

California State University, San Bernardino

CSUSB ScholarWorks

Theses Digitization Project

John M. Pfau Library

1978

Multimodal behavior therapy vs. reality therapy in the treatment of chronic delinquency

Anita J. Lara

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Student Counseling and Personnel Services Commons](#)

Recommended Citation

Lara, Anita J., "Multimodal behavior therapy vs. reality therapy in the treatment of chronic delinquency" (1978). *Theses Digitization Project*. 4363.

<https://scholarworks.lib.csusb.edu/etd-project/4363>

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

MULTIMODAL BEHAVIOR THERAPY VS. REALITY THERAPY
IN THE TREATMENT OF CHRONIC DELINQUENCY

A Thesis
Presented to the
Faculty of
California State College
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Psychology

by

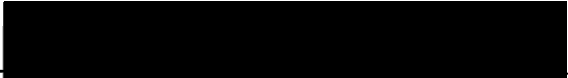
Anita J. Lara
November 1978

MULTIMODAL BEHAVIOR THERAPY VS. REALITY THERAPY
IN THE TREATMENT OF CHRONIC DELINQUENCY

A Thesis
Presented to the
Faculty of
California State College
San Bernardino

by
Anita J. Lara
November 1978

Approved by:


Chairman

12/6/78
Date

ABSTRACT

The purpose of the present study was to compare Multimodal Behavior Therapy and Reality Therapy with a Milieu Therapy Control Group in the treatment of delinquent behavior as it is related to institutional adjustment and later community adjustment. Forty adolescent males were assigned to a Multimodal treatment group, a Reality treatment group, or a Milieu therapy control group. Two counselors participated in the program which included twenty-four one hour sessions held twice weekly for a period of twelve weeks. Results indicated that the Multimodal subjects showed no significant improvement over the Reality or Milieu subjects following treatment. An eight-month follow-up assessment indicated Multimodal subjects did not show lower recidivism rates than Reality or Milieu subjects. However, all three therapy groups showed lower recidivism rates than suggested in previous literature.

TABLE OF CONTENTS

LIST OF TABLES	vi
ACKNOWLEDGEMENTS	vii
INTRODUCTION	1
Reality Therapy	5
Multimodal Behavior Therapy	6
METHOD	9
Subjects	9
Experimental Design	10
Assessment Measures	11
Procedure	12
Baseline Procedure	12
Treatment Procedure	12
Postbaseline Procedure	14
Follow-up Procedure	15
RESULTS	16
Follow-up Assessment	23
DISCUSSION	28

.

APPENDIX

A. BACKGROUND INFORMATION DATA FORM	30
B. DATA TABULATION FORM	31
C. WEEKLY GRADE REPORT FORM	32
D. INCIDENT REPORT FORM	33

E. REALITY THERAPY TREATMENT PLAN	34
F. MULTIMODAL ASSESSMENT FORM	35
G. MULTIMODAL TREATMENT PLAN	36
REFERENCES	39

LIST OF TABLES

1. Demographic Characteristics of subjects in Multimodal, Reality, and Milieu Therapy Groups	10
2. Counseling Grades of Multimodal, Reality, and Milieu Therapy Groups at Two Assessment Periods	16
3. Summary of Analysis of Variance Comparing Counseling Grade Scores for Two Treatment Groups and Milieu Group at Two Assessment Periods	18
4. Vocational Grades of Multimodal, Reality, and Milieu Therapy Groups at Two Assessment Periods	19
5. Summary of Analysis of Variance Comparing Vocational Grade Scores for Two Treatment Groups and Milieu Group at Two Assessment Periods	20
6. Incident Reports of Multimodal, Reality, and Milieu Therapy Groups at Two Assessment Periods	21
7. Summary of Analysis of Variance Comparing Incident Report Scores for Two Treatment Groups and Milieu Group at Two Assessment Periods	24
8. Institutional Adjustment Scores of Multimodal, Reality, and Milieu Therapy Groups at Two Assessment Periods	25
9. Summary of Analysis of Variance Comparing Institutional Adjustment Scores for Two Treatment Groups and Milieu Group at Two Assessment Periods	26
10. Number and percentage of Subjects Processed Through Juvenile Court Eight Months Following Treatment	27

ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to Dr. David Kantorowitz, my committee chairman for his help, availability, and concern throughout the long months. In addition, I want to express my thanks to Dr. Chris O'Hare and Dr. Charles Hoffman, the other members of my committee, for their assistance.

