes of these reports, a failure record of 39.6 percent. He also found that when considering the placement failure rate of releases from 1960 to 1967, the failure rate was 52 percent. Although the failure rate seemed "agonizingly high" to Eagle, he based his findings on many different criteria of adjustment; these included anti-social actions, undesirable personal conduct, unsatisfactory work, health problems, personality problems, voluntary return to the institution, transfer to other facilities and adverse environmental factors. If a narrower criteria of successful placement had been used, the failure rate would doubtless be much lower.

While follow-up studies such as these do provide much information on the success or failure of community-placed retarded individuals, there is still much confusion as to why some individuals succeed whereas others fail. Fernald (1919) was surprised that many of the individuals released from the institution were leading useful and blameless lives. Eagle (1967), on the other hand, was surprised at the agonizingly high failure rate he found in his review of community placement studies. The problem remained to predict what factors were necessary to take into account, to ensure an individual successful placement in the community.

#### PREDICTING SUCCESSFUL COMMUNITY PLACEMENT

As discussed, a large number of previously institutionalized mentally retarded individuals were capable of adequately functioning with independent living in the community. However, many individuals were found to have encountered problems in their vocational, economic or social adjustments, and had been reinstitutionalized. The fact that only some mentally retarded individuals succeeded in the community, suggested the need to determine, before they were discharged from the institution, what factors were related to successful community adjustment. Many studies have been directed toward this goal. Windle (1962) and McCarver and Craig (1974) have published comprehensive reviews of prognostic studies, dealing with previously institutionalized retardates.

Windle (1962) related outcome criteria, such as avoidance of reinstitutionalized, vocational placement, absence of aberrant or socially unacceptable behaviors, salary, and interpersonal relationships to five general areas of predictive characteristics. These predictive characteristics were demographic factors, individual abilities and disabilities, family and community factors, institutional experiences, and combinations of these factors. McCarver and Craig (1974) also grouped prognostic studies in accordance with predictive variables. The variables they grouped together included pre-admission variables, such as home environment, sexual behaviors and history of delinquency, and institutional variables such as reasons for admission, general behavior, age at admission, training programs, work experiences and length of institutionalization. Individual characteristics related to post-institutional adjustment are reported to be age at release, race, diagnosis, academic ability, intellectual level, personality, physical handicaps, and personal appearance. Other variables used included family interest, type of community placement at discharge, criteria for release from the institution, community attitudes toward, and the supervision of, mentally retarded persons.

Despite the comprehensive review of the many correlational studies performed to determine what factors may predict successful placement of the institutionalized mentally retarded person,

Windle (1962) and McCarver and Craig (1974) did not identify the predictive variables. Both studies point out the many methodological flaws in the reviewed studies and the discrepancies in the findings. McCarver and Craig (1974) concluded that placement was usually on a trial and error basis and evaluation was mainly subjective.

The problem in identifying the predictor variable or variables came from the contradictory results that have emerged from different investigations. One of the most widely used predictor variable, for example, is intelligence (as measured by standardized intelligence tests). McCarver and Craig (1974) found that, out of 33 studies, 12 reported a positive relationship between I.Q. and community adjustment success, and seven more suggested evidence for such a relationship. Contrary to this, 13 studies found no meaningful relationship between I.Q. and community adjustment, with one other study showing a negative relationship.

To further complicate the lack of evidence of predictor variables for successful community placements, studies attempting a cross-validation of their initial findings have also proved unsuccessful. O'Connor and Tizard (1951) found contradictory results when replicating a study combining a variety of predictive variables. Some relationships with criteria were found in the first, but not the second study. The authors explained that the discrepant findings of the two studies resulted from the unreliability

of the predictive tests used, and of the measurement of their criteria - work success.

Rosen, Floor and Baxter (1972) also reported cross-validation study results. Subjects for the study were chosen in the same manner; they were formerly institutionalized adults who had completed the same habilitation programs, were actually or functionally orphaned, and had been discharged for from six months to two years. The authors found that although predictor and criteria variables were similar to those found in the earlier study, the relationships of measures of perceptual-motor skills and employability ratings to indices of community adjustment were not substantiated.

In conclusion, many attempts have been made to predict successful habilitation of the mentally retarded. To date the results are variable and inconclusive. Therefore, the problem of what predictive criteria to use to ensure the successful community placement of institutionalized mentally retarded individuals still stands. As already discussed, there has been little in the literature to indicate the usefulness of cognitive-intellectual factors as determinants of community adjustment of retarded persons.

#### SOCIAL SKILLS AS A PREDICTIVE HABILITATION CRITERIA

Gunzburg (1968) reported that two training goals were usually emphasized to ensure successful social habilitation of mentally

retarded persons: the first was the training of vocational skills appropriate for functioning in employment situations in the community. The second was the teaching of sufficient social and academic skills so that the individual could cope with community demands. The kind of social skills taught were social knowledge skills, such as the use of public cafeterias, public transportation facilities, medical resources, and the handling of financial concepts such as budgeting. Social skills did not include the teaching of socially appropriate behavior or the extinction of socially inappropriate behavior such as dependency and submissiveness. Vocational, academic, and social knowledge skills are of great importance to successful habilitation of the retarded in order that the individual may live independently in the community. However, successful habilitation of the retarded can not occur even with vocational, academic and social knowledge skills unless inappropriate social behaviors such as over-friendliness, bizarre speech and actions, poor personal appearance, and childishness are extinguished (Rosen, Clark, and Kivitz, 1977).

Mentally retarded persons, after spending much of their lives within an institution, often appear different, or even bizarre to people living in the community. Spradlin and Girardeau (1966) discussed such behavior as learned behavior, and as a direct result of institutionalization:

There is some maladaptive behavior which is typically found in institutions. This behavior is developed and maintained by the institutional environment.

For example, the institutional environment provides very little adult attention for the child. However, when the child has a tantrum, is aggressive with others, breaks a window, or exhibits self-destructive behavior, he usually receives a great deal of attention from the attendant and professional personnel ...

Clinging or hugging of both friends and strangers is a behavior which is exhibited in high frequency in institutions for retarded persons. Yet this kind of behavior is generally unacceptable in a community ... This behavior is not an innate characteristic of retarded persons but is generated by the social reinforcements of an institutional environment. The persons in an institutional environment are apt to overlook a retarded person if the person is playing with blocks, drawing or merely talking to them in a conversational voice. However, it is most difficult to overlook a patient who is clinging to you. (pp. 290-291)

The behavioral results of this type of institutional social learning are inappropriate in the community. For example, a mentally retarded person who has a tantrum in order to express his anger, or to receive attention from his job supervisor, will probably fail in his community placement. A young girl who has learned to seek the attention of adults by overfriendliness and clinging to them, may also fail in her community placement if she appears overfriendly and clings to strangers.

These inappropriate institutional behaviors have been found



to be independent of intellectual level (Johnson, 1970). Data for over 23,000 mentally retarded individuals from 19 public institutions was obtained in a 1967 census study. Information about the residents' anti-social behaviors and intelligence were correlated. Johnson reported that the correlation between intelligence scores and problem behavior measures involving disturbed relations with peers or authority figures were too low to be of practical significance. Vogel, Kum and Meshorer (1968) reported that severe social and emotional behaviors such as throwing objects, screaming, and aggressive and destructive behaviors were also independent of intellectual level.

Johnson's (1970) conclusion that resident's anti-social behaviors and intelligence were not correlated is not well founded. Anastasi (1976) discussed the fact that "any correlation coefficient is affected by the range of individual differences in the group" (p. 125). Since these tests were administered to a highly homogeneous sample (mentally retarded individuals) the correlation between the two would be expected to be close to zero.

The point was made that vocational, academic and social knowledge skills have been the areas stressed in training the retarded toward successful community placement. It has also been noted that community placement may fail if socially appropriate behavior (and the extinction of socially inappropriate behavior) is not in addition, the goal of habilitation training. The

question remains if the retarded are amenable to change.

Baumeister (1968) offered evidence that the mentally retarded as a group were more heterogeneous in their behavior than normal intelligence groups, thus the performance of mentally retarded individuals is characterized by its high variability. He theorized that unreliability in measurement of retarded individuals' behavior may be due to real changes within the organism, presumably on a motivational, attentional, or arousal basis. Baumeister's findings may account for the seemingly inappropriate behavior and the inability of the mentally retarded to adapt appropriately to changing environmental contingencies. This would also offer problems in regards to a program set up to modify inappropriate behavior, since more variable behavior would be difficult to modify.

One prerequisite for eliminating inappropriate behavior is that the individual be responsive to social stimuli (be capable of responding to the behavior of others) (Rosen, Clark and Kivitz, 1977). Rosenberg, Spradlin, and Mabel (1961) found a high level of verbal and gestural interaction when two "high level" mentally retarded persons were together. This same interaction occurred when two "low level" mentally retarded persons were together. They found, however, that there was little interaction when high level mentally retarded persons were brought together. From this study, it seems that retardates are socially responsive.

Spradlin, Girardeau and Corte (1967) conducted a study to determine if there was social stimulus control in mentally retarded adolescents. They investigated whether or not a child would give a candy reinforcer to another child when it did not cost him to do so, since he received a candy in any event. Three-fourths of the subjects did give the candy and therefore were assumed to be under social control of the other child. This social control must have developed outside of the experimental situation, since the children were not trained to give the candy, nor were they rewarded when they did so. The authors concluded that mentally retarded persons, even of a low level, can provide social cues sufficient to control the behavior of others.

The mentally retarded have been found to be sensitive to social feedback and social control. Since one of the prerequisites for behavior change is that the individual be responsive to social stimuli, the remediation of inappropriate social behaviors should be possible. Altman and Talkington (1971) concluded in a review of several behavior modification strategies, that modeling procedures should be well suited as a training strategy for mentally retarded persons. Using modeling procedures and the influence of social control (reinforcement), habilitation training programs for the training of appropriate (and the elimination of inappropriate) social behaviors may prove successful.

## SOCIALIZATION PROGRAMS

A number of social skill training programs have been developed as a result of the recognition of the relationship between good social skills and successful community placement. Some of these programs (Roos, 1968; Boruchow and Espenshade, 1976) deal with the general goals of social competence and interpersonal skills, like the self-care skills of grooming and shopping, but they do not deal with the remediation of inappropriate social behavior, such as attention-seeking behavior. Recently, three social skills programs have been developed to deal with the remediation of inappropriate social behavior -- "Personal Adjustment Training" (PAT) (Rosen and Zisfein, 1975a, Rosen and Zisfein, 1975b, and Rosen and Hoffman, 1975), "Social Adjustment Training" (SAT) (Lee, Note 1), and "Teaching Question-Answering Skills" (QA) (Cottreau and Lee, Note 2).

The PAT is a group counseling program designed to teach specific social competencies to institutionalized mentally retarded individuals, preparing them for independent community living. The program is made up of three curricula, each one developed for a different purpose. The first curriculum, Basic PAT (Rosen and Zisfein, 1975a) deals with failures, degradations, and rejections associated with intellectual subnormality as well as social deficiencies associated with institutionalization. The curriculum is organized around five general units - self-evaluation, acquiescence-exploitation, self-assertion, heterosexual

behavior and independence-leadership.

The second PAT curriculum is Assertive Training (Rosen and Zisfein, 1975b). This is a specialized curriculum designed for mentally retarded persons who exhibit withdrawn, shy, passive and unqualified obedience behavior. Assertive Training teaches mentally retarded individuals the assertive responses necessary to function independently without violating the rights of others.

The third PAT curriculum is Appropriate Behavior Training (Rosen and Hoffman, 1975). This highly structured, directive group situation was designed for moderately to severely mentally retarded adults. Through the use of modeling, social reinforcement and role-playing, inappropriate social behaviors are replaced with socially appropriate behaviors. Appropriate Behavior Training is organized around five general areas relevant to inappropriate behavior - self-evaluation, speech, social interaction, expression of anger, and sexual behavior.

The effects of the Basic PAT (Zisfein and Rosen, 1975a) were studied in a group of mentally retarded young adults and socially deficient adolescents (Rosen, Clark and Kivitz, 1977). Of the 25 subjects involved in the study, 23 were residents of an institution, and the other two were living at home and were commuting daily to school classes at the institution. All subjects were enrolled in vocational habilitation and community preparation programs at the institution. Although the evaluation procedures of

the study "were constructed to reflect the target areas of the curriculum that were judged to be both measureable and responsive to therapeutic efforts" (Rosen, Clark and Kivitz, 1977, p. 328), the evaluation procedures failed to show a significant treatment effect. The authors explain the result as the unreliability of the specific measures employed. The authors noted, however, that there were anecdotal and subjective reports from some staff members concerning noticeable changes in former PAT students.

Lee developed the SAT (Note 1) based on the training formats of the PAT (Zisfein and Rosen, 1975a). The SAT is designed to help institutionalized mentally retarded individuals learn appropriate social behaviors through counselor and peer interactions, by using discrimination training, role playing, verbal instructions and discussion. This program is designed primarily for moderately and mildly retarded individuals. The SAT contains 15 group counseling sessions covering five areas of social and personal adjustment - social interaction, personal appearance and mannerism, awareness of feelings, making friends and social responsibility.

The effects of the SAT were studied by Lee (1977) with a group of moderately retarded (Mean I.Q. = 47) institutionalized residents (20 males, 24 females). To achieve maximum effect, the SAT was repeated after the initial training. Evaluation of the effect of training was measured by the Peabody Picture Vocabulary Test (Dunn, 1965), the Adaptive Behavior Scale (Nihira, Foster,

Shellhaas and Beland, 1974), and nomination by peers and ward staff. On each of the measures, the experimental group showed a significant improvement on social adjustment skills. However, the training did not reduce the inappropriate social behavior of the residents (as measured on the ABS, Part II).

Cottreau and Lee (Note 2) developed the training program "Teaching Question-Answering Skills". This program is designed to teach institutionalized, mildly and moderately retarded individuals appropriate social behaviors and to decrease inappropriate social behaviors, through modeling, social reinforcement and role play. The program is set up on the basis that many institutionalized mentally retarded persons respond to questions with excessive degrees of contradiction and inconsistency, and are easily swayed by the opinions of others. The authors suggest that this manner of responding is due to the individual's style of responding, an "impulsive tendency" to answer quickly without evaluating other possible responses to the question. The training is an attempt to teach three main skills - training for a delay in response to eliminate the impulsive tendency, training for attentive listening to the question in order to give a reflective answer, and training for assertiveness so that the individuals will "stand up" for their own opinions.

Both of the socialization programs used in the present study (QA and SAT) concentrate upon developing and strengthening constructive alternatives of behavior, based on social-learning

principles. The same training techniques - modeling, role-play and social reinforcement - were included in both socialization training programs (SAT and QA). Bandura (1969) concluded that "the combined use of modeling and reinforcement procedures is probably the most efficacious method of transmitting, eliciting, and maintaining social response patterns" (p. 161). However, the programs differ on other basic components.

The most noticeable difference is between the individual and the group training. The author reasoned that individual training allows the trainer more time to reinforce the resident, hold his attention and reinforce consistently. Group training, however, provides a socialization experience with his/her peers within the group. Also, the group training allows the trainer more efficient use of his time, since six subjects may be trained at one time. Both socialization programs are structured, although the SAT and QA differ as to the extent of their structure. In the SAT, the degree of structure is mainly left up to the counselor, as Lee (1977) stated:

The counselor initiated the topics for discussion, encouraged general participation while discouraging irrelevant verbal and nonverbal behaviors, and held the group members to the topic. (pp. 321-322)

In the QA, however, the counselor is instructed as to what to say to the subject, and the temporal sequence, as:

When I ask a question, and you answer me, I want to make sure I can hear your answer. Say, 'yes' or 'no' in a nice clear voice".



Discourage nodding. If resident gives an unclear or inaudible answer, explain why he should have answered 'yes' or 'no' and repeat the question. Each clear, loud answer should be praised by the trainer. (Cottreau and Lee, Note 2, p. 4)

Also, in QA there are direct instructions for problem solving that require assertiveness (certain predetermined behavioral criteria in a problem solving situation) on the part of the subject.

The SAT was found to be successful in increasing social competence and interpersonal skills as measured by the ABS Part I (Lee, 1977). However, it was not found successful in decreasing maladaptive behaviors as measured by the ABS Part II (Lee, 1977).

As previously mentioned, for successful community placement the goal of social skills training is to increase social competency skills as well as to decrease socially inappropriate behavior.

Where institutionalized residents have learned more severe patterns of inappropriate behavior, a different training program may be needed. Rosen, Clark and Kivitz (1977) reported that:

This need is particularly salient where institutional behavior patterns of passivity, dependency, submissiveness, low self-esteem, attention-seeking, and inertia prevail. It is for such behaviors that more powerful and more individually tailored procedures must be used to supplement group socialization programs.

