AN EVALUATION OF PERSONAL ADJUSTMENT TRAINING WITH MENTALLY RETARDED ADULTS*

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Introduction

There is growing recognition that social and emotional factors play an extremely important role in adjustment to independent living. With this in mind, research efforts at the Vocational and Rehabilitation Research Institute (VRRI) has been directed at improving personal adjustment of trainees participating in Social Educational and Vocational Training. Such variables as low self-concept, overly compliant or acquiescent behaviours, passivity or inability to act in critical social situations, would seem particularly crucial personality aspects which can impede transition to the community.

Obviously adjustment to independent living involves a wide range of behavioural skills that may be difficult to develop in more structured educational and residential programmes. Upon entering the community, trainees encounter a variety of roles, expectations and responsibilities which are often quite different from their formerly sheltered life styles. While this may be attributable to the restricted range of environments and situations in which this population commonly finds themselves, this new set of demands, is often not foreseen or explored during the course of training.

It has been found that many handicapped persons who have received basic social and occupational training fail to meet community standards after "graduation." (Cohen, 1961; Brown, 1973). While the reasons for these failures are extremely varied, most seem to involve poor social or personal adjustment even though vocational ability is very satisfactory. It has been stressed by Rosen, Floor, and Zisfein (1974) that mentally retarded persons appear less able than other members of the community to cope with problem situations arising in their everyday lives, and are more susceptible to exploitation or abuse. Manipulation by drug pushers and high pressure salesmen for overwhelmingly expensive or unneeded purchases are two illustrations that highlight potentially aversive or harmful consequences which call for effective coping strategies. Passivity or inability to act in crisis situations such as loss of employment, abuse of credit privileges or eviction from living accommodation may leave the individual destitute.

The intent of this study was to explore and design remedial training procedures intended to help improve personal adjustment of the mentally retarded. Compliance and dependency behaviours were chosen for examination as it was felt that these tendencies may render individuals particularly susceptible to exploitation or abuse in a community situation.

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Method

Forty-eight trainees were selected from the VRRI without regard to chronological age or residential versus day programme status. Since the training and evaluation procedures relied upon verbal comprehension, participants were chosen from a population of trainees who scored in the 60-90 raw score range (IQ equivalent 50-80) on the Peabody Picture Vocabulary Test (Dunn, 1959). From this group, 32 subjects who demonstrated compliance on at least three of the behavioural measures (described below) were randomly assigned to experimental or control conditions with an equal number placed in each group. A descriptive breakdown of the two subject graphs is presented in Table 1. An overview of the design of the study is displayed in Figure 1.

All group members were individually assessed, using both self-report and behavioural measures. This procedure served as a pre-test following which trainees were enrolled in the group counselling programmes. Training was conducted in six (3 experimental, 3 control) smaller sub-groups each comprised of 5 or 6 persons. Each sub-group was given nine one-hour training sessions held twice weekly over a one month period. Group composition was heterogeneous with respect to age, behavioural competence, and degree of apparent social inhibition. Remedial lessons were prepared in advance and followed precisely the same sequence of instruction for each sub-group. Each session was conducted by a team of two therapists who served as both participant-models and group-leaders.

Following participation in training the evaluation procedures were readministered individually to each subject. Two weeks after completion of the training programme, three additional test measures were conducted in a workshop setting. These latter indices served as a follow-up study to examine the extent to which learning was transferable to more crucial real life events.