Appreciation is due Twin Pines Ranch, whose staff was always willing to help and support the project. Also, I want to thank each individual who participated in this study. Without their help and enthusiasm this study would not have been possible.

Finally, I want to thank Dad, Mom, Rita, Carm, Susie, Cookie, and Logan for believing in my abilities and offering steadfast support.

INTRODUCTION

Recent U.S. Crime Statistics (1972, 1975) indicate that juvenile delinquency is increasing. In 1973, juvenile offenses accounted for 20% of this nation's crime as compared with 24% in 1975. Nationwide, 993,251,000 crimes were committed in 1975; in California alone, 3,138,000 crimes were committed by persons 10-17 years of age. Equally important, only 3,002 of these juvenile crimes committed in California were first offenses. These statistics indicate an extremely high recidivism rate among juvenile offenders in addition to an increase in juvenile crimes.

It is apparent that youth is responsible for a substantial share of the national crime problem. In order to prevent and control juvenile crime and recidivism rates, it is essential that institutional counseling programs find ways of helping juvenile offenders adjust back into the community to which they will return.

In the past, counseling interventions with juvenile delinquents have been dominated by psychoanalytic, sociological, and behavioral approaches. Psychoanalytically oriented researchers (e.g., Gregory, 1968) have theorized that antisocial behavior is rooted in inadequate childhood relationships with parental figures. Children

struggle to attain acceptance and confidence. Delinquent behavior arises as the individual begins to express and subconsciously react to feelings of anger and inadequacy which were conveyed by the adult figures in the child's life.

Conversely, the sociological perspective has generally asserted that antisocial behavior is a function of the delinquent's interaction with the environment. Buffalo and Reger (1969), for example, investigated the relationship among moral norms, perception of peer norms, and behavioral attachment among institutionalized delinquents. The authors found that peer associations and friendships in institutional settings provided behavioral norms which were not congruent with the institutional norms or the individual's private norms. Hindelang (1971) and Matthew (1974) also reported that peer associations among juvenile delinquents provided reinforcement for deviant and/or illegal behavior among boys under 17 years. Albert Cohen (1966) has speculated that most delinquent behavior is directed by motivation and interest rather than utilitarian gain. According to this view, delinquent individuals are mediated by the attitude that illegal behaviors are a challenge, an adventure, etc. Dinitz, Scarpitti, and Reckless (1962) have reported that feelings of worthlessness and unfulfilled needs of belonging "predispose" certain juveniles to delinquency. Gold (1969) has described the delinquent adolescent as an alienated individual who

utilizes this type of behavior as a mechanism for counter-ing personal feelings of powerlessness.

Behavioral research into delinquency rests on the presumption that the environment is the major influence in the development of delinquent behavior; by implication, changing the environmental reinforcers which support delinquent behavior would lead to their modification.

Following a behavioral approach, Rutherford (1976) has devised a behavioral decision model for delinquent and predelinquent adolescents. This model is based on the assumptions that: (a) the adolescent lacks specific data about him/herself and their environment, and (b) the adolescent lacks the critical decision-making skills to be assertive. Based upon these assumptions, Rutherford developed a counseling program designed to facilitate the acquisition of decision-making skills through: (a) role playing-modeling, (b) individual and group contracts, and (c) teaching self-assessment and contingency making. Cohen, Filipczak, and Bis (1965) have provided empirical support for the notion that educational behaviors may be developed and maintained through a behavioral approach. The project of Cohen et al. centered around developing an environmental and learning program based upon reinforcement principles which would facilitate the acquisition of socially appropriate behaviors. Using this approach, another program was instituted to investigate the

possibilities of utilizing a behavioral approach as a long-term program. CASE II (Contingencies Applicable to Special Education) utilized extrinsic reinforcements by making available points which could be used to purchase items from a mail order catalogue or entrance into an activities lounge. The authors noted that group I.Q scores improved noticeably. Stumphauzer (1976) also noted success using a token economy in treating delinquent behavior.