(p. 288)

Therefore, socialization training that attempts to result in positive behavior change of institutionalized mentally retarded

individuals must occur on an individual basis. Group programs (Lee, 1977) have had no effect in decreasing inappropriate social behaviors which may cause individuals to fail in community placements.

#### HYPOTHESES

The purpose of the present study, is to examine the effectiveness of a highly structured, four-week individualized training program designed to enhance social adjustment skills of mentally retarded individuals in an institutionalized setting. It was predicted that the retarded residents who received the individualized counselling, in contrast to those who did not receive such treatment would show a reduction in socially inappropriate behavior. It was also predicted that those residents who received training in either the Experimental or Control 1 group would show a greater degree of socially appropriate behavior compared to those residents who received no training.

Hypothesis 1 - It is hypothesized that subjects who received QA training would score significantly lower in maladaptive behavior than those subjects who received SAT training, or no training, as measured by the ABS Part II.

Hypothesis 2 - It is hypothesized that subjects who received SAT, or QA training would score significantly higher in adaptive behavior than

those subjects who received no training,  
as measured by the ABS Part I.

## CHAPTER III

### RESEARCH DESIGN AND METHODOLOGY

#### RESEARCH DESIGN

The sampled residents were randomly assigned to three groups of equal numbers: the experimental, control 1 (controlling for special attention effects of training), and control 2 (no treatment) groups. This pretest-posttest control group design was "strongly recommended" by Campbell and Stanley (1963) who reported that it controls for all sources of internal validity. The way in which these factors are controlled will briefly be discussed here.

"History" is controlled in that any general historical events that might have produced a change in the experimental group, will also produce a change in the control groups. "Maturation" and "testing" are controlled insofar as they are manifested to the same degree in experimental and control groups. "Instrumentation" is controlled insofar as the person administering the pretest also gave the posttest, and were kept ignorant as to which subjects were receiving treatments, lest the knowledge bias their ratings. "Regression" is controlled insofar as mean differences are concerned, since subjects are randomly assigned to experimental conditions from the same subject pool. "Selection" differences are controlled since group equality has been assured by randomization.

## THE SAMPLE

The subjects for this study were drawn from The Michener Centre in Red Deer, Alberta. The institution, subsidized by the Province of Alberta, accommodates 1,800 mentally retarded residents. All subjects participating in this study were attending a pre-vocational training program, as well as the usual daily programs on the wards. Those residents under heavy medication during the time of the study and those severely handicapped in speech and hearing were excluded from the sample.

The original sample consisted of 36 residents. However, eight of these subjects were excluded from the results of the study because they became ill, were transferred out of the institution or were discontinued from the pre-vocational training program. The remaining participants were a total of 28 residents (16 males, 12 females) whose ages ranged from 13 to 45, with a median of 22. Their I.Q. (as measured by the Peabody Picture Vocabulary Test) ranged from 10 to 78, with a mean of 43.7. Subjects were randomly assigned to three groups of equal size, an experimental group receiving QA training, a control 1 group receiving SAT training, and a control 2 group receiving no training.

## MEASURING INSTRUMENT

Changes in participants' behavior as a result of training were examined using the American Association on Mental Deficiency's

Adaptive Behavior Scale (Nihira et al., 1974). As discussed earlier, the goal of socialization training is to increase socially appropriate behavior as well as decrease socially inappropriate behavior. The ABS was used in this study because it was designed to measure both socially adaptable behavior (Part I) and socially maladaptive behavior (Part II).

The ABS (Nihira et al., 1974) is a behavior rating scale for mentally retarded individuals. Part I of the scale was designed to evaluate an individual's skills on 10 behavior domains considered important to the development of personal independence in daily living. Part II was designed to evaluate maladaptive behavior related to personality and behavior disorders over 14 domains. For the purpose of the present study, the overall scores of Part I and Part II were used, as well as Part I Subdomains VIII (Self-Direction), IX (Responsibility) and X (Socialization). The mean reliability of the ABS Part I was reported to be .86, Part II (.57), Part I Subdomain VIII (.71), Part I Subdomain IX (.83) and Part I Subdomain X (.77) (Nihira et al., 1974).

#### PROCEDURE IN ADMINISTRATION

Prior to the start of training, all subjects received a "pre-test" on the Adaptive Behavior Scale (ABS) (Nihira, et al., 1974). The ABS was administered by the subjects' "key workers" (residential staff assigned to take care of the daily programming aspects of the residents).

The 36 sampled residents were assigned to Experimental, Control 1 and Control 2 groups of equal size. The Experimental group received training individually on QA for four weeks, 25 minutes per session, approximately five sessions per week. The Control 1 group (two groups of six residents each) received training in SAT for four weeks, 30 minutes per session, approximately four sessions per week. The Control 2 group received no training, but were involved in their usual ward activities or programs during the training sessions for the Experimental subjects. Time spent in each training program for each subject was equal. The QA program was repeated once in order to make this possible. Sample lessons of the QA are found in Appendix A, while sample lessons of the SAT are found in Appendix B.

Training of subjects was carried out by two counselors, who each trained an equal number of subjects in the Experimental and Control 1 groups. These counselors (females) had a Bachelor of Arts degree in Psychology, and their experience in the mental retardation area ranged from approximately one to three years. Neither of these counselors participated in the pre or post-testing of the subjects. Upon completing the programs, subjects were post-tested by the same institutional staff who participated in the pretesting. The evaluating staff were not informed as to which residents were participating in the experimental group.

## CHAPTER IV

### RESULTS

#### EXCLUSION OF SUBJECTS.

Eight participants were excluded from the study because they became ill, were transferred out of the institution, or were discontinued from the pre-vocational training program. These eight participants were excluded from the final analysis of the data. The remaining participants were a total of 28 residents, with 10 subjects in the Experimental (QA) group, nine in the Control 1 (SAT) group, and nine in the Control 2 (no treatment) group.

#### EFFECTS OF TRAINING

t - test comparisons of groups' pretest scores on the ABS were carried out to ensure that the groups did not vary significantly before training. As can be seen from Table 1, there were no statistically significant differences in pretest scores for the experimental and control groups.

The experimental and control groups were compared on the dependent variable - Adaptive Behavior Scale, using a 2 x 3 way analysis of variance. This design permitted comparisons of the differences in the overall performance of the subjects in the three groups, as well as evaluation of the changes in performance shown by the subjects during the experimental session.

Note: See Appendix C for Raw Data



TABLE 1

Summary of t - tests for Differences in Pretest Means

	Experimental, Control 1	Experimental, Control 2	Control 1, Control 2
ABS Part I	.10	1.86	1.98
ABS Part II	1.23	.61	1.50
ABS Part I Subdomain VIII	.50	1.14	.71
ABS Part I Subdomain IX	.56	2.17	1.71
ABS Part I Subdomain X	.34	1.00	1.33

ABS Part I Adaptive Behavior

The mean, standard deviation and summary results of the analysis comparing ABS Part I Adaptive Behavior scores are given in Table 2. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [F (2, 25) = 1.03, p = n.s.] [F (1, 25) = .44, p = n.s.] [F (2, 25) = .52, p = n.s.].

ABS Part II Maladaptive Behavior

The mean, standard deviation and summary results of the analysis comparing ABS Part II Maladaptive Behavior scores are given in Table 3. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [F (2, 25) = 1.45, p = n.s.] [F (1, 25) = .07, p = n.s.] [F (2, 25) = .03, p = n.s.].

ABS Part I Subdomain VIII Self-Direction

The mean, standard deviation and summary results of the analysis comparing ABS Part I Subdomain VIII Self-Direction scores are given in Table 4. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [F (2, 25) = .33, p = n.s.] [F (1, 25) = 1.46, p = n.s.] [F (2, 25) = .00, p = n.s.].

ABS Part I Subdomain X Socialization

The mean, standard deviation and summary results of the analysis comparing ABS Part Subdomain X Socialization scores are given in Table 5. No statistically significant differences were

TABLE 2  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Adaptive Behavior Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	198.20	31.81	206.00	23.37
Control 1	199.22	35.31	195.89	40.14
Control 2	182.00	26.06	186.11	23.94

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	1640.15	1.03
Error <sub>b</sub>	25	1586.59	
Within Groups	28		
Trials	1	128.90	.44
Trials X Conditions	2	150.70	.52
Error <sub>w</sub>	25	289.60	

TABLE 3  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part II Maladaptive Behavior Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	30.30	18.20	34.10	22.17
Control 1	23.22	12.29	25.67	14.28
Control 2	35.11	23.81	40.33	27.84

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	801.36	1.45
Error <sub>b</sub>	25	551.63	
Within Groups	28		
Trials	1	204.45	.07
Trials X Conditions	2	8.68	.03
Error <sub>w</sub>	25	287.63	

TABLE 4

Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain VIII Self Direction Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	13.30	3.27	14.10	2.33
Control 1	12.78	5.09	13.67	5.50
Control 2	11.89	3.72	12.78	4.27

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	9.02	.33
Error <sub>b</sub>	25	27.01	
Within Groups	28		
Trials	1	10.29	1.46
Trials X Conditions	2	.01	.00
Error <sub>w</sub>	25	7.03	

TABLE 5  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain X Socialization Scores

	Pretest Means	Pretest SD	Posttest Means	Posttest SD
Experimental	18.10	4.28	18.30	4.32
Control 1	18.56	2.96	18.22	3.56
Control 2	16.67	4.27	16.89	3.95

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	14.13	.71
Error <sub>b</sub>	25	19.92	
Within Groups	28		
Trials	1	.02	.00
Trials X Conditions	2	.45	.04
Error <sub>w</sub>	25	11.10	

found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = .71, p = n.s.$ ] [ $F(1, 25) = .00, p = n.s.$ ] [ $F(2, 25) = .04, p = n.s.$ ].

#### ABS Part I Subdomain IX Responsibility

The mean, standard deviation and summary results of the analysis comparing ABS Part I Subdomain IX Responsibility scores are given in Table 6. A statistically significant difference was found between groups [ $F(2, 25) = 3.69, p < .05$ ]. No other statistically significant differences were found [ $F(1, 25) = .00, p = n.s.$ ] [ $F(2, 25) = 1.12, p = n.s.$ ].

Both of the two main hypotheses were rejected. Subjects who received QA training did not score significantly lower in maladaptive behavior than those subjects who received SAT training, or no training, as measured by the ABS Part II. Also, subjects who received QA, or SAT training did not score significantly higher in adaptive behavior than those subjects who received no training, as measured by the ABS Part I. The ABS Part I Subdomain IX Responsibility scores did show a statistically significant between group effect, but it is of no practical significance since this subdomain is made up of only two items.

TABLE 6  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain IX Responsibility Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	4.10	1.20	4.40	1.07
Control 1	3.89	1.45	4.22	1.20
Control 2	3.11	1.36	2.78	1.20

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	9.17	3.69*
Error <sub>b</sub>	25	2.48	
Within Groups	28		
Trials	1	.02	.02
Trials X Conditions	2	.72	1.12
Error <sub>w</sub>	25	.64	

\*  $p < .05$



## CHAPTER V

### DISCUSSION

As was seen in Chapter IV, neither of the main hypotheses were supported. Training of institutionalized mentally retarded residents on a highly structured, individualized training program was not found to enhance social adjustment skills. Also, this study did not support Lee's (1977) finding that SAT training increased socially appropriate behavior.

Several factors may account for the present research findings. One involves the measuring instrument used to determine the effect of training on inappropriate behavior. (Inappropriate social behavior was not decreased by training as measured by the ABS Part II (Nihira et al., 1974). Lee (1977) found the same result on the ABS Part II when training using the SAT. In terms of that study, Lee (1977) reported that it was "puzzling, to find no significant differences between the experimental and control groups" (p. 321) in the ABS Part II. Lee's results as well as those of the present study may be explained as occurring because of the low mean reliability of the ABS Part II, which is reported to be .57 (Nihira et al., 1974). Changes may have been disguised due to the low reliability coefficient. Additional inappropriate behavior measuring instruments, with higher reliability coefficients may have been more sensitive to changes produced by training. An alternative explanation would be that these training programs have no effect on inappropriate behavior.

Another factor that may account for the present findings pertains to the length of training time. Lee (1977), as reported earlier, found a statistically significant training effect when training institutionalized mentally retarded individuals on the SAT, as measured on the ABS Part F (Nihira et al., 1974). This result was hypothesized to occur in the present study. However, Lee's (1977) study and the present study differ in terms of the length of training. Lee doubled the length of training time in his study by giving the SAT program to the subjects twice. The training programs (SAT and QA) used in the present study were matched in terms of length of training, but this training time was half of the training time reported in Lee's study. Training time was not made equal to that of Lee's (1977) study because it was not pointed out to be an important factor in program effectiveness. From this, length of training may be considered a factor that may contribute to treatment effectiveness.

Another factor that may account for the present research findings pertains to the design controls of the study. Key workers who rated subjects on the pre and posttests of the study were not informed that the residents were attending a special program. This was possible since subjects attended the program during the time they spent at a pre-vocational training program. Lee (1977) reported that ward staff who rated subjects on pre and posttests of the ABS probably knew which residents were experimentals and

which were controls. Therefore, the significant results reported by Lee (1977) could have been derived from the rater's knowledge of the experimental condition.

Another design control of the present study was the addition of a control group to control for special attention effects of training. Lee's (1977) study in which he employed no control group to account for special attention effects found significant training effects. These could have resulted from the special attention affects that the experimental group was given since the residents left the ward three times a week for a special program.

IMPLICATIONS FOR FUTURE RESEARCH

To further examine the effectiveness of social adjustment training, it would be interesting to examine the effect of training time. It is recommended that future research consider a length of training time comparable to that reported by Lee (1977).

Another implication for future research pertains to the research design used. In the present study, training was not found to be effective in enhancing social adjustment skills on institutionalized mentally retarded persons. It is not clear why the training did not have an effect on social behavior. Length of training time, and a low reliability measure of inappropriate behavior have been considered as contributing factors. In order to identify other factors that may have affected the present result, a single-case experimental design (Hersen and Barlow, 1976)

would be appropriate. Hersen and Barlow (1976) reported that by using a single case approach, relevant therapeutic variables may be isolated, that can answer the question of why a treatment works. When all of the relevant variables have been isolated, they may be combined to form a more powerful treatment "package" (Hersen and Barlow, 1976). The treatment program would then be the result of a series of single case designs, with the reasons why it should be effective known. The magnitude of the effect would be the only factor needed to be demonstrated and could be accomplished by using a group design, as was used in the present study.

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APPENDIX A

TEACHING QUESTION ANSWERING SKILLS: SAMPLE LESSONS

## Lesson #1

"For the next few weeks we are going to be talking to each other and you will learn to ask questions in nice ways. You will also learn how to answer questions and to tell me what you think and how you feel. I hope you will enjoy the lessons and have some fun".

### Warm-up Phase

### Training Phase

Target Skill: Answering Clearly.

"When I ask a question, and you answer me, I want to make sure I can hear your answer. Say 'yes' or 'no' in a nice, clear voice".

Discourage nodding. If resident gives an unclear or inaudible answer, explain why he should have answered 'yes' or 'no' and repeat the question. Each clear, loud answer should be praised by a trainer.

Question 1 - "Are you a boy"?

Question 2 - "Do you live in Red Deer"?

Question 3 - "Do you have blue hair"?

Question 4 - "Are your shoes red"?

Question 5 - "Do you have 10 fingers"?

Question 6 - "Do you like to watch T.V."?

Question 7 - "Do you have many friends"?

"You have been doing very well. It is nice to hear you answer in a nice clear voice. Now let's practice something else. This time, when you answer, I want you to look at me. Answer 'yes' or 'no' in a clear voice and look at me when you answer". Use slight physical guidance if necessary (i.e., tipping chin if resident is looking down, or turning away).

Question 8 - "Do you like to swim"?

Question 9 - "Do some dogs fly in the air"?

Question 10 - "Do you like snow"?

Question 11 - "Do you get mad very often"?

Question 12 - "Would you like to live in a really big city"?

Question 13 - "Do you like to get up in the morning"?

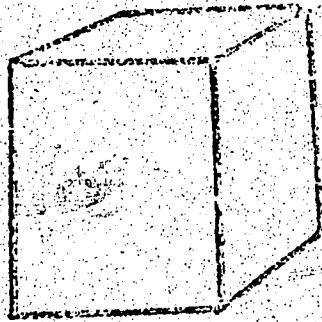
Question 14 - "Is it a good idea to smoke"?