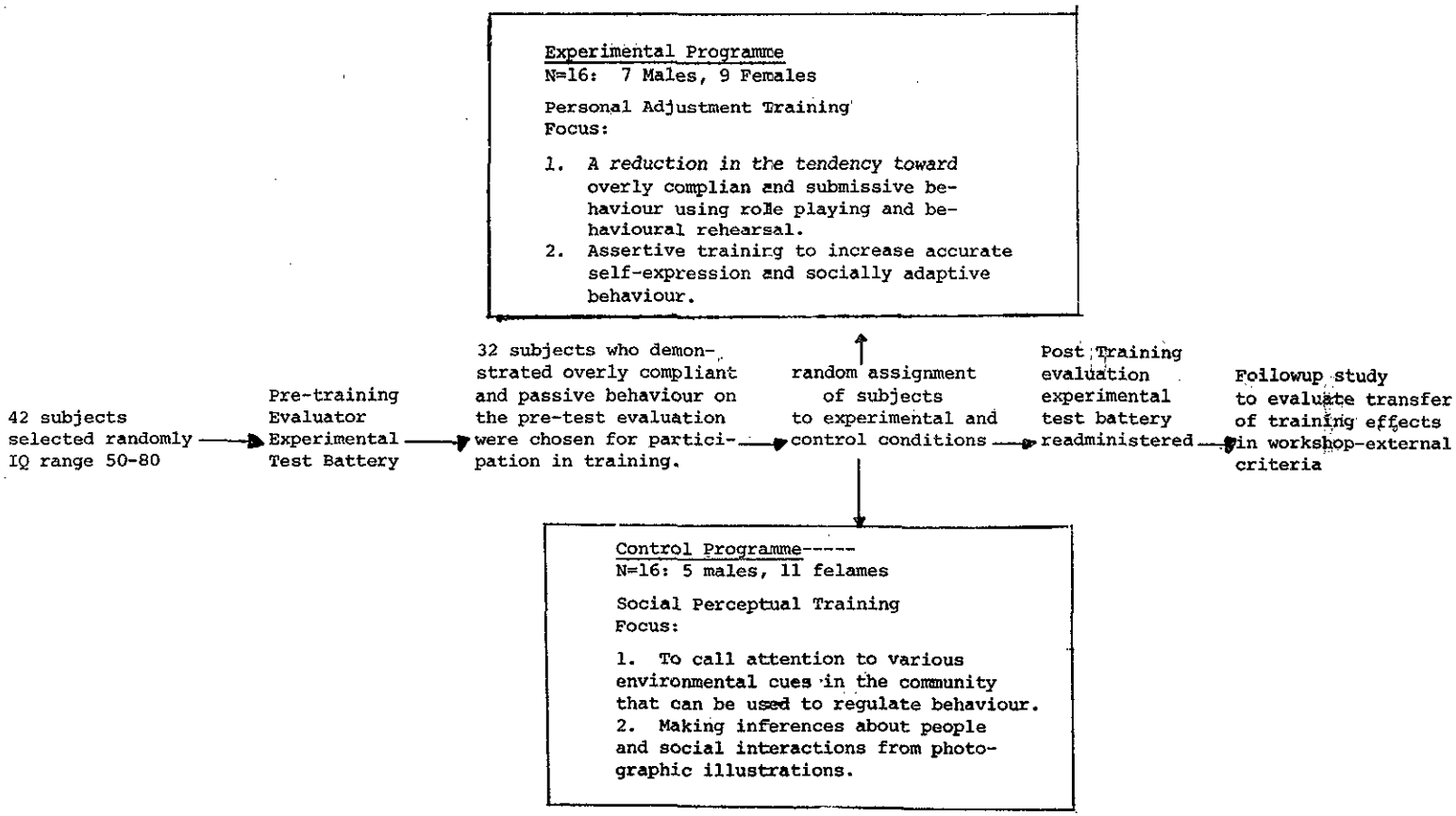
TABLE 1

Description of Subjects

Item	Experimental Group (N=16)		Control Group (N=16)	
Sex Distribution				
Male	7		5	
Female	9		11	
Chronological Age	Mean	Range	Mean	Range
Male	22.3	17 - 31	25.8	17 - 39
Female	18.8	16 - 39	22.2	17 - 39
Peabody PVT Raw Score	73.4	61 - 83	73.0	60 - 90
Peabody PVT IQ Equivalent	66.9	52 - 77	65.5	47 - 82

FIGURE 1

Design of Study



Training Programmes

A. Experimental Group: Personal Adjustment Training.

The focus of the training was two-fold (a) to reduce acquiescent submissive behaviour to attempts at social pressure and exploitation, and (b) to decondition passivity, feelings of dependency and helplessness by teaching assertive behaviour and effective coping strategies. An important aspect of the sessions was to clarify self-concept and develop accurate appraisals of personal capabilities. Several aspects of this curriculum were adapted from a previous training programme developed by Rosen and Zisfein (1975).