Evaluations of group counseling programs based on aforementioned approaches has produced mixed results. Shelly and Johnson (1961) found that participants in counseling programs had lower incidence of recidivism than members of a control group. Persons (1967) investigated the effect of intensive group and individual therapy with matched therapy and control groups; the therapy group showed superior institutional adjustment, interpersonal relationships, performance in school, had fewer disciplinary reports, and received their institutional pass privileges sooner than the control group. Feder (1962) utilized short-term therapy with institutionalized delinquent boys; the results showed that limited goals and short-term therapy did not facilitate institutional adjustment among inmates. Studies by Persons (1967) and Gersten (1951) support the contention that counseling facilitated community adjustment among institutionalized

delinquents.

Questions concerning the effectiveness of psychotherapy as a treatment for delinquents are evident. One major oversight of the studies reviewed is that they have usually failed to specify the type of therapy which was employed. Certain studies indicate that it is the interaction of the therapist and client, rather than the therapy, which accounts for the behavioral change. Caplan (1968), for example, noted an interaction between treatment agent and individual regardless of psychotherapeutic mode. Persons and Pepinsky (1966) have similarly noted a convergence of attitudes, personality traits and value patterns between therapist and individual following a 20 week counseling period.

While success is noted with counseling treatment, clearer specification of treatment modes and empirical validation of effectiveness are needed. Reality Therapy and Multimodal Behavior Therapy are relatively new clinical approaches requiring empirical validation for use with institutionalized delinquents.

Reality Therapy

Reality Therapy involves the practical evaluation of present irresponsible behavior and discussion of positive alternatives. Counseling utilizing Reality Therapy involves: (a) communication of caring, (b) focusing on present behavior rather than feelings, (c) discussing

present irresponsible behavior and alternatives, (d) making value judgments, (e) planning alternative courses of responsible behavior, and (f) arranging verbal and written commitments of individual plans for change.

In Reality Therapy, the individual focuses on the present irresponsible behavior while examining his/her positive attributes. It is the individual's responsibility to plan behavioral alternatives and implement change programs. Punishment is not given if the individual fails to fulfill the planned commitment. The therapist instead assists the individual in formulating another viable plan.

Empirical evidence to support this approach in counseling delinquents is not currently available. However, William Glasser (1965, 1969, 1970) has noted personal counseling success using the principles of Reality Therapy at California Youth Authority's Ventura School for Girls.

Multimodal Behavior Therapy

Multimodal Behavior Therapy was developed after studies showed that Behavior Therapy and Broad Spectrum Therapy were subject to as much as 40% relapse within one-to-three years following treatment (Lazarus, 1976). The primary assumption of Multimodal Behavior Therapy states that the more a person learns in therapy, the greater his/her coping skills, the less likely a person

is to relapse following treatment.

Multimodal Behavior Therapy focuses on seven inter-related areas of human experience including behavior, affect, sensory, imagery, cognition, interpersonal relationships, and physiological response. This mode of counseling specifies: (a) an assessment of problems within each modality, (b) a course of specific interventions in response to each targeted problem within each modality, and (c) objective measurement of treatment outcomes. The therapist provides an assessment of the problem and a plan which utilized a technically eclectic approach encompassing diffuse problem areas. Interventions include relaxation training, desensitization, Gestalt methods of therapy, guided fantasy, assertion training, modeling, and cognitive restructuring (Lazarus, 1976).

Multimodal Behavior Therapy has been applied in cases involving treatment of anxiety, depression, obesity, smoking, and impotency (Lazarus, 1976). Controlled investigations have yet to be undertaken in applying this treatment to juvenile delinquency.