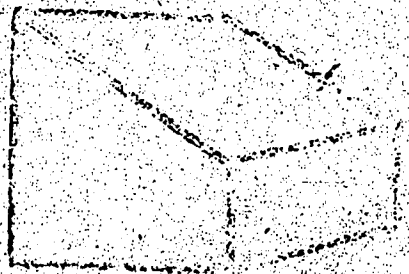
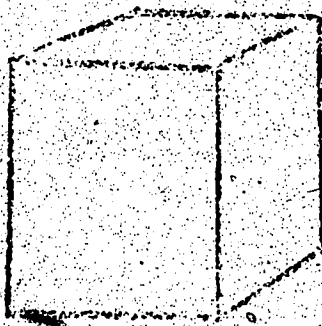
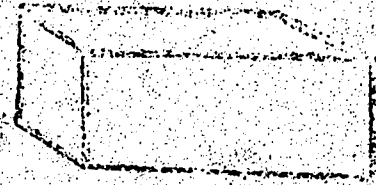
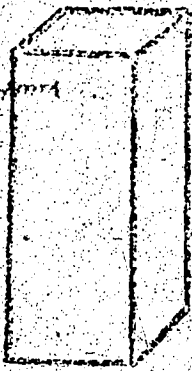
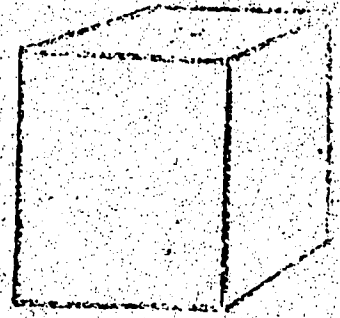
Question 15 - "Are big cars better than small cars"?

In all subsequent lessons, the resident is expected to answer in a clear, loud voice, and look at the trainer.

#### Assertion Task

Picture Selection: Resident is asked to look at a standard picture. He is then presented with a pair of pictures, one identical and the other one different. Say, "This is the same picture as this, isn't it"? (When the pictures are different) and "This picture is different, isn't it"? (When the pictures are the same).







## Lesson # 7

Warm-up PhaseTraining

Review: Repeat 2 examples from Session #6.

Target Skill: Answering Questions in a Consistent Way.

This lesson is intended to teach the resident not to answer 'yes' or 'no' in a haphazard, random, or impulsive fashion.

When the resident answers the first question of the set, ask him if he is really sure, before asking the second question.

Set #1 "Do you like cats"? Yes or No  
 "Are you really sure"?  
 "Do you hate cats"? Yes or No

If resident contradicts himself, point out the contradiction.

(i.e., "You said you liked cats; you should not say you hate cats).

If the resident is still contradicting himself after two repetitions, go on to next example. When resident responds without contradicting, praise by saying "good, you are really listening and thinking"!

Set #2 "Are you happy"? Yes or No  
 "You are sure"?  
 "Are you sad"? Yes or No

Set #3 "Do you like winter better than summer"?  
 "Do you like summer better than winter"?

Starting at Set #3, tell the resident to really think about his answer because you will be checking back on some of his answers later. As an example, go back to Set #1 and check on only one of the questions (i.e., Do you like cats vs Do you hate cats?) to see if the answer is consistent with his earlier response to the question. Repeat this review several times during the training part of Sets #3 - 10.

Set #4 "Are most people good to you"?

"Are most people mean to you"?

Set #5 "Are white cars nicer than black cars"?

"Are black cars nicer than white cars"?

Set #6 "Are parties good for people"?

"Are parties bad for people"?

Set #7 "We should eat one apple every day".

"We should not eat any apples".

Set #8 "Are you a tall person"?

"Are you a short person"?

Set #9 "Do you think football is a better game than swimming"?

"Do you think swimming is a better game than football"?

Set #10 "When you get in a fight it is your fault".

"When you get in a fight is it someone else's fault"?

#### Assertion Task

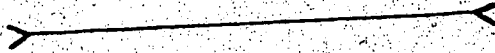
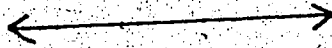
This task involves answering 'yes' or 'no' to questions about certain visual stimulus.

The purpose here is to get resident to answer consistently.  
That is, he must not answer 'yes' to all the questions in each set.

A. Is this line longer than this line?

Is this line shorter than this line?

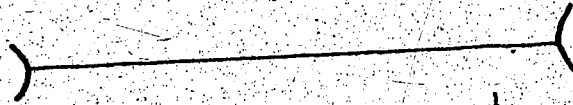
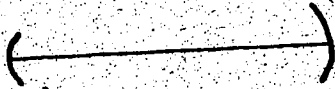
Is this line the same as this line?



B. Is this line the same as this line?

Is this line shorter than this line?

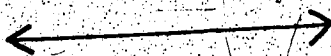
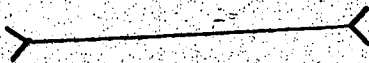
Is this line longer than this line?



C. Is this line shorter than this line?

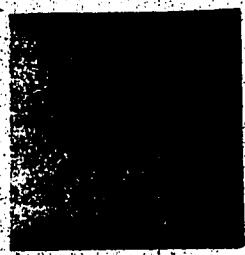
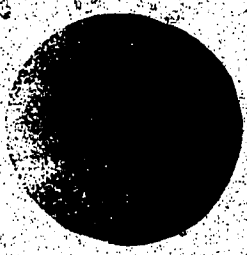
Is this line longer than this line?

Is this line the same as this line?



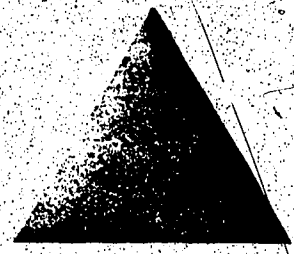
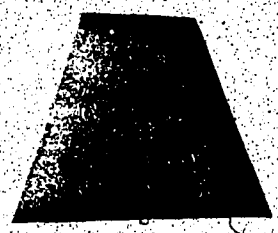
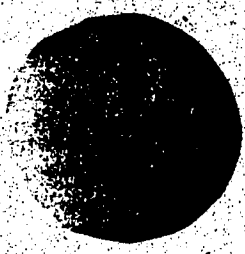
D. Are these two colors the same?

Are these two colors different?



E. Are these two colors the same?

Are these two colors different?



Lesson #8

Warm-up Phase

Training

Review: Repeat 2 sets from Session #7

Target Skill: Resistance to Countersuggestion

Sometimes residents are easily influenced by external cues. In answering questions, the resident may easily be influenced by the countersuggestions. This lesson is intended to help residents resist this type of influence. Say, "Now, I am going to ask you some questions. Don't be 'fooled' by what I say. O.K.? Just listen and think carefully".

Praise after each consistent response.

Question 1 - "Are you a boy/girl"? (State question so it requires an affirmative answer).

Countersuggestion: "You are a girl/boy aren't you"?  
(Opposite of above).

Contradiction: "Are you a boy/girl" (same as Countersuggestion).

Repetition of Question: "Are you a boy/girl"?  
(Original question).

Question 2 - "Are you short/tall?"

Countersuggestion: "You are short/tall aren't you?"

Contradiction: "Are you short/tall?"

Repetition of Original Question: "Are you short/tall?"

Question 3 - "Do you like apple pie?"

Countersuggestion: "No, you hate/like apple pie don't you?"

Contradiction: "Do you hate/like apple pie?"

Original Question: "Do you like apple pie?"

Question 4 - "Do you laugh at funny stories?"

Countersuggestion: "You cry when you hear funny stories, don't you?"

Contradiction: "Do you cry at funny stories?"

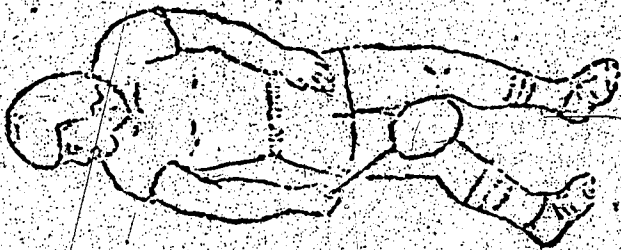
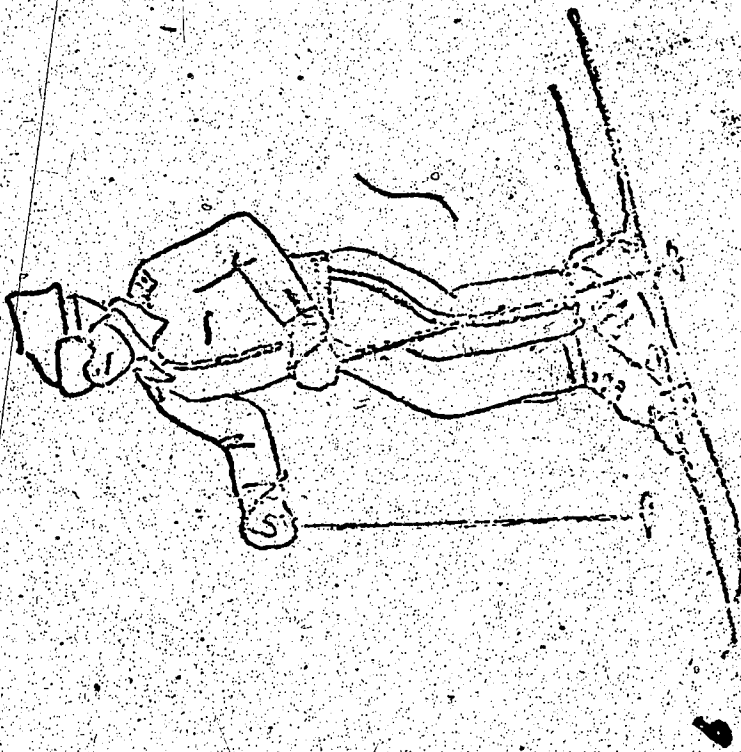
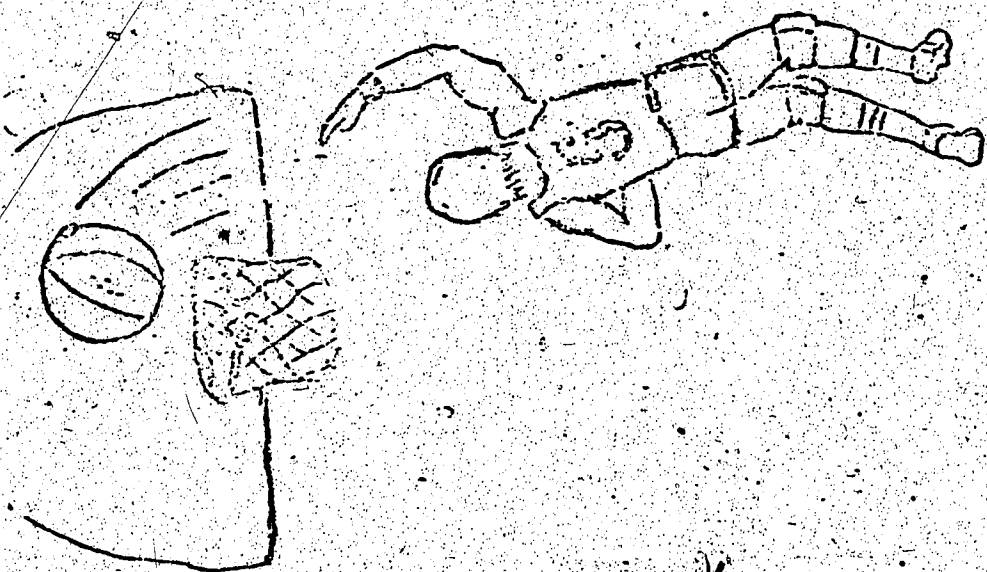
Original Question: "Do you laugh at funny stories?"

#### Assertion Task

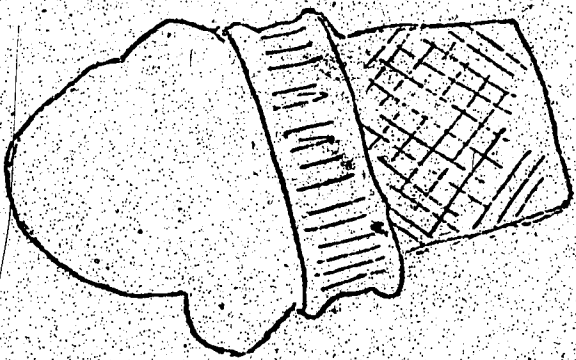
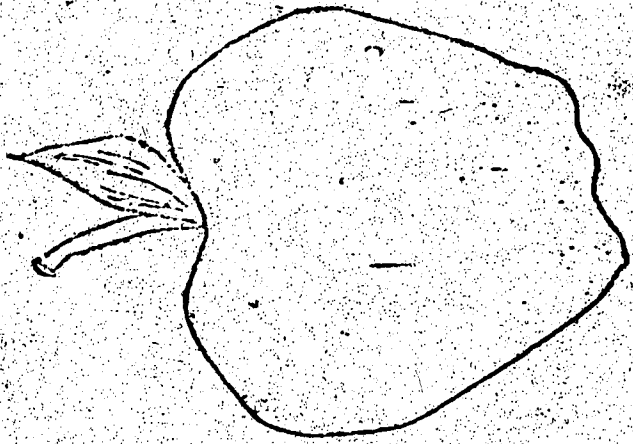
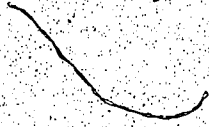
Picture Judgement: A stimulus card depicting three sports (hockey, basketball, baseball) is presented. The resident is asked which of these three sports he likes best. Trainer then expounds on the merits of another sport and says he likes it better. Trainer then asks a leading question, "Don't you like this sport better?" in a voice trying to convince resident of same. Then he repeats his earlier question, "Which sport do you like best?" If resident refuses to be swayed say, "Very good, you made up your own mind and didn't change what you said." If

he did change, explain that sometimes it is nice to "stick" to what you said. Then say, "We'll try another example, but this time don't change your mind so easily."

Present another card showing three kinds of food (apple, pie, ice cream cone), and repeat the above instructions.

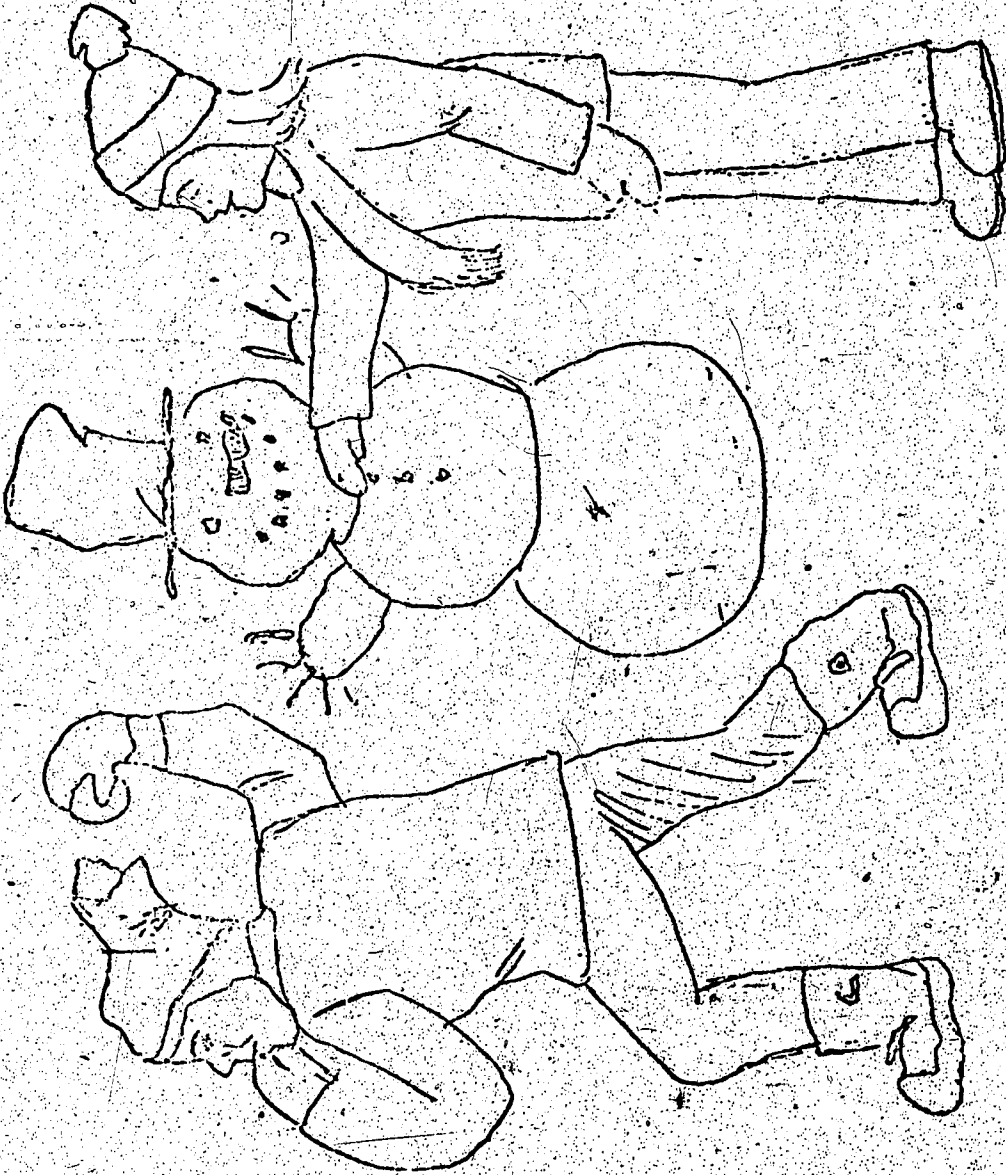






**Warm-Up #3: Winter****Possible questions**

1. "What is Betty doing?"
2. "What is Bob doing?"
3. Discuss winter clothing and why they must wear warm clothing.
4. "Do you like winter? What do you like about winter?"
5. "Do you like snow? What are some games you can play in the snow?"
6. "Is winter better than summer?"