Nine training sessions were developed which covered the areas of identity of concept, audio visual self-evaluation, development of the ability to express feelings such as appreciation, receiving compliments, apologising to others, developing effective communication skills such as seeking assistance, and developing self initiative. A further session dealt with expression of anger, acquiescence and exploitation such as being requested to sign a document, or to lend money or take pills, assertion of one's self to authority figures and not yielding to pressures of one kind or another, for example, unfair requests of employers and landlords. The final session was a review involving a "who am I" technique, and role playing situations calling for assertive behaviour, in potentially exploitive situations. Practice was also given in making discriminative responses, rather than spontaneous replies, to unusual or bizarre requests. Modelling and video taping were the techniques used for these sessions. A full account of the programme content is provided in Ryba and Brown, 1980.

B. Control Group: Social Perceptual Training.

Control subjects were given an equal amount of programme time to the experimental group (nine one hour sessions) in small group situations. The training sessions were developed using a similar format to a programme devised by Edmonson, Leach, and Leland (1969). Through a progressive sequence of community awareness units illustrated by more than 150 photographic slides, practice was given in detecting and reading visual aspects of the environment judged to be important for independent living. The overall objective of the programme was to induce improved inferential abilities about social and community situations by clarifying which behaviours are appropriate in response to environmental cues or signals. Control group members were provided with similar exposure to technical equipment (slide projector, audio-video recorder) as experimental subjects in order to help minimise novelty effects of training. It should be mentioned however that while the control group viewed prepared tapes, they did not participate in video-taped interviews or role playing situations. The following topics were presented:

Session I:	Introduction to signals (e.g. direction signs)
Session II:	Places sometime explain what we should do
Session III:	Where we go for what we need
Session IV:	Making a good impression
Session V:	Being reliable and dependable
Session VI & VII:	Living on our own
Session VIII:	Having a good time because of knowing how
Session IX:	Summary and review of programme

Evaluation Procedures

Pre and post-test interviews were conducted by the examiner in a counselling room equipped with a one way observation window. Responses to the behavioural measures were observed and scored by a confederate situated in an adjoining room. Each testing session was administered individually using a standard form of presentation.

1. **Self Evaluation:** Three verbal scales and one performance test were administered to evaluate subjects appraisals of their own behaviour and capabilities.

(a) Locus of Control Scale - This consisted of 28 forced choice statements such as: "Most people get into trouble just because of bad luck." and "The best way to handle problems is just not to think about them."

Responses were scored according to whether the individual perceived events as consequential to his own actions (Internal Control) or due to domination by others (External Control).

(b) Self Concept Scale - Subjects were asked to respond to 40 statements which described their behaviour and feelings in a variety of situations. The scale yielded a total score based upon the number of choices reflecting acceptance of positive descriptions and rejection of negative statements about self.

(c) Passive Dependency Scales - This 45 item inventory evaluated self-initiative and independent behaviour. Items were devised to be representative of common situation, e.g. "At work I can usually solve my own problems."

(d) Aspiration Test - Subjects were required to insert metal pegs into a matrix of holes using a pair of tweezers. Following a practice trial, each person was asked to estimate their expected performance on five subsequent trials of 30 seconds duration. Scoring was based upon the absolute discrepancy between self-estimates and actual performance.

2. **Behavioural Items:** Five measures of compliance were employed in the testing session. Subjects were not informed about the nature of these items nor given any feedback on how they performed.

(a) Cluttered Chair Task - Upon entering the testing room the examiner sat down without offering the subject a seat. The only other chair in the room was cluttered with books and cardboard boxes. Scoring was based upon whether the subject took initiative to clear the seat, enquired about a chair, or remained standing (maximum 5 minutes).