The purpose of the present study is to compare the relative effectiveness of Reality Therapy and Multimodal Behavior Therapy in relation to institutional adjustment. Previous studies (Shelly and Johnson, 1961, Feder, 1962, Wolk, 1963, Persons, 1967) indicated that institutional adjustment is related to later community adjustment.

While the present study is primarily concerned with the viability of each approach to the quality of institutional adjustment, it may also provide a basis for evaluating the juvenile offender's potential for later adjustment in the community.

The current study is exploratory in nature. Some hypothesis have been formulated based upon the author's knowledge of the two treatment modes and past experience as a counselor in an institution for delinquent boys.

It is predicted that:

1. Both (Multimodal and Reality Therapy) treatment groups will show greater gains on counseling grades, vocational grades, incident report scores and institutional adjustment scores within the correctional institution than a Milieu Therapy Group.

2. Multimodal Behavior Therapy subjects will show greater improvement than Reality Therapy subjects one month following treatment.

3. Multimodal Behavior Therapy subjects will show lower recidivism rates than Reality Therapy subjects or Milieu Therapy subjects eight months following treatment.

METHOD

Subjects

Forty subjects were selected from a population of delinquent males at Twin Pines Ranch, Banning, California. Prior to the study, each subject completed a brief questionnaire providing information concerning his age, ethnic background, educational level, vocational placement at the ranch, parental marital status, and degree of previous counseling experiences.

Subjects ranged in age from 15-17 years with a mean of 16. The subjects included members of Mexican-American, Anglo-American, and Black-American ethnic groups. All socio-economic levels and parental marital status were represented. Subjects had no previous counseling or psychiatric treatment prior to the study. Additionally, subjects had completed a mean of eleven years of education (Table 1).

All subjects had committed at least one felony (a California Criminal Code 602 Offense). These offenses included burglary, armed robbery, assault, possession and sales of narcotics, grand theft, grand theft auto, and extortion. Individuals were randomly assigned to one of four treatment groups or a milieu therapy group.

Groups were designated Multimodal I, Multimodal II, Reality I, Reality II, and Milieu.

Table 1

Demographic Characteristics of Subjects in
Multimodal, Reality, and Milieu Therapy Groups

Group	Age	Educa- tional Level	Number of 602 Offenses ^a	Ethnic Back- ground ^b
Multimodal Therapy				
Experimenter A	17.3	11.3	2.6	5 (W) 1 (C) 2 (B)
Experimenter B	17.0	11.1	3.6	3 (W) 4 (C) 1 (B)
Average	17.1	11.2	3.1	8 (W) 5 (C) 3 (B)
Reality Therapy				
Experimenter A	17.1	11.3	2.8	3 (W) 4 (C) 1 (B)
Experimenter B	17.1	11.3	2.1	4 (W) 3 (C) 1 (B)
Average	17.1	11.3	2.5	7 (W) 7 (C) 2 (B)
Milieu	16.5	11.3	3.9	6 (W) 2 (C) 0 (B)

^aCriminal Code 602 offenses include burglary, armed robbery, assault, possession and sales of narcotics, grand theft, grand theft auto, and extortion.

^bW = White, C = Chicano, B = Black ethnic group members.

Experimental Design

A 3 x 2 factorial design was used in order to compare:

(a) Multimodal Therapy, (b) Reality Therapy with the Milieu Therapy Group.

Assessment Measures

Assessment measures were taken directly from the subject's behavior at Twin Pines Ranch. These included weekly counseling grades, weekly vocational grades, daily incident reports, and daily institutional adjustment scores.

Counseling grades were recorded weekly. Each counselor employed defined criterion for the grade given by each to each individual on his/her caseload; the criterion varied among the counseling staff and among individual caseloads. Scores ranged from 4 to 0 points; with 4 defined as superior behavior and 0 defined as unsatisfactory achievement.