APPENDIX B

SOCIAL ADJUSTMENT TRAINING: SAMPLE LESSONS

## Session # 1 Introduction and Teaching the Terms "Weird" and "OK"

Session #1 consists of two parts. Part One is intended to introduce each team member, and Part Two is intended to teach R's the meanings of "weird" and "OK" by designating inappropriate and appropriate behaviors, respectively. Behaviors that are deviant from defined norms (e.g., over friendliness, hand flipping, bizarre speech and actions) are labelled "weird" and behaviors that are acceptable are labelled "OK".

### Part One: Introducing Oneself

#### Procedures

1. Counselor (C), looking at the residents (R's), says the following:

"Does everyone know each other? I will introduce myself first. My name is \_\_\_\_\_, and I am a \_\_\_\_\_. During the next few weeks, we are going to be meeting three times a week to get to know each other better. Our meeting will be called group counseling. In our group counseling meeting, we will talk about a lot of things such as how we get along with each other, how we can make friends, how to take care of ourselves, and things like that. I hope you will like coming to these group counseling meetings. Now, I think each of you should introduce yourselves to everyone."

2. C models the appropriate response by introducing himself again to everybody. ("My name is \_\_\_\_\_, and I live in Red Deer.")
3. Every R, in turn, introduces himself.
4. C asks a question again, "Now, do you remember what my name is?" If there is a correct response from the group, C reinforces R by saying, "That's correct. My name is \_\_\_\_\_." If there is not a satisfactory response from the group, C re-introduces himself again and reminds the group members not to forget.
5. C asks, "What is our meeting here called?" If there is a correct response from the group, C repeats the response. If there is no satisfactory response, C says that this is called group counseling and asks the group members not to forget.

#### Part Two: Teaching the Terms "Weird" and "OK"

##### Procedures

1. C explains that the manner in which a person dresses, walks, eats, and talks, creates an impression upon others. Impression is defined as "what people think of you because of the way you dress, talk, and walk." If a person is to be seen as OK or is to make a "good" impression on others, he must dress, talk, and behave nicely (properly); otherwise, others will see him as weird.

2. C gives a female's dress to a male R and asks:

"If you wear this, is this weird or OK?" (C says,

"That's right. It's weird because boys do not wear girl's dresses, right?")

3. C gives a pair of boy's pants to a boy and asks:

"If you wear this, is this weird or OK?" (C says,

"That's right. It's OK, because he is a boy and he should wear boy's pants.")

4. C shows a dress that is extremely shabby and unkempt and asks:

"If you wear this, is it weird or OK?" (C says,

"That's right. It's weird, because it is too dirty.")

5. C shows a dress that is clean and neatly ironed and asks a female R:

"If you wear this, is it weird or OK?" (C says,

"That's right. It's OK, because it is clean and neat.")

6. C shows a video tape segment in which a man urinates in the garden, and asks:

"If you do this, is it weird or OK?" (C says,

"That's right. It's weird, because we are not supposed to pee pee in the garden.")

C then asks where the proper place is. The correct answer (i.e., washroom) is praised.

7. C role-plays a man who flips his hand repetitiously and asks:

"Is this weird or OK?" (C says, "That's right. It's weird.")

8. C role-plays a person who speaks extremely loud (e.g., "I have been to church today"), and asks whether this is weird or OK? C also asks why it is weird.

9. C role-plays a person who picks up a cigarette butt and puts it in his pocket and asks whether this is weird or OK.

10. C shows a video tape segment in which a man enters a ladies washroom and asks whether this is weird or OK.

11. C role-plays a resident who approaches another R and says, "Hi, my name is Humpty Dumpty. What is your name?" C then asks whether this is weird or OK.

12. C role-plays a resident who approaches another R and says, "Hi, how are you?" in the appropriate manner. C then asks whether this is weird or OK.

13. C role-plays a resident who is sitting in a chair with his head bowed and asks, "Is this weird or OK?" (C then says, "It is weird, because a person should not bow his head like this.")

14. C role-plays a resident who sits properly in a chair and asks: "Is this weird or OK?" (C then says, "It is OK, because ...")



15. C role-plays a resident who talks loudly to himself and asks: "Is this weird or OK?" (C then says, "It's weird, because he is talking loudly to himself.")
16. C asks R's to verbally report or demonstrate any weird behaviors they have seen. Ask three R's to report, and after each report, C says: "Thank you. That is really weird and you've done a good job of telling us the weird behavior you have seen."

### Session #6 Dress

In Session #6, the focus is on teaching R's appropriate attire. It is assumed that R's have already acquired basic self-help skills prior to this session. Again, any deviations from defined norms are labelled weird.

### Procedures

1. C explains that the manner in which a person dresses creates an impression upon others. Impression is defined as "what people think of you because of the way you dress, talk, and walk." If a person is to be viewed as OK, he must dress according to socially accepted rules. C further explains that proper, OK dressing is important because:
  - a) It makes you look nice (it improves your appearance).
  - b) It helps make a good (favorable) impression when meeting and keeping friends.
  - c) It keeps you healthy and happy.
2. C asks the group to state a weird way of attiring. If there is a satisfactory answer from the group, C repeats or expands R's response. If there is not a satisfactory answer, C presents several pictures cut from magazines, depicting either OK or weird ways of attiring. C then asks the group members to indicate whether they are weird or OK. The pictures should depict the following:
  - a) unkempt vs. clean.
  - b) ill-fitting vs. well-fitting

- c) sex inappropriate vs. sex appropriate.
- d) weather inappropriate vs. weather appropriate.
- e) occasion inappropriate vs. occasion appropriate.

3. C emphasizes that it is not only important to choose appropriate dress but also to wear it properly. For example, if a person wears good quality clothes but has his zipper or buttons often undone or his underwear showing all the time, then his attire would be considered weird.

4. C asks each member to come out to the front and requests the remaining members to answer whether their clothing is weird or OK when the following questions are asked by C:

- a) Is his clothing appropriate for his sex?
- b) Is his clothing appropriate for his age?
- c) Is his clothing appropriate for the weather?
- d) Is his clothing appropriate for the occasion?
- e) Does his clothing fit well?
- f) Is his clothing clean?
- g) Is his clothing neatly ironed?
- h) Is he buttoned correctly. Is any button missing?
- i) Is his underwear showing?
- j) Does he need a belt, and if so, is it properly done up?
- k) Other: socks, shoes, etc.

5. Repeat #4 in a pair evaluation situation. C pairs the group members and requests them to evaluate whether the other R's attire is weird or OK with respect to the following:

- a) Is his clothing OK (appropriate) for his sex, age, weather, and occasion?
- b) Does his clothing fit well?
- c) Is his clothing clean or shabby?
- d) Is his clothing neatly ironed?
- e) Is he buttoned correctly? Is any button missing?
- f) Is his underwear showing?
- g) Other: socks, shoes, etc.

If R's answer according to how these questions are stated, their answers will either be "yes" or "no". They must then equate these answers with OK or weird. R's who received any weird comments are checked by C, and if this is confirmed, they are sent to a suitable area (ladies' room, mens' room) to correct their appearance and allowed to return when they look OK. Subsequently, C praises the improved appearance of R, and asks the other group members to praise the improvement.

C explains that the "impression" created by appearance is not just determined by dress alone; it is also affected by grooming and general self-care. The foregoing explanation can be achieved by asking the following hypothetical question:

"If a person wears an outfit of good, clean quality, but is poorly groomed (unshaven face, untrimmed moustache, poorly groomed hair, smelly mouth, etc.), does he look weird or OK?"

If there is a satisfactory response from the group, C repeats and expands the response. If the response from the group is not satisfactory, C explains that grooming and other self-care (care of face, shaving, moustache, care of teeth, care of hair, care of nails, etc.) significantly influences people's impressions of him.

C presents four pictures taken from magazines which contrast trimmed vs. untrimmed moustaches and well combed vs. poorly combed hair and says: "Look at this person. Do you like him? What impression do you have of him? What is weird about him?"

If the response from the group is not satisfactory, C indicates that the person is wearing a good outfit, but is poorly groomed — that is, he has a poorly groomed moustache and hair.

8. C announces to the group members that:

- a) they will be checked about their dress and grooming hereafter;
- b) they must come to the group counseling session properly dressed and groomed;
- c) they will be sent away to correct their clothing or grooming if it is poor.

9. At the beginning of any SAT training sessions hereafter, C should check every group member concerning appropriate attire (see #4), and praise R's for their improved attire as well as grooming. Those who show unacceptable, weird dressing or grooming are sent to a suitable area (ladies' room, men's room) to correct their appearance and are allowed to return when they look OK. When R's return with a better appearance, C should praise them in front of the entire group so that desirable, vicarious learning may occur.

APPENDIX C

RAW DATA

RAW DATA - EXPERIMENTAL (QA) GROUP

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
1	213	192	18	76	12	11	4	4	21	10
2	221	219	66	31	17	18	4	3	21	19
3	162	207	52	8	8	13	3	6	16	24
4	139	157	23	27	11	14	2	3	10	14
5	180	196	25	31	11	14	5	4	14	17
6	203	202	10	28	17	16	5	5	24	22
7	208	219	34	40	14	15	3	4	15	22
8	233	240	14	8	14	15	6	6	19	19
9	197	231	18	25	11	15	5	5	19	21
10	232	197	43	67	18	10	4	4	22	15



RAW DATA - CONTROL 1 (SAT) GROUP

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
11	233	172	27	20	7	6	3	3	19	16
12	214	222	43	25	15	18	5	5	17	19
13	198	218	29	27	15	16	5	5	19	21
14	186	153	25	15	15	7	3	4	17	13
15	241	221	6	12	18	18	6	4	24	21
16	153	134	36	33	3	7	2	2	16	16
17	214	205	21	29	18	17	5	5	21	21
18	151	176	12	58	10	14	2	4	14	14
19	253	262	10	12	14	20	4	6	20	23

RAW DATA - CONTROL 2 (NO TREATMENT) Group

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
20	191	184	59	61	11	8	3	3	19	15
21	126	187	53	44	5	11	1	2	9	13
22	183	211	76	75	13	15	2	3	11	20
23	219	229	8	8	15	16	5	5	23	24
24	204	197	43	29	18	16	5	3	18	15
25	179	161	28	75	9	6	2	1	18	16
26	169	176	23	1	13	19	3	2	19	16
27	193	198	13	18	13	14	4	4	16	21
28	174	152	13	52	10	10	3	2	17	12

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THE UNIVERSITY OF ALBERTA

SOCIAL ADJUSTMENT TRAINING  
OF THE MENTALLY RETARDED

by



CHRISTINA FAYE WADDEN

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE  
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Social Adjustment Training of the Mentally Retarded submitted by Christina Faye Wadden in partial fulfilment of the requirements for the degree of Master of Education

Supervisor  
*[Signature]*  
*[Signature]*

Date November 15, 1978

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#### ABSTRACT

The present study examined the effectiveness of the socialization program, Teaching Question-Answering Skills, when used with mentally retarded persons. It was hypothesized that residents who received Question-Answering Skill Training would show a greater degree of socially appropriate behavior, as well as a lesser degree of socially inappropriate behavior.

A group of mentally retarded (mean I.Q. = 43.7), institutionalized residents (16 males, 12 females) received four weeks of structured, individualized, socialization training which focused on social and personal adjustment. The resident's improvement was measured by the Adaptive Behavior Scale. The experimental (n = 10), control 1 (n=9) and control 2 (n = 9) groups were compared on pre and posttest difference scores. The results showed no significant differences on Adaptive Behavior Scale scores after training. It was concluded that the socialization program, Teaching Question-Answering Skills was not successful in increasing socially appropriate behavior or decreasing socially inappropriate behavior of institutionalized mentally retarded individuals. Implications for the future implementation of similar training programs were discussed.



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## CHAPTER I

### INTRODUCTION

#### OBJECTIVES

The purpose of this study is to examine the effectiveness of, a socialization program when used with institutionalized mentally retarded persons. The study attempts to answer the question, Is individualized training of a primarily verbal nature effective in promoting positive behavioral changes when it is used with institutionalized, mentally retarded individuals?

#### OVERVIEW

Ever since deinstitutionalization of mentally retarded persons began, researchers have searched for the factors that accounted for successful placement in the community. As a result of this research, Gunzburg (1968) identified two factors that were believed to ensure successful community placement - vocational skills appropriate for functioning in community employment situations and social and academic skills so that the individual could cope with community demands. Rosen, Clark and Kivitz (1977) have reviewed the training of social skills and have concluded that researchers have dealt only with social knowledge skills; they found that training has not included socially appropriate behavior.

Mentally retarded residents have been described by researchers as exhibiting socially inappropriate behavior such as bizarre speech and actions, poor personal appearance and childishness

(Spradlin and Girardeau, 1966). They point out that these behaviors are learned as a result of experiences within the institutional setting. The elimination of these socially inappropriate behaviors is the goal of training programs recently developed. The reduction of these behaviors themselves is not predicted to ensure successful community placement of previously institutionalized mentally retarded individuals, but the training of those skills in conjunction with vocational, academic and social knowledge skills may.

#### DEFINITION OF MENTAL RETARDATION

The term "mental retardation" is considered within this work as defined by the American Association of Mental Deficiency. That is, "mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period" (Grossman, 1973, p. 11).

## CHAPTER II

### REVIEW OF THE LITERATURE

#### HISTORICAL BACKGROUND: HABILITATION OF THE RETARDED

Rosen, Clark and Kivitz (1977) reported that "habilitation is usually defined as a process by which various professional services are utilized to help a disabled individual make maximal use of his capacities in order that he might learn to function more effectively" (p. 3). Habilitation of mentally retarded individuals is a reoccurring goal in the history of institutionalization. First sought after in the mid-nineteenth century, then challenged at the close of that century, it was sought after again, a few decades later, and was endorsed fully by some in the 1960's and 1970's.

The spirit of habilitation in the mid-nineteenth century was optimism. Early teachers of the mentally retarded, such as Sequin (1864), felt that mentally retarded persons could be trained sufficiently to permit them to function normally in a community. Whatever training occurred, however, was based on a totally Christian view of their labors. Violations of the "natural laws", with intemperance, intermarriage of relatives, "self-abuse", and greed were still believed to be the causes of mental retardation. Sequin (1864) felt they were saving idiots who "know(s) nothing, can do nothing, cannot even desire to do anything".

The first attempt to find a method of separating the subnormal (mentally retarded) from the normal children in public schools came from the Minister of Public Instruction in Paris in 1904 (Sattler, 1974). As a result of the committee formed by the Minister, Alfred Binet and Theodore Simon devised 30 tests that could be rated objectively and could differentiate the mentally retarded from the normal. These tests were not used in the treatment of the mentally retarded, but only to determine the level of intelligence of school children (Sattler, 1974).

It was soon realized that the mentally retarded could not function normally in the community, even after training. This realization created a pessimism in terms of educating the mentally retarded that was to last many decades. White and Wolfensberger (1969) described the main habilitation philosophy of this time as a shift from a "desire" between 1850 and 1880, to "make the deviant undeviant" to a "concern", from 1870 to 1890, to "shelter the deviant from society" to "alarm", between 1880 and 1900, over "protection of society from the deviant". At this time, the rising concern was over the "menace" of the mentally retarded.