(b) Pencil Sharpener - Several unsharpened pencils, a hand sharpener, and non-working pen were placed on the table. Having previously demonstrated use of the sharpener, the examiner asked the subject to draw a picture of a person. The examiner then departed before the subject attempted to draw. Scoring was based upon whether the individual made use of the sharpener and how long it took him to do so (maximum 5 minutes). This item was adapted from a previous study by Floor and Rosen (1975).

(c) Document Signing - Subjects were requested to sign a fictitious "legal" document without receiving any explanation on the purpose of the form. The individual was scored according to whether he refused to sign, queried the document, or spontaneously complied. This was based upon an earlier investigation by Rosen, Floor, and Zisfein (1974).

(d) Tape Recorder Task - The subject was requested to record himself reading a list of words during the examiners absence. After the subject had been working on his own for a minute or so, a confederate entered the office and asked to borrow the tape recorder. Scoring was based upon whether the individual was immediately compliant, made some verbal attempt to withhold the machine, or refused to loan the recorder.

(e) Departure - This measure was adapted from an earlier study by Floor and Rosen (1975). Upon completing the session, the examiner told the subject he was finished and thanked him for his participation. Remaining seated and ceasing all conversation, the examiner turned his attention to reviewing the test material. The subject was scored according to how long he remained seated before standing or seeking advice on whether he might leave.

3. **Supervisor's Ratings:** Workshop training staff were asked to assess participating subjects on an observational rating scale. This consisted of ten statements pertaining to autonomous achievement striving and dependency striving, e.g., "How often does the individual seek help?," and "How often does the individual attempt to overcome environmental obstacles on his own." The format was similar to a scale developed by Beller (1957) and provided definitions for each item along with a five point scale describing the frequency and intensity of behaviour.

4. **Video-tapes: Experimental Group:** Each member of the experimental group was administered a brief, structured interview upon commencement and after completion of the personal adjustment training programme. Subjects were instructed to introduce themselves and answer six standard questions that dealt with job placement, place of residence and plans for the future. Audio-visual recordings were aken through the observation window in an adjoining room. Video-tapes were scored independently by two raters who had not been informed about the nature of the study. Interviews were rated on a five point scale according to eight aspects of behaviour, e.g., "How confident does this person appear?" and "How loud and clear does this person speak?"

5. **Transfer Measures:** Three behavioural tests were administered during a two week period after completion of the training programmes to examine whether learning was transferable to real life situations in a workshop setting.

(a) Supervisor's Document Signing: Each subject was individually requested by their supervisor to sign a ficticious document with someone else's name on (a person of the opposite sex). Scoring was based upon whether the individual commented that the form contained the wrong name, requested an explanation, or waited until information had been provided before signing.

(b) Assembly Task Initiative: Subjects were instructed by their supervisors to assemble a light socket apparatus. The supervisor explained the task and then asked what tool would be required (a screwdriver). After the subject had pointed to the correct tool, the supervisor picked up the screwdriver and repeated the directions. With the screwdriver still in his hand, the supervisor asked the subject to complete the task and departed from the room. Scoring was based upon the initiative the subject demonstrated in obtaining the tool he required to complete the assignment.

(c) Petition Signing: Subjects were individually approached in their work area by a female confederate who asked them to sign a fictitious petition containing complex terminology. This was scored according to whether the individual immediately complied, enquired about the meaning, or challenged the confederates identity.

RESULTS AND DISCUSSION

1. Self Evaluation

As can be seen in Table 2, 12 experimental individuals (75 per cent) and 4 control members (25 per cent) showed decreases in their total passive-dependence scores following participation in training. Since the difference between the two groups was significant (X^2 6.13 $p<.01$) it can be concluded that experimental subjects demonstrated greater improvement than control members.

Neither the Self-Concept nor locus of Control Scales revealed any significant change between the before and after training ratings of experimental and control subjects.

Apparently more concrete items which describe real life situations such as those on the Passive-Dependency Scale are more meaningful for evaluating adjustment in mentally handicapped subjects, and that abstract areas such as self-concept may not be easily assessed by means of verbal measures.