Vocational grades were also issued weekly by the instructors as part of the subjects' school curriculum. These grades were based upon the individual's performance and knowledge of weekly tasks and instruction. Scores also ranged from 4 to 0, with 4 defined as superior and 0 defined as unsatisfactory achievement.

Incident reports (write-ups) were based upon observable behavior (positive or negative) which came to the attention of the counseling or vocational staff. Each report summarized the observed behavior, the resolution made between the staff member and individual, and the

referral action taken.

Concerning institutional adjustment scores, each subject participating in the Twin Pines Ranch program was responsible for cleaning and maintaining his locker, bed, and immediate area. Two inspections were held daily; failure or refusal to comply with these maintenance demands resulted in receipt of a demerit. These demerits were also recorded weekly.

Procedure

Baseline Procedure

Weekly records of counseling grades, vocational grades, incident reports, and institutional adjustment scores were recorded for each individual during the thirty-day period immediately preceeding treatment.

Treatment Procedure

Both treatment conditions consisted of 24 one-hour sessions held twice weekly for a 12-week period. Groups were led by the author and a colleague, both psychology graduate students and counselors at Twin Pines Ranch. Each counselor led one Multimodal and one Reality Therapy group. The weekly treatment program was closely structured to insure, insofar as possible, uniform coverage by both counselors of designated topics.

Prior to the onset of treatment, each member of the Multimodal Group was interviewed for one hour. During

this time information was gathered in order for the counselor to complete a Multimodal Assessment. An equal amount of interview time was also spent with each Reality Therapy subject.

At the first group meeting, all subjects were informed of the stipulations of the project. The groups were informed that the goal of treatment was to help each member adjust to the ranch setting and later to community living. Subjects were also informed about the necessity of confidentiality and honesty in order to facilitate effective group meetings.

Multimodal Treatment. Multimodal Behavior Therapy was developed according to a hypothesized general modality profile drawn from the responses of the subjects during the initial assessments. The program included weekly diaries, and contingency contracts, in addition to the prescheduled program. Members of the group exhibited low self-image, patterns of aggressive behavior, ineffective communication skills, poor study habits, and excessive drug usage. Gestalt modes of guided fantasy were used to explore self-concept. Cognitive restructuring was used in order to understand patterns of negative self talk. Communication skills were taught via role rehearsal and role playing. Relaxation training was also introduced to teach the subjects methods of coping with confrontive situations and dealing with anxiety. Re-education and

review of the effects of drugs was also included in the counseling program. In addition, weekly diaries and contracts were arranged and discussed.

Reality Treatment. Reality Therapy involved providing a warm group atmosphere, discussing irresponsible behaviors, and planning alternative courses of action. The program was patterned after that which was suggested by Glasser (1965). The treatment was less structured; it consisted of discussion of commitment to change behavior, personal evaluations of current behavior, and discussion of weekly progress.

Milieu Treatment. The Milieu Therapy Group completed the baseline assessment and then participated in the Twin Pines Ranch program. The ranch program consisted of a structured routine of school and vocational classes, counseling group meetings, and daily maintenance sessions. Good behavior was rewarded by weekly activities and trips away from the ranch. The program is typical of those employed at "boy's ranches" and "juvenile homes" throughout the Southern California area. It, thus, constitutes a meaningful standard against which additional benefits of Multimodal and/or Reality Therapy Groups may be assessed.

Postbaseline Procedure

All dependent measures were reassessed following treatment.

Follow-up Procedure

In order to assess the effects of treatment upon long-term community adjustment, the number of subjects who had been reprocessed through criminal court within eight months following treatment termination was collected.

RESULTS

Table 2 presents counseling grades for Multimodal, Reality, and Milieu Groups at two assessment periods. Scores ranged from 0 to 4; lower scores indicate improved behavior. Inspection of Table 2 indicated that counseling grades for all groups improved over treatment; counseling grades for Multimodal, Reality, and Milieu Therapy subjects improved 1.1 (22% of full scale), 1.5 (30%), and 1.1 (22%) grade points respectively.