Goddard (1914) concluded in a family study, that mental retardation had a genetic basis and explained the influence of heredity on mental deficiency in terms of "bad blood". He also

concluded that there was a strong relationship between feeble-mindedness and criminality, and estimated that as many as 50 percent of penal institution inmates were mentally retarded. Goddard (1913) dealt a final blow to the hope of habilitating mentally retarded individuals when he, as director of the research department at the Vineland Training School, concluded that few of the feeble-minded children at Vineland were making any significant mental development, despite their enrollment in special education programs.

Wolfensberger (1969) reported that early Twentieth Century policies were based on the assumption that the retarded were a "menace" to society. Laws were passed in some states forbidding marriage and making sterilization mandatory. Further to this, permanent custodial care of the retarded was advocated. The policy of dealing with the retarded had, by the Twentieth Century, gone from preparing the retarded to adjust to society to preventing the contamination of the race.

The eugenics alarm reached its peak by the 1920's but soon abated due to the increased understanding of nongenetic determinants of retardation, such as organic causation and the influence of environmental factors. The myth of I.Q. constancy was dispelled with data indicating increases in tested intelligence with programs of stimulation (Kirk, 1958, Skeels and Dye, 1939). Also, earlier claims of an association between crime and mental retardation were

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challenged (Davies, 1930, Wallin, 1956). The attitude concerning the inability of mentally retarded persons to lead productive lives without the structure of an institutional setting was further dispelled by studies by Baller (1936), Charles (1953), Fairbanks (1933) and Kennedy (1966). These researchers presented evidence of the satisfactory adjustment of persons leaving institutions for the mentally retarded, often against medical advice, and of mentally retarded students in special classes in the public schools.

The groundwork for deinstitutionalization came during World War II when manpower needs required that many retarded persons leave institutions to serve in the armed forces, or as defense workers in factories (McCarver and Craig, 1974). From this beginning, the rights of the mentally retarded were advocated. By 1960, social unrest brought demands from minority groups for equal opportunity. The mentally retarded emerged as a minority group "with spokesmen voicing demands for an expansion of services, for availability of public school and community programs, for the improvement or complete abolition of institutions, and for the civil rights available to the ordinary citizen" (Rosen, Clark, and Kivitz, 1977, p. 11).

Nirje (1969) demanded that the mentally retarded be provided their full rights and benefits as citizens. The normalization principle as he saw it, "means making available to the mentally



retarded patterns and conditions of every day life which are as close as possible to the norms and patterns of the mainstream of society" (p. 363).

The habilitation of mentally retarded persons has developed through many stages since the mid-nineteenth century and the civil rights of mentally retarded persons are still being defined. Just recently, the American Association on Mental Deficiency published as an official policy statement, the "Rights of Mentally Retarded Persons". This document

specifies the rights to exert freedom of choice in making decisions; to live in the least restrictive environment; to obtain gainful employment and fair pay; to be part of a family; to marry and have a family; to be free to move about without deprivation of liberty by institutionalization; to speak openly; to maintain privacy; to practise a religion; to interact with peers; and to receive public supported education, vocational training, and habilitation programs (Rosen, Clark and Kivitz, 1977, p. 11).

FOLLOW-UP STUDIES

Follow-up studies of previously institutionalized mentally retarded individuals were carried out to investigate the general adjustment of mentally retarded individuals after a period of time in the community. Fernald (1919), for example, investigated 646 of 1,537 patients discharged from an institution over a 25 year period. Of these, 78 had died and 101 had been readmitted to the institution. The majority of the remainder had left the

institution by running away or being discharged under administrative protest. In this follow-up, Fernald found that many were leading "useful and blameless lives", being either self-supporting, or living with relatives under fairly close supervision. Fernald (1919) requested that the "limited facilities for segregation" be used for those who "can be protected in no other way".

Fernald's (1919) study was the first of its kind, and was performed at a time when mentally retarded persons were considered to be "moral imbeciles" prone to criminal tendencies, and a potential danger to the community. In fact, Davies (1930) points out that Fernald hesitated for two years before publishing this controversial study, possibly because it was at variance with the then accepted theories of mental retardation.

Other investigations were inspired by Fernald's findings. Many researchers were interested in the community adjustment of the mentally retarded. The criteria of community adjustment used in these studies were "success" or "failure" of employment, avoidance of arrest or anti-social behavior, and the ability to remain out of an institution of any sort. Two studies dealt with the adjustment of previously institutionalized persons during the War years. Hegge (1944) reported on 177 mentally retarded persons whose average age was 17, and whose average I.Q. was 71.8. Eighty-eight percent of those persons were employed, most males working

in defense plants, and most women working in their own homes. Since many of the individuals were working above the unskilled level, and had found their jobs independently (without the help of the institution), Hegge concluded that they would be employable even under normal working conditions. Coakley (1945), in a study of 37 formerly institutionalized retarded persons, found that most of these persons, as well, obtained their jobs independently or through the U.S. Employment Service.

A summary of 36 publications of follow-up studies of previously institutionalized mentally retarded individuals was provided by Eagle (1967). These included vocational placements, family care and independent living placements for a total of 7,436 releases. He found, adding the total number of successful and unsuccessful outcomes of these reports, a failure record of 39.6 percent. He also found that when considering the placement failure rate of releases from 1960 to 1967, the failure rate was 52 percent. Although the failure rate seemed "agonizingly high" to Eagle, he based his findings on many different criteria of adjustment; these included anti-social actions, undesirable personal conduct, unsatisfactory work, health problems, personality problems, voluntary return to the institution, transfer to other facilities and adverse environmental factors. If a narrower criteria of successful placement had been used, the failure rate would doubtless be much lower.

While follow-up studies such as these do provide much information on the success or failure of community-placed retarded individuals, there is still much confusion as to why some individuals succeed whereas others fail. Fernald (1919) was surprised that many of the individuals released from the institution were leading useful and blameless lives. Eagle (1967), on the other hand, was surprised at the agonizingly high failure rate he found in his review of community placement studies. The problem remained to predict what factors were necessary to take into account, to ensure an individual successful placement in the community.

#### PREDICTING SUCCESSFUL COMMUNITY PLACEMENT

As discussed, a large number of previously institutionalized mentally retarded individuals were capable of adequately functioning with independent living in the community. However, many individuals were found to have encountered problems in their vocational, economic or social adjustments, and had been reinstitutionalized. The fact that only some mentally retarded individuals succeeded in the community, suggested the need to determine, before they were discharged from the institution, what factors were related to successful community adjustment. Many studies have been directed toward this goal. Windle (1962) and McCarver and Craig (1974) have published comprehensive reviews of prognostic studies, dealing with previously institutionalized retardates.

Windle (1962) related outcome criteria, such as avoidance of reinstitutionalized, vocational placement, absence of aberrant or socially unacceptable behaviors, salary, and interpersonal relationships to five general areas of predictive characteristics. These predictive characteristics were demographic factors, individual abilities and disabilities, family and community factors, institutional experiences, and combinations of these factors. McCarver and Craig (1974) also grouped prognostic studies in accordance with predictive variables. The variables they grouped together included pre-admission variables, such as home environment, sexual behaviors and history of delinquency, and institutional variables such as reasons for admission, general behavior, age at admission, training programs, work experiences and length of institutionalization. Individual characteristics related to post-institutional adjustment are reported to be age at release, race, diagnosis, academic ability, intellectual level, personality, physical handicaps, and personal appearance. Other variables used included family interest, type of community placement at discharge, criteria for release from the institution, community attitudes toward, and the supervision of, mentally retarded persons.

Despite the comprehensive review of the many correlational studies performed to determine what factors may predict successful placement of the institutionalized mentally retarded person,

Windle (1962) and McCarver and Craig (1974) did not identify the predictive variables. Both studies point out the many methodological flaws in the reviewed studies and the discrepancies in the findings. McCarver and Craig (1974) concluded that placement was usually on a trial and error basis and evaluation was mainly subjective.

The problem in identifying the predictor variable or variables came from the contradictory results that have emerged from different investigations. One of the most widely used predictor variable, for example, is intelligence (as measured by standardized intelligence tests). McCarver and Craig (1974) found that, out of 33 studies, 12 reported a positive relationship between I.Q. and community adjustment success, and seven more suggested evidence for such a relationship. Contrary to this, 13 studies found no meaningful relationship between I.Q. and community adjustment, with one other study showing a negative relationship.

To further complicate the lack of evidence of predictor variables for successful community placements, studies attempting a cross-validation of their initial findings have also proved unsuccessful. O'Connor and Tizard (1951) found contradictory results when replicating a study combining a variety of predictive variables. Some relationships with criteria were found in the first, but not the second study. The authors explained that the discrepant findings of the two studies resulted from the unreliability

of the predictive tests used, and of the measurement of their criteria - work success.

Rosen, Floor and Baxter (1972) also reported cross-validation study results. Subjects for the study were chosen in the same manner; they were formerly institutionalized adults who had completed the same habilitation programs, were actually or functionally orphaned, and had been discharged for from six months to two years. The authors found that although predictor and criteria variables were similar to those found in the earlier study, the relationships of measures of perceptual-motor skills and employability ratings to indices of community adjustment were not substantiated.

In conclusion, many attempts have been made to predict successful habilitation of the mentally retarded. To date the results are variable and inconclusive. Therefore, the problem of what predictive criteria to use to ensure the successful community placement of institutionalized mentally retarded individuals still stands. As already discussed, there has been little in the literature to indicate the usefulness of cognitive-intellectual factors as determinants of community adjustment of retarded persons.

#### SOCIAL SKILLS AS A PREDICTIVE HABILITATION CRITERIA

Gunzburg (1968) reported that two training goals were usually emphasized to ensure successful social habilitation of mentally

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retarded persons: the first was the training of vocational skills appropriate for functioning in employment situations in the community. The second was the teaching of sufficient social and academic skills so that the individual could cope with community demands. The kind of social skills taught were social knowledge skills, such as the use of public cafeterias, public transportation facilities, medical resources, and the handling of financial concepts such as budgeting. Social skills did not include the teaching of socially appropriate behavior or the extinction of socially inappropriate behavior such as dependency and submissiveness. Vocational, academic, and social knowledge skills are of great importance to successful habilitation of the retarded in order that the individual may live independently in the community. However, successful habilitation of the retarded can not occur even with vocational, academic and social knowledge skills unless inappropriate social behaviors such as over-friendliness, bizarre speech and actions, poor personal appearance, and childishness are extinguished (Rosen, Clark, and Kivitz, 1977).

Mentally retarded persons, after spending much of their lives within an institution, often appear different, or even bizarre to people living in the community. Spradlin and Girardeau (1966) discussed such behavior as learned behavior, and as a direct result of institutionalization:



There is some maladaptive behavior which is typically found in institutions. This behavior is developed and maintained by the institutional environment.

For example, the institutional environment provides very little adult attention for the child. However, when the child has a tantrum, is aggressive with others, breaks a window, or exhibits self-destructive behavior, he usually receives a great deal of attention from the attendant and professional personnel ...

Clinging or hugging of both friends and strangers is a behavior which is exhibited in high frequency in institutions for retarded persons. Yet this kind of behavior is generally unacceptable in a community ... This behavior is not an innate characteristic of retarded persons but is generated by the social reinforcements of an institutional environment. The persons in an institutional environment are apt to overlook a retarded person if the person is playing with blocks, drawing or merely talking to them in a conversational voice. However, it is most difficult to overlook a patient who is clinging to you. (pp. 290-291)

The behavioral results of this type of institutional social learning are inappropriate in the community. For example, a mentally retarded person who has a tantrum in order to express his anger, or to receive attention from his job supervisor, will probably fail in his community placement. A young girl who has learned to seek the attention of adults by overfriendliness and clinging to them, may also fail in her community placement if she appears overfriendly and clings to strangers.

These inappropriate institutional behaviors have been found

to be independent of intellectual level (Johnson, 1970). Data for over 23,000 mentally retarded individuals from 19 public institutions was obtained in a 1967 census study. Information about the residents' anti-social behaviors and intelligence were correlated. Johnson reported that the correlation between intelligence scores and problem behavior measures involving disturbed relations with peers or authority figures were too low to be of practical significance. Vogel, Kum and Meshorer (1968) reported that severe social and emotional behaviors such as throwing objects, screaming, and aggressive and destructive behaviors were also independent of intellectual level.

Johnson's (1970) conclusion that resident's anti-social behaviors and intelligence were not correlated is not well founded. Anastasi (1976) discussed the fact that "any correlation coefficient is affected by the range of individual differences in the group" (p. 125). Since these tests were administered to a highly homogeneous sample (mentally retarded individuals) the correlation between the two would be expected to be close to zero.

The point was made that vocational, academic and social knowledge skills have been the areas stressed in training the retarded toward successful community placement. It has also been noted that community placement may fail if socially appropriate behavior (and the extinction of socially inappropriate behavior) is not in addition, the goal of habilitation training. The

question remains if the retarded are amenable to change.

Baumeister (1968) offered evidence that the mentally retarded as a group were more heterogeneous in their behavior than normal intelligence groups, thus the performance of mentally retarded individuals is characterized by its high variability. He theorized that unreliability in measurement of retarded individuals' behavior may be due to real changes within the organism, presumably on a motivational, attentional, or arousal basis. Baumeister's findings may account for the seemingly inappropriate behavior and the inability of the mentally retarded to adapt appropriately to changing environmental contingencies. This would also offer problems in regards to a program set up to modify inappropriate behavior, since more variable behavior would be difficult to modify.

One prerequisite for eliminating inappropriate behavior is that the individual be responsive to social stimuli (be capable of responding to the behavior of others) (Rosen, Clark and Kivitz, 1977). Rosenberg, Spradlin, and Mabel (1961) found a high level of verbal and gestural interaction when two "high level" mentally retarded persons were together. This same interaction occurred when two "low level" mentally retarded persons were together. They found, however, that there was little interaction when high level mentally retarded persons were brought together. From this study, it seems that retardates are socially responsive.

Spradlin, Girardeau and Corte (1967) conducted a study to determine if there was social stimulus control in mentally retarded adolescents. They investigated whether or not a child would give a candy reinforcer to another child when it did not cost him to do so, since he received a candy in any event. Three-fourths of the subjects did give the candy and therefore were assumed to be under social control of the other child. This social control must have developed outside of the experimental situation, since the children were not trained to give the candy, nor were they rewarded when they did so. The authors concluded that mentally retarded persons, even of a low level, can provide social cues sufficient to control the behavior of others.

The mentally retarded have been found to be sensitive to social feedback and social control. Since one of the prerequisites for behavior change is that the individual be responsive to social stimuli, the remediation of inappropriate social behaviors should be possible. Altman and Talkington (1971) concluded in a review of several behavior modification strategies, that modeling procedures should be well suited as a training strategy for mentally retarded persons. Using modeling procedures and the influence of social control (reinforcement), habilitation training programs for the training of appropriate (and the elimination of inappropriate) social behaviors may prove successful.

## SOCIALIZATION PROGRAMS

A number of social skill training programs have been developed as a result of the recognition of the relationship between good social skills and successful community placement. Some of these programs (Roos, 1968; Boruchow and Espenshade, 1976) deal with the general goals of social competence and interpersonal skills, like the self-care skills of grooming and shopping, but they do not deal with the remediation of inappropriate social behavior, such as attention-seeking behavior. Recently, three social skills programs have been developed to deal with the remediation of inappropriate social behavior — "Personal Adjustment Training" (PAT) (Rosen and Zisfein, 1975a, Rosen and Zisfein, 1975b, and Rosen and Hoffman, 1975), "Social Adjustment Training" (SAT) (Lee, Note 1), and "Teaching Question-Answering Skills" (QA) (Cottreau and Lee, Note 2).

The PAT is a group counseling program designed to teach specific social competencies to institutionalized mentally retarded individuals, preparing them for independent community living. The program is made up of three curricula, each one developed for a different purpose. The first curriculum, Basic PAT (Rosen and Zisfein, 1975a) deals with failures, degradations, and rejections associated with intellectual subnormality as well as social deficiencies associated with institutionalization. The curriculum is organized around five general units — self-evaluation, acquiescence-exploitation, self-assertion, heterosexual

behavior and independence-leadership.

The second PAT curriculum is Assertive Training (Rosen and Zisfein, 1975b). This is a specialized curriculum designed for mentally retarded persons who exhibit withdrawn, shy, passive and unqualified obedience behavior. Assertive Training teaches mentally retarded individuals the assertive responses necessary to function independently without violating the rights of others.