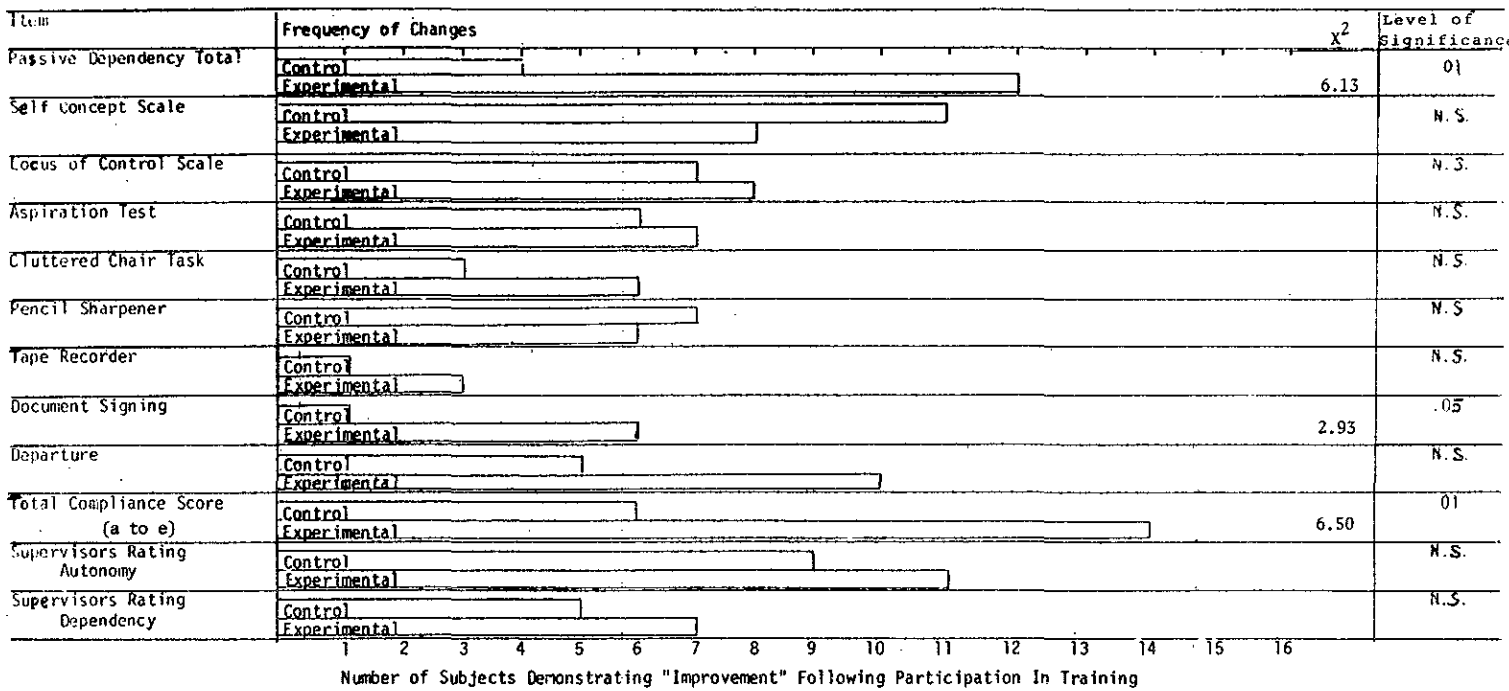
On the Aspiration Test no significant differences were found between the discrepancy scores of experimental and control members. Once again, it may be that this type of task, which requires self-appraisals of performance capabilities, is insufficiently sensitive and unreliable to evaluate changes in goal setting behaviour. It must be remembered that this is a contrived experimental situation which may not reflect tendencies to over or underestimate abilities in real life. Perhaps it would be more to the point then to evaluate self-appraisals of performance on sample work tasks within a natural setting.