Table 2
Counseling Grades of Multimodal,
Reality, and Milieu Therapy Groups
at Two Assessment Periods

Group	Assessment Period			
	Pre	Percentage of Full Scale ^b	Post	Percentage of Full Scale
Multimodal Therapy	2.1	42	3.2	64
Experimenter A	3.0	60	3.2	64
Experimenter B	1.1	22	3.2	64
Reality Therapy	1.4	28	2.9	58
Experimenter A	0.9	18	2.9	58
Experimenter B	1.2	24	2.9	58
Milieu	2.2	44	3.3	66

^aHigher scores indicate improved counseling behavior.

^bPercentage of full scale 4-0.

An analysis of variance was performed on the counseling grade scores at two assessment periods (Table 3). The analysis failed to indicate significant interaction between treatment groups and assessment periods, $F(1, 35) = .68, p > .05$. In addition, the analysis did not indicate a significant interaction between treatment methods and assessment periods, $F(1, 35) = .56, p > .05$. Finally, the analysis showed no significant interaction between treatment methods, assessment sessions, and therapist, $F(1, 35) = 2.3, p > .05$.

Table 4 presents vocational grades for Multimodal, Reality, and Milieu Therapy Groups at two assessment periods. Inspection of Table 4 indicates that subjects in Multimodal, Reality, and Milieu Therapy Groups improved in their mean vocational grades by 0.1 (2.5%), 0.1 (2.5%), and 1.3 (3.2%) respectively.

A two-way analysis of variance was performed on the vocational grades of the three therapy groups at two assessment periods (Table 5). The analysis indicated a significant improvement in behavior over time, $F(1, 35) = 15.68, p > .05$. The analysis, however, did not indicate significant interaction effects between treatment method and time, $F(1, 35) = .86, p > .05$. Finally, the analysis of variance indicated no significant interaction between therapist, method, and time, $F(1, 35) = 1.95, p > .05$.

Table 3

Summary of Analysis of Variance Comparing
Counseling Grade Scores for Two Treatment
Groups and Milieu Group at Two Assessment Periods

Source of Variance	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Subjects	136.05	39		
Between Groups	7.59	4	1.89	
Method	0.14	1	0.14	0.18
Therapist	0.02	1	0.02	0.01
Method x Therapist	0.76	1	0.76	0.21
Milieu vs. Others	6.67	1	6.67	1.86
Subjects Within Groups	128.46	35	3.58	
Within Subjects	89.80	40		
Pretest/posttest	7.02	1	7.02	2.92
Method x time	1.62	1	1.62	0.68
Therapist x time	1.16	1	1.16	0.56
Method x Therapist x time	4.73	1	4.73	2.26

Table 5

Summary of Analysis of Variance Comparing
Vocational Grade Scores for Two Treatment
Groups and Milieu Group at Two Assessment Periods

Source of Variance	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Subjects	113.8	39		
Between Groups	15.9	4		
Method	5.94	1	5.94	1.21
Therapist	2.2	1	2.2	0.79
Method x Therapist	4.9	1	4.9	1.76
Milieu vs. Others	2.9	1	2.9	1.1
Subjects Within Groups	97.8	35	2.8	
Within Subjects	134.9	40		
Pretest/Posttest	39.2	1	39.2	15.68*
Method x time	2.14	1	2.14	0.86
Therapist x time	2.6	1	2.6	1.1
Method x therapist x time	4.8	1	4.8	1.95

* $p > .05$.

sessions (Table 7). With regard to main effects, the analysis indicated no significant change over time, $F(1, 35) = p > .05$. The analysis further indicated no significant interaction between treatment groups and assessment periods, $F(1, 35) = 4.1, p > .05$. Finally, the analysis of variance indicated no significant difference between treatment method, assessment session, and therapist, $F(1, 35) = 0.7, p > .05$.