The third PAT curriculum is Appropriate Behavior Training (Rosen and Hoffman, 1975). This highly structured, directive group situation was designed for moderately to severely mentally retarded adults. Through the use of modeling, social reinforcement and role-playing, inappropriate social behaviors are replaced with socially appropriate behaviors. Appropriate Behavior Training is organized around five general areas relevant to inappropriate behavior - self-evaluation, speech, social interaction, expression of anger, and sexual behavior.

The effects of the Basic PAT (Zisfein and Rosen, 1975a) were studied in a group of mentally retarded young adults and socially deficient adolescents (Rosen, Clark and Kivitz, 1977). Of the 25 subjects involved in the study, 23 were residents of an institution, and the other two were living at home and were

the study "were constructed to reflect the target areas of the curriculum that were judged to be both measureable and responsive to therapeutic efforts" (Rosen, Clark and Kivitz, 1977, p. 328), the evaluation procedures failed to show a significant treatment effect. The authors explain the result as the unreliability of the specific measures employed. The authors noted, however, that there were anecdotal and subjective reports from some staff members concerning noticeable changes in former PAT students.

Lee developed the SAT (Note 1) based on the training formats of the PAT (Zisfein and Rosen, 1975a). The SAT is designed to help institutionalized mentally retarded individuals learn appropriate social behaviors through counselor and peer interactions, by using discrimination training, role playing, verbal instructions and discussion. This program is designed primarily for moderately and mildly retarded individuals. The SAT contains 15 group counseling sessions covering five areas of social and personal adjustment - social interaction, personal appearance and mannerism, awareness of feelings, making friends and social responsibility.

The effects of the SAT were studied by Lee (1977) with a group of moderately retarded (Mean I.Q. = 47) institutionalized residents (20 males, 24 females). To achieve maximum effect, the SAT was repeated after the initial training. Evaluation of the effect of training was measured by the Peabody Picture Vocabulary Test (Dunn, 1965), the Adaptive Behavior Scale (Nihira, Foster,

Shellhaas and Beland, 1974), and nomination by peers and ward staff. On each of the measures, the experimental group showed a significant improvement on social adjustment skills. However, the training did not reduce the inappropriate social behavior of the residents (as measured on the ABS, Part II).

Cottreau and Lee (Note 2) developed the training program "Teaching Question-Answering Skills". This program is designed to teach institutionalized, mildly and moderately retarded individuals appropriate social behaviors and to decrease inappropriate social behaviors, through modeling, social reinforcement and role play. The program is set up on the basis that many institutionalized mentally retarded persons respond to questions with excessive degrees of contradiction and inconsistency, and are easily swayed by the opinions of others. The authors suggest that this manner of responding is due to the individual's style of responding, an "impulsive tendency" to answer quickly without evaluating other possible responses to the question. The training is an attempt to teach three main skills - training for a delay in response to eliminate the impulsive tendency, training for attentive listening to the question in order to give a reflective answer, and training for assertiveness so that the individuals will "stand up" for their own opinions.

Both of the socialization programs used in the present study (QA and SAT) concentrate upon developing and strengthening constructive alternatives of behavior, based on social-learning



principles. The same training techniques - modeling, role-play and social reinforcement - were included in both socialization training programs (SAT and QA). Bandura (1969) concluded that "the combined use of modeling and reinforcement procedures is probably the most efficacious method of transmitting, eliciting, and maintaining social response patterns" (p. 161). However, the programs differ on other basic components.

The most noticeable difference is between the individual and the group training. The author reasoned that individual training allows the trainer more time to reinforce the resident, hold his attention and reinforce consistently. Group training, however, provides a socialization experience with his/her peers within the group. Also, the group training allows the trainer more efficient use of his time, since six subjects may be trained at one time.

Both socialization programs are structured, although the SAT and QA differ as to the extent of their structure. In the SAT, the degree of structure is mainly left up to the counselor, as Lee (1977) stated:

The counselor initiated the topics for discussion, encouraged general participation while discouraging irrelevant verbal and nonverbal behaviors, and held the group members to the topic. (pp. 321-322)

In the QA, however, the counselor is instructed as to what to say to the subject, and the temporal sequence, as:

When I ask a question, and you answer me, I want to make sure I can hear your answer. Say, 'yes' or 'no' in a nice clear voice".

Discourage nodding. If resident gives an unclear or inaudible answer, explain why he should have answered 'yes' or 'no' and repeat the question. Each clear, loud answer should be praised by the trainer. (Cottreau and Lee, Note 2, p. 4)

Also, in QA there are direct instructions for problem solving that require assertiveness (certain predetermined behavioral criteria in a problem solving situation) on the part of the subject.

The SAT was found to be successful in increasing social competence and interpersonal skills as measured by the ABS Part I (Lee, 1977). However, it was not found successful in decreasing maladaptive behaviors as measured by the ABS Part II (Lee, 1977).

As previously mentioned, for successful community placement the goal of social skills training is to increase social competency skills as well as to decrease socially inappropriate behavior.

Where institutionalized residents have learned more severe patterns of inappropriate behavior, a different training program may be needed. Rosen, Clark and Kivitz (1977) reported that:

This need is particularly salient where institutional behavior patterns of passivity, dependency, submissiveness, low self-esteem, attention-seeking, and inertia prevail. It is for such behaviors that more powerful and more individually tailored procedures must be used to supplement group socialization programs.

(p. 288)

Therefore, socialization training that attempts to result in positive behavior change of institutionalized mentally retarded

individuals must occur on an individual basis. Group programs (Lee, 1977) have had no effect in decreasing inappropriate social behaviors which may cause individuals to fail in community placements.

#### HYPOTHESES

The purpose of the present study is to examine the effectiveness of a highly structured, four-week individualized training program designed to enhance social adjustment skills of mentally retarded individuals in an institutionalized setting. It was predicted that the retarded residents who received the individualized counselling, in contrast to those who did not receive such treatment would show a reduction in socially inappropriate behavior. It was also predicted that those residents who received training in either the Experimental or Control 1 group would show a greater degree of socially appropriate behavior compared to those residents who received no training.

Hypothesis 1 - It is hypothesized that subjects who received QA training would score significantly lower in maladaptive behavior than those subjects who received SAT training, or no training, as measured by the ABS Part II.

Hypothesis 2 - It is hypothesized that subjects who received SAT, or QA training would score significantly higher in adaptive behavior than

those subjects who received no training,  
as measured by the ABS Part I.

## CHAPTER III

### RESEARCH DESIGN AND METHODOLOGY

#### RESEARCH DESIGN

The sampled residents were randomly assigned to three groups of equal numbers; the experimental, control 1 (controlling for special attention effects of training), and control 2 (no treatment) groups. This pretest-posttest control group design was "strongly recommended" by Campbell and Stanley (1963) who reported that it controls for all sources of internal validity. The way in which these factors are controlled will briefly be discussed here.

"History" is controlled in that any general historical events that might have produced a change in the experimental group, will also produce a change in the control groups. "Maturation" and "testing" are controlled insofar as they are manifested to the same degree in experimental and control groups. "Instrumentation" is controlled insofar as the person administering the pretest also gave the posttest, and were kept ignorant as to which subjects were receiving treatments, lest the knowledge bias their ratings. "Regression" is controlled insofar as mean differences are concerned, since subjects are randomly assigned to experimental conditions from the same subject pool. "Selection" differences are controlled since group equality has been assured by randomization.

## THE SAMPLE

The subjects for this study were drawn from The Michener Centre in Red Deer, Alberta. The institution, subsidized by the Province of Alberta, accommodates 1,800 mentally retarded residents. All subjects participating in this study were attending a pre-vocational training program, as well as the usual daily programs on the wards. Those residents under heavy medication during the time of the study and those severely handicapped in speech and hearing were excluded from the sample.

The original sample consisted of 36 residents. However, eight of these subjects were excluded from the results of the study because they became ill, were transferred out of the institution or were discontinued from the pre-vocational training program. The remaining participants were a total of 28 residents (16 males, 12 females) whose ages ranged from 13 to 45, with a median of 22. Their I.Q. (as measured by the Peabody Picture Vocabulary Test) ranged from 10 to 78, with a mean of 43.7. Subjects were randomly assigned to three groups of equal size, an experimental group receiving QA training, a control 1 group receiving SAT training, and a control 2 group receiving no training.

## MEASURING INSTRUMENT

Changes in participants' behavior as a result of training were examined using the American Association on Mental Deficiency's

Adaptive Behavior Scale (Nihira et al., 1974). As discussed earlier, the goal of socialization training is to increase socially appropriate behavior as well as decrease socially inappropriate behavior. The ABS was used in this study because it was designed to measure both socially adaptable behavior (Part I) and socially maladaptive behavior (Part II).

The ABS (Nihira et al., 1974) is a behavior rating scale for mentally retarded individuals. Part I of the scale was designed to evaluate an individual's skills on 10 behavior domains considered important to the development of personal independence in daily living. Part II was designed to evaluate maladaptive behavior related to personality and behavior disorders over 14 domains. For the purpose of the present study, the overall scores of Part I and Part II were used, as well as Part I Subdomains VIII (Self-Direction), IX (Responsibility) and X (Socialization). The mean reliability of the ABS Part I was reported to be .86, Part II (.57), Part I Subdomain VIII (.71), Part I Subdomain IX (.83) and Part I Subdomain X (.77) (Nihira et al., 1974).

#### PROCEDURE IN ADMINISTRATION

Prior to the start of training, all subjects received a "pre-test" on the Adaptive Behavior Scale (ABS) (Nihira, et al., 1974). The ABS was administered by the subjects' "key workers" (residential staff assigned to take care of the daily programming aspects of the residents).

The 36 sampled residents were assigned to Experimental, Control 1 and Control 2 groups of equal size. The Experimental group received training individually on QA for four weeks, 25 minutes per session, approximately five sessions per week. The Control 1 group (two groups of six residents each) received training in SAT for four weeks, 30 minutes per session, approximately four sessions per week. The Control 2 group received no training, but were involved in their usual ward activities or programs during the training sessions for the Experimental subjects. Time spent in each training program for each subject was equal. The QA program was repeated once in order to make this possible. Sample lessons of the QA are found in Appendix A, while sample lessons of the SAT are found in Appendix B.

Training of subjects was carried out by two counselors, who each trained an equal number of subjects in the Experimental and Control 1 groups. These counselors (females) had a Bachelor of Arts degree in Psychology, and their experience in the mental retardation area ranged from approximately one to three years. Neither of these counselors participated in the pre or post-testing of the subjects. Upon completing the programs, subjects were post-tested by the same institutional staff who participated in the pretesting. The evaluating staff were not informed as to which residents were participating in the experimental group.



## CHAPTER IV

### RESULTS

#### EXCLUSION OF SUBJECTS.

Eight participants were excluded from the study because they became ill, were transferred out of the institution, or were discontinued from the pre-vocational training program. These eight participants were excluded from the final analysis of the data. The remaining participants were a total of 28 residents, with 10 subjects in the Experimental (QA) group, nine in the Control 1 (SAT) group, and nine in the Control 2 (no treatment) group.

#### EFFECTS OF TRAINING

t - test comparisons of groups' pretest scores on the ABS were carried out to ensure that the groups did not vary significantly before training. As can be seen from Table 1, there were no statistically significant differences in pretest scores for the experimental and control groups.

The experimental and control groups were compared on the dependent variable - Adaptive Behavior Scale, using a 2 x 3 way analysis of variance. This design permitted comparisons of the differences in the overall performance of the subjects in the three groups, as well as evaluation of the changes in performance shown by the subjects during the experimental session.

Note: See Appendix C for Raw Data

TABLE 1

Summary of t - tests for Differences in Pretest Means

	Experimental, Control 1	Experimental, Control 2	Control 1, Control 2
ABS Part I	.10	1.86	1.98
ABS Part II	1.23	.61	1.50
ABS Part I Subdomain VIII	.50	1.14	.71
ABS Part I Subdomain IX	.56	2.17	1.71
ABS Part I Subdomain X	.34	1.00	1.33

### ABS Part I Adaptive Behavior

The mean, standard deviation and summary results of the analysis comparing ABS Part I Adaptive Behavior scores are given in Table 2. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = 1.03, p = n.s.$ ] [ $F(1, 25) = .44, p = n.s.$ ] [ $F(2, 25) = .52, p = n.s.$ ].

### ABS Part II Maladaptive Behavior

The mean, standard deviation and summary results of the analysis comparing ABS Part II Maladaptive Behavior scores are given in Table 3. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = 1.45, p = n.s.$ ] [ $F(1, 25) = .07, p = n.s.$ ] [ $F(2, 25) = .03, p = n.s.$ ].

### ABS Part I Subdomain VIII Self-Direction

The mean, standard deviation and summary results of the analysis comparing ABS Part I Subdomain VIII Self-Direction scores are given in Table 4. No statistically significant differences were found between the pre- and posttest scores for the experimental and control groups [ $F(2, 25) = .33, p = n.s.$ ] [ $F(1, 25) = 1.46, p = n.s.$ ] [ $F(2, 25) = .00, p = n.s.$ ].

### ABS Part I Subdomain X Socialization

The mean, standard deviation and summary results of the analysis comparing ABS Part Subdomain X Socialization scores are given in Table 5. No statistically significant differences were

TABLE 2  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Adaptive Behavior Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	198.20	31.81	206.00	23.37
Control 1	199.22	35.31	195.89	40.14
Control 2	182.00	26.06	186.11	23.94

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	1640.15	1.03
Error <sub>b</sub>	25	1586.59	
Within Groups	28		
Trials	1	128.90	.44
Trials X Conditions	2	150.70	.52
Error <sub>w</sub>	25	289.60	

TABLE 3  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part II Maladaptive Behavior Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	30.30	18.20	34.10	22.17
Control 1	23.22	12.29	25.67	14.28
Control 2	35.11	23.81	40.33	27.84

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	801.36	1.45
Error <sub>b</sub>	25	551.63	
Within Groups	28		
Trials	1	204.45	.07
Trials X Conditions	2	8.68	.03
Error <sub>w</sub>	25	287.63	

TABLE 4  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain VIII Self Direction Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	13.30	3.27	14.10	2.33
Control 1	12.78	5.09	13.67	5.50
Control 2	11.89	3.72	12.78	4.27

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	9.02	.33
Error <sub>b</sub>	25	27.01	
Within Groups	28		
Trials	1	10.29	1.46
Trials X Conditions	2	.01	.00
Error <sub>w</sub>	25	7.03	

TABLE 5  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain X Socialization Scores

	Pretest Means	Pretest SD	Posttest Means	Posttest SD
Experimental	18.10	4.28	18.30	4.32
Control 1	18.56	2.96	18.22	3.56
Control 2	16.67	4.27	16.89	3.95

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	14.13	.71
Error <sub>b</sub>	25	19.92	
Within Groups	28		
Trials	1	.02	.00
Trials X Conditions	2	.45	.04
Error <sub>w</sub>	25	11.10	

found between the pre- and posttest scores for the experimental and control groups [ $F(2; 25) = .71, p = n.s.$ ] [ $F(1, 25) = .00, p = n.s.$ ] [ $F(2, 25) = .04, p = n.s.$ ].

#### ABS Part I Subdomain IX Responsibility

The mean, standard deviation and summary results of the analysis comparing ABS Part I Subdomain IX Responsibility scores are given in Table 6. A statistically significant difference was found between groups [ $F(2, 25) = 3.69, p < .05$ ]. No other statistically significant differences were found ( $F(1, 25) = .00, p = n.s.$ ] [ $F(2, 25) = 1.12, p = n.s.$ ].

Both of the two main hypotheses were rejected. Subjects who received QA training did not score significantly lower in maladaptive behavior than those subjects who received SAT training, or no training, as measured by the ABS Part II. Also, subjects who received QA, or SAT training did not score significantly higher in adaptive behavior than those subjects who received no training, as measured by the ABS Part I. The ABS Part I Subdomain IX Responsibility scores did show a statistically significant between group effect, but it is of no practical significance since this subdomain is made up of only two items.



TABLE 6  
Mean, SD, and Summary of Analysis of Variance  
of ABS Part I Subdomain IX Responsibility Scores

	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Experimental	4.10	1.20	4.40	1.07
Control 1	3.89	1.45	4.22	1.20
Control 2	3.11	1.36	2.78	1.20

Source	df	MS	F
Total	55		
Between Groups	27		
Conditions	2	9.17	3.69*
Error <sub>b</sub>	25	2.48	
Within Groups	28		
Trials	1	.02	.02
Trials X Conditions	2	.72	1.12
Error <sub>w</sub>	25	.64	

\* p < .05

## CHAPTER V

### DISCUSSION

As was seen in Chapter IV, neither of the main hypotheses were supported. Training of institutionalized mentally retarded residents on a highly structured, individualized training program was not found to enhance social adjustment skills. Also, this study did not support Lee's (1977) finding that SAT training increased socially appropriate behavior.