2. Behavioural Measures

Pretest scores were similar in both groups. Subjects were classified as "improved" or "unimproved" following training so that group differences could be analysed for significance using chi square techniques. Table 2 displays a comparison of the change scores for experimental and control group members. Summing the scores over all tests it was found that 14 (87 per cent) of the experimental individuals and 6 (37 per cent) control members improved. These significant results (X^2 6.50 $p<.01$) suggest that the experimental subjects were less compliant as a group than control members after treatment. More subjects improved (less compliant) in the experimental than in the control group in four out of the five behavioural situation tasks.

TABLE 2

Frequency of Improved Change Scores Following Participation In Training



Significance levels are based upon a chi-square test corrected for continuity, or Fisher's Exact Probability Test where N is small.

However, an item-by-item analysis failed to show significant differences between the two groups with one exception. All experimental and control subjects unhesitatingly signed a spurious "legal" document when asked to do so prior to training. However, after completion of the programmes it was found that 1 control and 6 experimental subjects demonstrated non-compliance with the form signing request.

3. Supervisor Ratings

It is interesting to note that no improvement in observational ratings of autonomy was recorded following participation in training. This finding may have several different interpretations. One is that compliance within a training environment is considered by supervisors to be an adaptive behaviour much in the same way as taking direction or following instruction. Alternatively, the rating scales may be insufficiently sensitive to measure positive changes in behaviour. Many supervisors reported improvements in personal adjustment of certain trainees even though they did not rate the individual involved as more improved after training. For example, one participant previously incapable of working on his own was reported to show more initiative in planning and carrying through his daily work routines. This may point to the need to train supervisors in observing and rating assertiveness behaviour in clients. Other subjective feedback indicated improved social interactions, more adequate communication skills, and increased acceptance of personal responsibilities.

4. Video-Tapes

Experimental Group - Only 75 per cent of the 16 experimental subjects were judged by 2 independent raters to have improved on the post-training tape. Gains were observed in terms of apparent self confidence, appropriateness of responses and verbal expression. McNemar's Test for significance of changes shows that gains following training were significant (X^2 3.06 $p<.05$). Practical limitations with regard to administration time and technical equipment precluded a comparative analysis of the control group. Evidence from this study does suggest that video-tape procedures may be a useful tool for developing more realistic self-evaluations and demonstrating aspects of interpersonal communication.

5. Transfer Measures

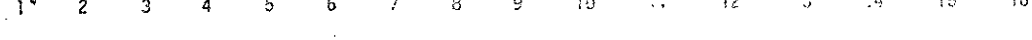
Only 1 experimental and 2 control group members challenged the purpose or refused to sign a spurious document when requested by their supervisor in the vocational workshops. A 'Petition Signing' request made by an unknown person within the workshop setting resulted in 10 experimental individuals and all 16 control group members unhesitatingly signing the form (X^2 3.93 $p <.025$). Apparently, experimental subjects tended to be less compliant when confronted by an unfamiliar and trusted staff member.

When subjects were requested to assemble the light socket, only 5 experimental members and 6 control subjects failed to request or obtain the necessary tool to perform the task. This was perhaps to be expected since most trainees are familiar with workshop procedures and could therefore cope adequately in this situation.

TABLE 3

Response To Compliance Transfer Measures

Item	Frequency of Compliance Responses	Level of Significance
Supervisor's Document Signing	Control Experimental	N.S.
Assembly Task Initiative	Control Experimental	N.S.
Petition Signing	Control Experimental	.025



Number of Subjects Demonstrating Overly Compliant Behaviour

*P levels of significance are based upon a chi-square test corrected for continuity.

RECOMMENDATIONS

The results clearly underline the need for the development of assertiveness training programmes amongst clients who are mentally handicapped. Most subjects showed they were susceptible to mild social pressures and therefore were "at risk" in the community. The results also suggest the importance of using real life situations in training and the use of behavioural and realistic measures of performance. Verbal measures of performance did not seem sufficiently sensitive and problems were encountered in using supervisors' estimates of assertiveness in their clients. This suggests the need for staff training in this area. The study illustrated that some transfer could be expected from the assertiveness training groups to workshop situations. However there were also indications that this transfer was somewhat limited. It is apparent that much more realistic situations must be developed for developing assertiveness training, and that precise means for transferring knowledge from one situation to another should be explored.

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