Table 8 presents the weekly institutional adjustment scores of the subjects. Inspection of Table 8 indicates that all groups improved in their adjustment scores over the course of treatment; the magnitude of the improvement in the scores for the Multimodal, Reality, and Milieu Groups was 2.5, 2.3, and 3.9 respectively.

A two-way analysis of variance was performed on the adjustment scores of the three treatment groups at two assessment sessions (Table 9). With regard to main effects, the analysis of variance indicated a highly significant difference between assessment periods, $F(1, 35) = 13.96, p > .05$. The analysis further indicated no significant interaction between treatment groups and assessment sessions. Finally, the analysis indicated a significant interaction between treatment method, assessment session, and therapist, $F(1, 35) = 4.9, p > .05$. Briefly, subjects in the Multimodal group led by Experimenter A (who had received a greater amount of previous training

Table 6 presents the number of incident reports written with regard to subjects in the Multimodal, Reality, and Milieu Therapy Groups at two assessment periods. Table 6 indicates that all groups increased in the number of incident reports; the increases were 0.04 (1%), 1.4 (35%), and 0.05 (1.3%) for the Multimodal, Reality, and Milieu Therapy Groups respectively.

Table 6

Incident Reports of Multimodal, Reality, and
Milieu Therapy Groups at Two Assessment Periods^a

Group	Assessment Periods	
	Pre	Post
Multimodal Therapy	1.0	1.1
Experimenter A	0.7	0.8
Experimenter B	1.3	1.3
Reality Therapy	1.3	2.6
Experimenter A	1.5	3.3
Experimenter B	1.0	1.9
Milieu	1.6	2.1

^aLower scores indicate improved behavior.

A two-way analysis of variance was performed on the data for the three treatment groups at two assessment

in Multimodal Therapy) achieved significantly greater gains over treatment than members of the Multimodal Group led by Experimenter B. Conversely, subjects in the Reality Therapy Group led by Experimenter B achieved significantly greater gains over treatment than members of the Reality Therapy Group led by Experimenter A.

Follow-up Assessment

Table 10 presents the number of subjects who had been reprocessed through juvenile court eight months following treatment.

Table 7

Summary of Analysis of Variance Comparing
Incident Report Scores for Two Treatment Groups
and Milieu Group at Two Assessment Periods

Source of Variance	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Subjects	106.5	39		
Between Groups	23.4	4		
Method	12.3	1	12.3	1.5
Therapist	0.5	1	0.5	0.23
Method x Therapist	8.5	1	8.5	3.58
Milieu vs. Others	2.1	1	2.1	0.9
Subjects Within Groups	83.1	35	2.4	
Within Subjects	63.3	40		
Pretest/posttest	8.7	1	8.7	4.11
Method x Time	6.7	1	6.7	3.2
Therapist x Time	0.8	1	0.8	0.6
Method x Therapist x time	0.9	1	0.9	0.7

Table 8
Institutional Adjustment Scores of Multimodal,
Reality, and Milieu Therapy Groups
at Two Assessment Periods^a

Group	Assessment Period	
	Pre	Post
Multimodal Therapy	3.6	1.0
Experimenter A	5.4	0.8
Experimenter B	1.8	1.2
Reality Therapy	3.4	1.1
Experimenter A	2.8	1.2
Experimenter B	4.0	1.0
Milieu	5.0	1.1

^aLower scores indicate less negative reports and therefore improved behavior.

Table 9

Summary of Analysis of Variance Comparing
Institutional Adjustment Scores for
Two Treatment Groups and Milieu
Group at Two Assessment Periods

Source of Variance	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Subjects	220.6	39		
Between Groups	31.7	4		
Method	0.04	1	0.04	.002
Therapist	4.8	1	4.8	.89
Method x Therapist	19.3	1	19.3	3.6
Milieu vs. Others	7.7	1	7.7	1.42
Subjects Within Groups	188.8	35		
Within Subjects	398.0	40		
Pretest/posttest	149.9	1	149.9	13.96*
Method x Time	0.3	1	0.3	0.03
Therapist x Time	6.6	1	6.6	1.1
Method x Therapist x time	28.8	1	28.8	4.9*

*p > .05.