Several factors may account for the present research findings. One involves the measuring instrument used to determine the effect of training on inappropriate behavior. (Inappropriate social behavior was not decreased by training as measured by the ABS Part II (Nihira et al., 1974). Lee (1977) found the same result on the ABS Part II when training using the SAT. In terms of that study, Lee (1977) reported that it was "puzzling, to find no significant differences between the experimental and control groups" (p. 321) in the ABS Part II. Lee's results as well as those of the present study may be explained as occurring because of the low mean reliability of the ABS Part II, which is reported to be .57 (Nihira et al., 1974). Changes may have been disguised due to the low reliability coefficient. Additional inappropriate behavior measuring instruments, with higher reliability coefficients may have been more sensitive to changes produced by training. An alternative explanation would be that these training programs have no effect on inappropriate behavior.

Another factor that may account for the present findings pertains to the length of training time. Lee (1977), as reported earlier, found a statistically significant training effect when training institutionalized mentally retarded individuals on the SAT, as measured on the ABS Part I (Nihira et al., 1974). This result was hypothesized to occur in the present study. However, Lee's (1977) study and the present study differ in terms of the length of training. Lee doubled the length of training time in his study by giving the SAT program to the subjects twice. The training programs (SAT and QA) used in the present study were matched in terms of length of training, but this training time was half of the training time reported in Lee's study. Training time was not made equal to that of Lee's (1977) study because it was not pointed out to be an important factor in program effectiveness. From this, length of training may be considered a factor that may contribute to treatment effectiveness.

Another factor that may account for the present research findings pertains to the design controls of the study. Key workers who rated subjects on the pre and posttests of the study were not informed that the residents were attending a special program. This was possible since subjects attended the program during the time they spent at a pre-vocational training program. Lee (1977) reported that ward staff who rated subjects on pre and posttests of the ABS probably knew which residents were experimentals and

which were controls. Therefore, the significant results reported by Lee (1977) could have been derived from the rater's knowledge of the experimental condition.

Another design control of the present study was the addition of a control group to control for special attention effects of training. Lee's (1977) study in which he employed no control group to account for special attention effects found significant training effects. These could have resulted from the special attention affects that the experimental group was given since the residents left the ward three times a week for a special program.

#### IMPLICATIONS FOR FUTURE RESEARCH

To further examine the effectiveness of social adjustment training, it would be interesting to examine the effect of training time. It is recommended that future research consider a length of training time comparable to that reported by Lee (1977).

Another implication for future research pertains to the research design used. In the present study, training was not found to be effective in enhancing social adjustment skills on institutionalized mentally retarded persons. It is not clear why the training did not have an effect on social behavior. Length of training time, and a low reliability measure of inappropriate behavior have been considered as contributing factors. In order to identify other factors that may have affected the present result, a single-case experimental design (Hersen and Barlow, 1976)

would be appropriate. Hersen and Barlow (1976) reported that by using a single case approach, relevant therapeutic variables may be isolated, that can answer the question of why a treatment works. When all of the relevant variables have been isolated, they may be combined to form a more powerful treatment "package" (Hersen and Barlow, 1976). The treatment program would then be the result of a series of single case designs, with the reasons why it should be effective known. The magnitude of the effect would be the only factor needed to be demonstrated and could be accomplished by using a group design, as was used in the present study.

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APPENDIX A

TEACHING QUESTION ANSWERING SKILLS: SAMPLE LESSONS

## Lesson #1

"For the next few weeks we are going to be talking to each other and you will learn to ask questions in nice ways. You will also learn how to answer questions and to tell me what you think and how you feel. I hope you will enjoy the lessons and have some fun".

### Warm-up Phase

### Training Phase

Target Skill: Answering Clearly.

"When I ask a question, and you answer me, I want to make sure I can hear your answer. Say 'yes' or 'no' in a nice, clear voice". Discourage nodding. If resident gives an unclear or inaudible answer, explain why he should have answered 'yes' or 'no' and repeat the question. Each clear, loud answer should be praised by a trainer.

Question 1 - "Are you a boy"?

Question 2 - "Do you live in Red Deer"?

Question 3 - "Do you have blue hair"?

Question 4 - "Are your shoes red"?

Question 5 - "Do you have 10 fingers"?

Question 6 - "Do you like to watch T.V."?

Question 7 - "Do you have many friends"?

"You have been doing very well. It is nice to hear you answer in a nice clear voice. Now let's practice something else. This time, when you answer, I want you to look at me. Answer 'yes' or 'no' in a clear voice and look at me when you answer". Use slight physical guidance if necessary (i.e., tipping chin if resident is looking down, or turning away).

Question 8 - "Do you like to swim"?

Question 9 - "Do some dogs fly in the air"?

Question 10 - "Do you like snow"?

Question 11 - "Do you get mad very often"?

Question 12 - "Would you like to live in a really big city"?

Question 13 - "Do you like to get up in the morning"?

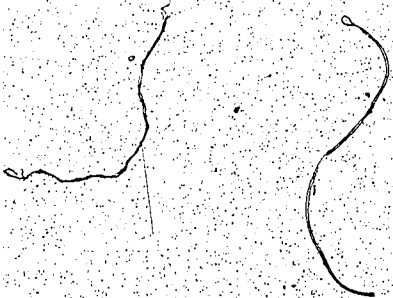
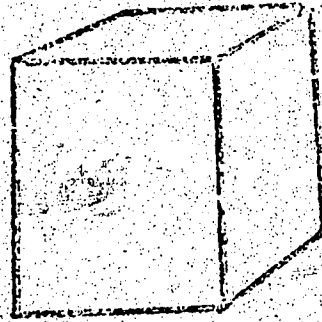
Question 14 - "Is it a good idea to smoke"?

Question 15 - "Are big cars better than small cars"?

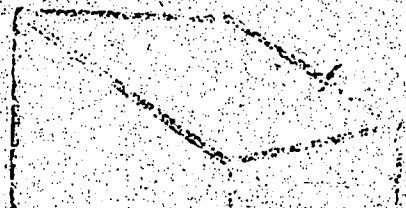
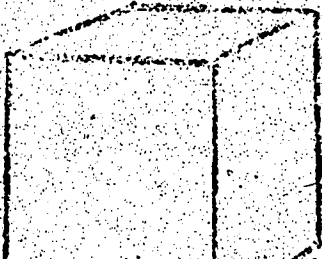
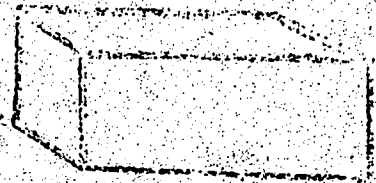
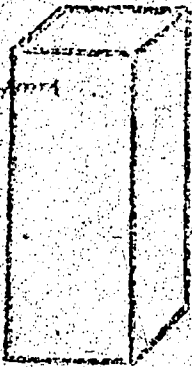
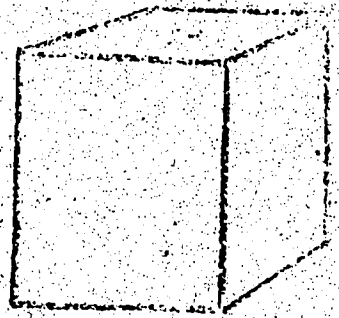
In all subsequent lessons, the resident is expected to answer in a clear, loud voice, and look at the trainer.

#### Assertion Task

Picture Selection: Resident is asked to look at a standard picture. He is then presented with a pair of pictures, one identical and the other one different. Say, "This is the same picture as this, isn't it"? (When the pictures are different) and "This picture is different, isn't it"? (When the pictures are the same).







## Lesson # 7

Warm-up PhaseTraining

Review: Repeat 2 examples from Session #6.

Target Skill: Answering Questions in a Consistent Way.

This lesson is intended to teach the resident not to answer 'yes' or 'no' in a haphazard, random, or impulsive fashion.

When the resident answers the first question of the set, ask him if he is really sure, before asking the second question.

Set #1 "Do you like cats"? Yes or No  
 "Are you really sure"?  
 "Do you hate cats"? Yes or No

If resident contradicts himself, point out the contradiction.

(i.e., "You said you liked cats; you should not say you hate cats).

If the resident is still contradicting himself after two repetitions, go on to next example. When resident responds without contradicting, praise by saying "good, you are really listening and thinking"!

Set #2 "Are you happy"? Yes or No  
 "You are sure"?  
 "Are you sad"? Yes or No

Set #3 "Do you like winter better than summer"?  
 "Do you like summer better than winter"?

Starting at Set #3, tell the resident to really think about his answer because you will be checking back on some of his answers later. As an example, go back to Set #1 and check on only one of the questions (i.e., Do you like cats vs Do you hate cats?) to see if the answer is consistent with his earlier response to the question. Repeat this review several times during the training part of Sets #3 - 10.

Set #4 "Are most people good to you"?

"Are most people mean to you"?

Set #5 "Are white cars nicer than black cars"?

"Are black cars nicer than white cars"?

Set #6 "Are parties good for people"?

"Are parties bad for people"?

Set #7 "We should eat one apple every day".

"We should not eat any apples".

Set #8 "Are you a tall person"?

"Are you a short person"?

Set #9 "Do you think football is a better game than swimming"?

"Do you think swimming is a better game than football"?

Set #10 "When you get in a fight it is your fault".

"When you get in a fight is it someone else's fault"?

#### Assertion Task

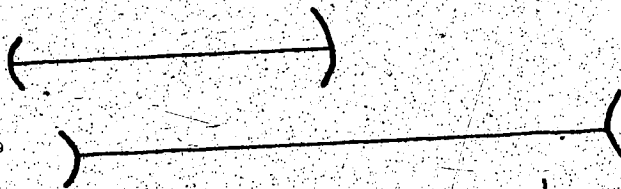
This task involves answering 'yes' or 'no' to questions about certain visual stimulus.

The purpose here is to get resident to answer consistently.  
That is, he must not answer 'yes' to all the questions in each set.

- A. Is this line longer than this line?
- Is this line shorter than this line?
- Is this line the same as this line?



- B. Is this line the same as this line?
- Is this line shorter than this line?
- Is this line longer than this line?

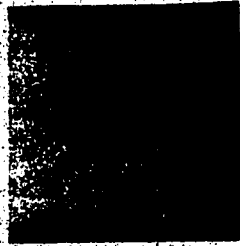
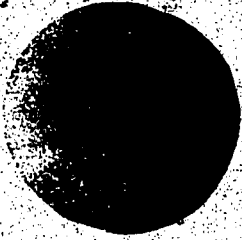


- C. Is this line shorter than this line?
- Is this line longer than this line?
- Is this line the same as this line?



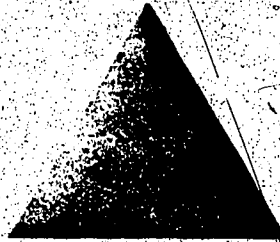
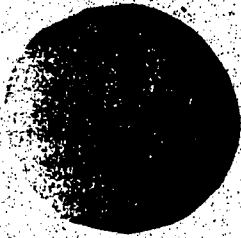
D. Are these two colors the same?

Are these two colors different?



E. Are these two colors the same?

Are these two colors different?



## Lesson #8

Warm-up PhaseTraining

Review: Repeat 2 sets from Session #7

Target Skill: Resistance to Countersuggestion

Sometimes residents are easily influenced by external cues. In answering questions, the resident may easily be influenced by the countersuggestions. This lesson is intended to help residents resist this type of influence. Say, "Now, I am going to ask you some questions. Don't be 'fooled' by what I say. O.K.? Just listen and think carefully".

Praise after each consistent response.

Question 1 - "Are you a boy/girl"? (State question so it requires an affirmative answer).

Countersuggestion: "You are a girl/boy aren't you"?

(Opposite of above).

Contradiction: "Are you a boy/girl" (same as Countersuggestion).

Repetition of Question: "Are you a boy/girl"?

(Original question).

Question 2 - "Are you short/tall?"

Countersuggestion: "You are short/tall aren't you?"

Contradiction: "Are you short/tall?"

Repetition of Original Question: "Are you short/tall?"

Question 3 - "Do you like apple pie?"

Countersuggestion: "No, you hate/like apple pie don't you?"

Contradiction: "Do you hate/like apple pie?"

Original Question: "Do you like apple pie?"

Question 4 - "Do you laugh at funny stories?"

Countersuggestion: "You cry when you hear funny stories, don't you?"

Contradiction: "Do you cry at funny stories?"

Original Question: "Do you laugh at funny stories?"

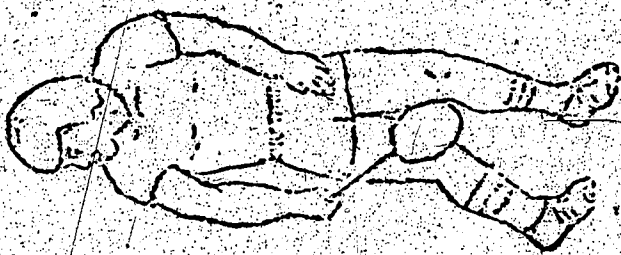
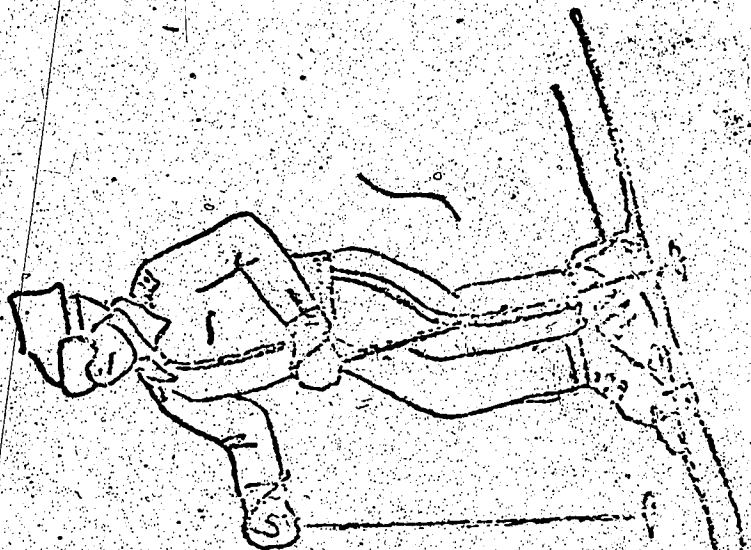
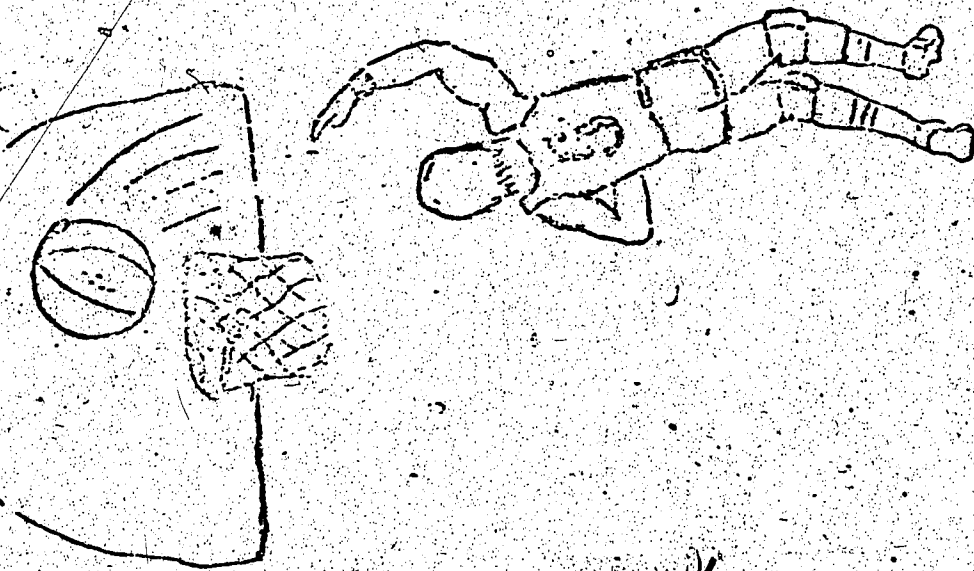
#### Assertion Task

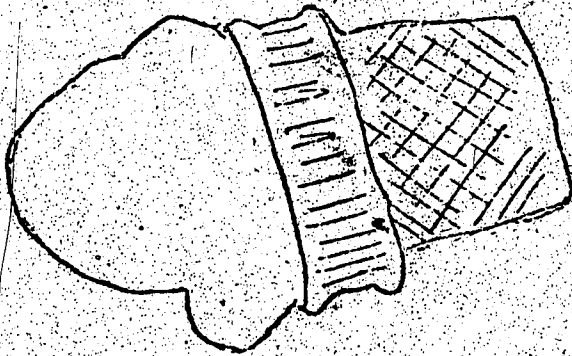
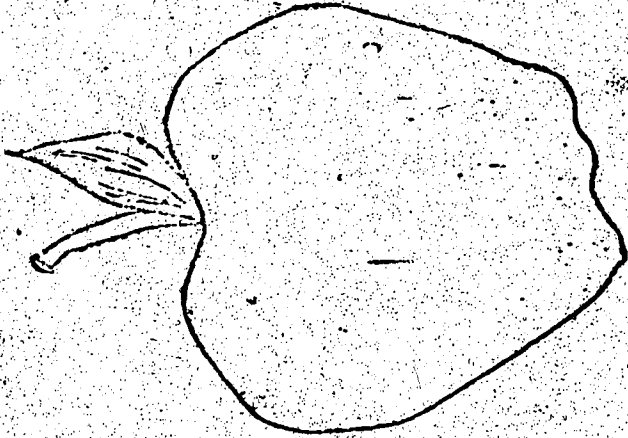
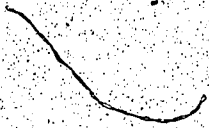
Picture Judgement: A stimulus card depicting three sports (hockey, basketball, baseball) is presented. The resident is asked which of these three sports he likes best. Trainer then expounds on the merits of another sport and says he likes it better. Trainer then asks a leading question, "Don't you like this sport better?" in a voice trying to convince resident of same. Then he repeats his earlier question, "Which sport do you like best?" If resident refuses to be swayed say, "Very good, you made up your own mind and didn't change what you said." If

he did change, explain that sometimes it is nice to "stick" to what you said. Then say, "We'll try another example, but this time don't change your mind so easily."

Present another card showing three kinds of food (apple, pie, ice cream cone), and repeat the above instructions.



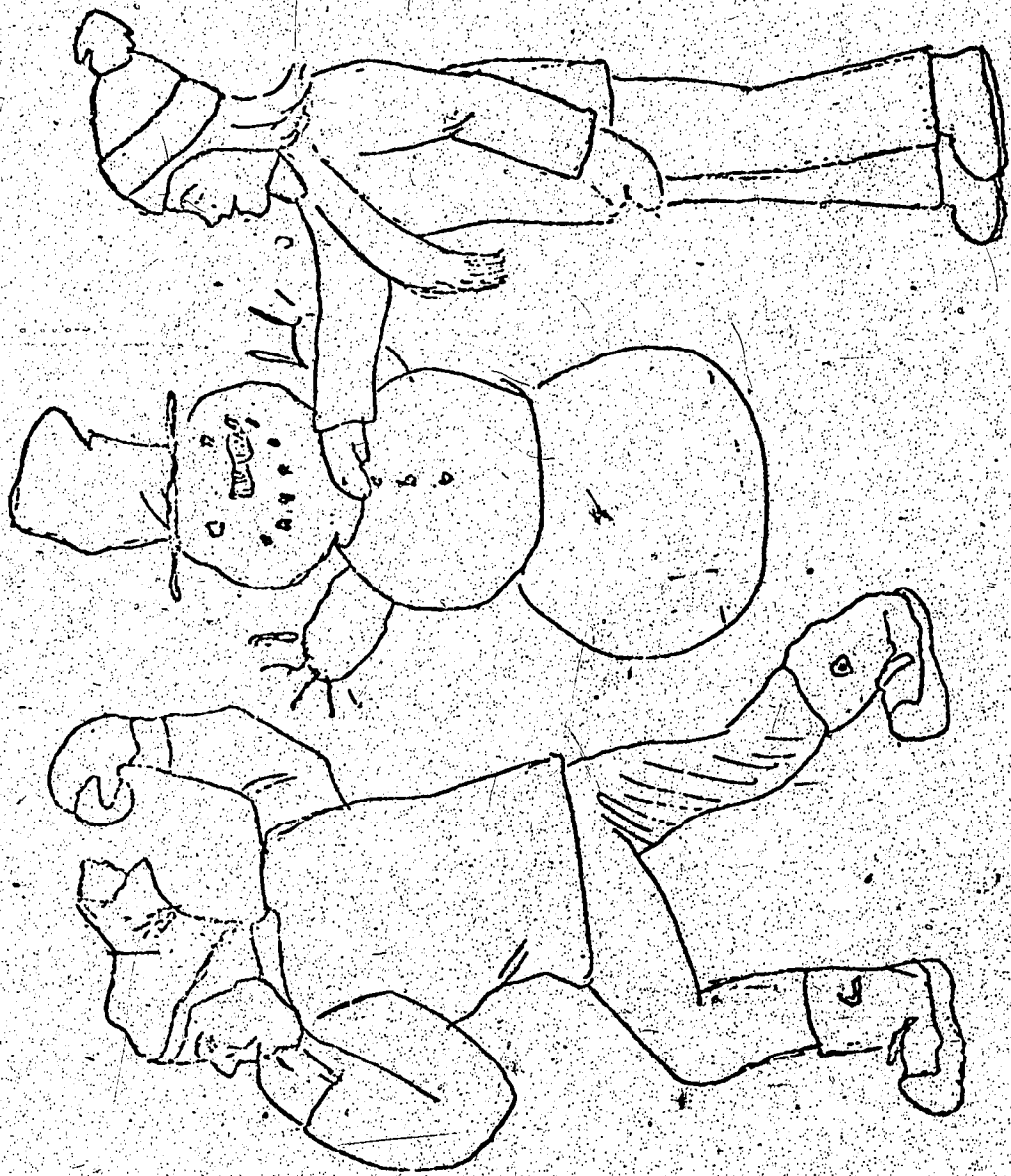




Warm-Up #3: Winter

Possible questions

1. "What is Betty doing?"
2. "What is Bob doing?"
3. Discuss winter clothing and why they must wear warm clothing.
4. "Do you like winter? What do you like about winter?"
5. "Do you like snow? What are some games you can play in the snow?"
6. "Is winter better than summer?"



APPENDIX B

SOCIAL ADJUSTMENT TRAINING: SAMPLE LESSONS

## Session # 1 Introduction and Teaching the Terms "Weird" and "OK"

Session #1 consists of two parts. Part One is intended to introduce each team member, and Part Two is intended to teach R's the meanings of "weird" and "OK" by designating inappropriate and appropriate behaviors, respectively. Behaviors that are deviant from defined norms (e.g., over friendliness, hand flipping, bizarre speech and actions) are labelled "weird" and behaviors that are acceptable are labelled "OK".

### Part One: Introducing Oneself

#### Procedures

1. Counselor (C), looking at the residents (R's), says the following:

"Does everyone know each other? I will introduce myself first. My name is \_\_\_\_\_, and I am a \_\_\_\_\_. During the next few weeks, we are going to be meeting three times a week to get to know each other better. Our meeting will be called group counseling. In our group counseling meeting, we will talk about a lot of things such as how we get along with each other, how we can make friends, how to take care of ourselves, and things like that. I hope you will like coming to these group counseling meetings. Now, I think each of you should introduce yourselves to everyone."

2. C models the appropriate response by introducing himself again to everybody. ("My name is \_\_\_\_\_, and I live in Red Deer.")
3. Every R, in turn, introduces himself.
4. C asks a question again, "Now, do you remember what my name is?" If there is a correct response from the group, C reinforces R by saying, "That's correct. My name is \_\_\_\_\_." If there is not a satisfactory response from the group, C re-introduces himself again and reminds the group members not to forget.
5. C asks, "What is our meeting here called?" If there is a correct response from the group, C repeats the response. If there is no satisfactory response, C says that this is called group counseling and asks the group members not to forget.

#### Part Two: Teaching the Terms "Weird" and "OK"

##### Procedures

1. C explains that the manner in which a person dresses, walks, eats, and talks, creates an impression upon others. Impression is defined as "what people think of you because of the way you dress, talk, and walk." If a person is to be seen as OK or is to make a "good" impression on others, he must dress, talk, and behave nicely (properly); otherwise, others will see him as weird.

2. C gives a female's dress to a male R and asks:

"If you wear this, is this weird or OK?" (C says,

"That's right. It's weird because boys do not wear girl's dresses, right?")

3. C gives a pair of boy's pants to a boy and asks:

"If you wear this, is this weird or OK?" (C says,

"That's right. It's OK, because he is a boy and he should wear boy's pants.")

4. C shows a dress that is extremely shabby and unkempt and asks:

"If you wear this, is it weird or OK?" (C says,

"That's right. It's weird, because it is too dirty.")

5. C shows a dress that is clean and neatly ironed and asks a female R:

"If you wear this, is it weird or OK?" (C says,

"That's right. It's OK, because it is clean and neat.")

6. C shows a video tape segment in which a man urinates in the garden, and asks:

"If you do this, is it weird or OK?" (C says,

"That's right. It's weird, because we are not supposed to pee pee in the garden.")

C then asks where the proper place is. The correct answer (i.e., washroom) is praised.



7. C role-plays a man who flips his hand repetitiously and asks:

"Is this weird or OK?" (C says, "That's right. It's weird.")

8. C role-plays a person who speaks extremely loud (e.g., "I have been to church today"), and asks whether this is weird or OK? C also asks why it is weird.

9. C role-plays a person who picks up a cigarette butt and puts it in his pocket and asks whether this is weird or OK.

10. C shows a video tape segment in which a man enters a ladies washroom and asks whether this is weird or OK.

11. C role-plays a resident who approaches another R and says, "Hi, my name is Humpty Dumpty. What is your name?" C then asks whether this is weird or OK.

12. C role-plays a resident who approaches another R and says, "Hi, how are you?" in the appropriate manner. C then asks whether this is weird or OK.

13. C role-plays a resident who is sitting in a chair with his head bowed and asks, "Is this weird or OK?" (C then says, "It is weird, because a person should not bow his head like this.")

14. C role-plays a resident who sits properly in a chair and asks: "Is this weird or OK?" (C then says, "It is OK, because ...")

15. C role-plays a resident who talks loudly to himself and asks: "Is this weird or OK?" (C then says, "It's weird, because he is talking loudly to himself.")
16. C asks R's to verbally report or demonstrate any weird behaviors they have seen. Ask three R's to report, and after each report, C says: "Thank you. That is really weird and you've done a good job of telling us the weird behavior you have seen."

## Session #6 Dress

In Session #6, the focus is on teaching R's appropriate attire. It is assumed that R's have already acquired basic self-help skills prior to this session. Again, any deviations from defined norms are labelled weird.

### Procedures

1. C explains that the manner in which a person dresses creates an impression upon others. Impression is defined as "what people think of you because of the way you dress, talk, and walk." If a person is to be viewed as OK, he must dress according to socially accepted rules. C further explains that proper, OK dressing is important because:
  - a) It makes you look nice (it improves your appearance).
  - b) It helps make a good (favorable) impression when meeting and keeping friends.
  - c) It keeps you healthy and happy.
2. C asks the group to state a weird way of attiring. If there is a satisfactory answer from the group, C repeats or expands R's response. If there is not a satisfactory answer, C presents several pictures cut from magazines, depicting either OK or weird ways of attiring. C then asks the group members to indicate whether they are weird or OK. The pictures should depict the following:
  - a) unkempt vs. clean.
  - b) ill-fitting vs. well-fitting

- c) sex inappropriate vs. sex appropriate.
- d) weather inappropriate vs. weather appropriate.
- e) occasion inappropriate vs. occasion appropriate.

3. C emphasizes that it is not only important to choose appropriate dress but also to wear it properly. For example, if a person wears good quality clothes but has his zipper or buttons often undone or his underwear showing all the time, then his attire would be considered weird.

4. C asks each member to come out to the front and requests the remaining members to answer whether their clothing is weird or OK when the following questions are asked by C:

- a) Is his clothing appropriate for his sex?
- b) Is his clothing appropriate for his age?
- c) Is his clothing appropriate for the weather?
- d) Is his clothing appropriate for the occasion?
- e) Does his clothing fit well?
- f) Is his clothing clean?
- g) Is his clothing neatly ironed?
- h) Is he buttoned correctly. Is any button missing?
- i) Is his underwear showing?
- j) Does he need a belt, and if so, is it properly done up?
- k) Other: socks, shoes, etc.

5. Repeat #4 in a pair evaluation situation: C pairs the group members and requests them to evaluate whether the other R's attire is weird or OK with respect to the following:

- a) Is his clothing OK (appropriate) for his sex, age, weather, and occasion?
- b) Does his clothing fit well?
- c) Is his clothing clean or shabby?
- d) Is his clothing neatly ironed?
- e) Is he buttoned correctly? Is any button missing?
- f) Is his underwear showing?
- g) Other: socks, shoes, etc.

If R's answer according to how these questions are stated, their answers will either be "yes" or "no". They must then equate these answers with OK or weird. R's who received any weird comments are checked by C, and if this is confirmed, they are sent to a suitable area (ladies' room, mens' room) to correct their appearance and allowed to return when they look OK. Subsequently, C praises the improved appearance of R, and asks the other group members to praise the improvement.

C explains that the "impression" created by appearance is not just determined by dress alone. It is also affected by grooming and general self-care. The foregoing explanation can be achieved by asking the following hypothetical question:

"If a person wears an outfit of good, clean quality, but is poorly groomed (unshaven face, untrimmed moustache, poorly groomed hair, smelly mouth, etc.), does he look weird or OK?"

If there is a satisfactory response from the group, C repeats and expands the response. If the response from the group is not satisfactory, C explains that grooming and other self-care (care of face, shaving, moustache, care of teeth, care of hair, care of nails, etc.) significantly influences people's impressions of him.

C presents four pictures taken from magazines which contrast trimmed vs. untrimmed moustaches and well combed vs. poorly combed hair and says: "Look at this person. Do you like him? What impression do you have of him? What is weird about him?"

If the response from the group is not satisfactory, C indicates that the person is wearing a good outfit, but is poorly groomed — that is, he has a poorly groomed moustache and hair.

8. C announces to the group members that:

- a) they will be checked about their dress and grooming hereafter;
- b) they must come to the group counseling session properly dressed and groomed;
- c) they will be sent away to correct their clothing or

9. At the beginning of any SAT training sessions hereafter, C should check every group member concerning appropriate attire (see #4), and praise R's for their improved attire as well as grooming. Those who show unacceptable, weird dressing or grooming are sent to a suitable area (ladies' room, men's room) to correct their appearance and are allowed to return when they look OK. When R's return with a better appearance, C should praise them in front of the entire group so that desirable, vicarious learning may occur.

APPENDIX C

RAW DATA



RAW DATA - EXPERIMENTAL (QA) GROUP

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
1	213	192	18	76	12	11	4	4	21	10
2	221	219	66	31	17	18	4	3	21	19
3	162	207	52	8	8	13	3	6	16	24
4	139	157	23	27	11	14	2	3	10	14
5	180	196	25	31	11	14	5	4	14	17
6	203	202	10	28	17	16	5	5	24	22
7	208	219	34	40	14	15	3	4	15	22
8	233	240	14	8	14	15	6	6	19	19
9	197	231	18	25	11	15	5	5	19	21
10	232	197	43	67	18	10	4	4	22	15

RAW DATA - CONTROL 1 (SAT) GROUP

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
11	172	203	27	20	7	6	3	3	19	16
12	222	214	43	25	15	18	5	5	17	19
13	218	198	29	27	15	16	5	5	19	21
14	153	166	25	15	15	7	3	4	17	13
15	221	241	6	12	18	18	6	4	24	21
16	134	153	36	33	3	7	2	2	16	16
17	205	214	21	29	18	17	5	5	21	21
18	176	151	12	58	10	14	2	4	14	14
19	262	253	10	12	14	20	4	6	20	23

RAW DATA - CONTROL 2 (NO TREATMENT) Group

Subject	ABS PART I		ABS PART II		ABS PART I SUBDOMAIN VIII		ABS PART I SUBDOMAIN IX		ABS PART I SUBDOMAIN X	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
20	191	184	59	61	11	8	3	3	19	15
21	126	187	53	44	5	11	1	2	9	13
22	183	211	76	75	13	15	2	3	11	20
23	219	239	8	8	15	16	5	5	23	24
24	204	197	43	29	18	16	5	3	18	15
25	179	161	28	75	9	6	2	1	18	16
26	169	176	23	1	13	19	3	2	19	16
27	193	198	13	18	13	14	4	4	16	21
28	174	152	13	52	10	10	3	2	17	12