Table 10

Number and Percentage of Subjects Processed
Through Juvenile Court Eight
Months Following Treatment

Group	Number of Subjects Processed Through Court	Percentage of Total Number Released
Multimodal Therapy		
Experimenter A	1	12.5
Experimenter B	2	25.0
Reality Therapy		
Experimenter A	0	0.0
Experimenter B	4	50.0
Milieu	2	25.0

DISCUSSION

The first hypothesis, which predicted that the Multimodal and Reality Therapy groups would show significantly greater improvement on the various dependent measures than the Milieu Therapy group, is unsupported. Milieu Therapy subjects showed significant improvement in institutional adjustment scores and counseling grades but failed to show improvement in vocational grade scores and incident report scores. Similar changes occurred among Multimodal and Reality Therapy subjects.

The second hypothesis, that Multimodal Behavior Therapy subjects would show greater improvement than Reality Therapy subjects one month following treatment, is also unsupported. A Pretest/posttest means indicated that Multimodal subjects scored slightly lower than Reality Therapy subjects when institutional adjustment scores and counseling grade scores were compared. While incident report and vocational grade comparisons indicated Multimodal subjects showed greater improvement than Reality Therapy subjects, analysis of variance showed this gain was not statistically significant.

There are a number of possible factors which may have influenced the pattern of results which were obtained. One factor is that all groups showed relatively high

baseline grades and low pretreatment institutional adjustment and incident report scores. Posttest measurements thus may have suffered from a floor effect which would have obscured the effects of treatment.

Examination of vocational grade scores indicates that experimenter differences may have also effected the outcome. Whereas Reality Therapy subjects led by Experimenter B showed more improvement over treatment in their test scores than Multimodal subjects led by Experimenter B, Multimodal subjects led by Experimenter A showed greater improvement than Reality subjects led by Experimenter A. This pattern of change corresponded to familiarity and extent of training of the therapists with the treatment mode which was employed. As previously mentioned, Caplan (1969), Persons and Pepinsky (1966) attributed interactions between treatment agent and individual as the causal factor of behavioral change. Therapist factors appeared to have been operative in the present context.

Another explanation for the lack of significant results is that the experiment was based on a time-limited program. Feder (1962) utilized short-term therapy and limited goals and found this regimen did not facilitate institutional adjustment. This limitation added difficulties in effecting significant changes which might have eventuated given a greater amount of time for treatment.

The third hypothesis, which predicted that Multimodal Therapy subjects would show lower recidivism following treatment is unsupported. Three (18.8%) Multimodal treatment subjects were re-processed through criminal court within eight months following treatment. Four subjects (22%) of the Reality Therapy group and two (25%) subjects of the Milieu group had been re-processed through court following treatment. Differences between groups were thus small and statistically nonsignificant.

Since all recidivism scores seem to be substantially lower than indicated in previous literature, it is possible that all three treatment modes were effective in dealing with delinquent behavior. This, however, is only speculative since the number of subjects in this study was too small to warrant such a conclusion.

APPENDIX A

BACKGROUND INFORMATION DATA FORM

Name _____

Age _____ Date of Birth _____

Present Grade in School _____ Vocation _____

Parents' Occupation:

Mother _____

Father _____

Are Your Parents:

Married _____

Divorced _____

Deceased _____

Separated _____

Other _____

Ethnic Background:

Anglo _____

Chicano _____

Black _____

Other (Specify) _____

602 Offenses Committed:

APPENDIX B

DATA TABULATION FORM

NAME _____		GROUP _____		
BASELINE	INSTITUTIONAL ADJUSTMENT SCORE	COUNSELING GRADE	VOCATIONAL GRADE	INCIDENT REPORTS
1				
2				
3				
4				
TREATMENT				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
BASELINE				
1				
2				
3				
4				

GRADE LEVEL _____ VOCATIONAL PLACEMENT _____

ETHNIC BACKGROUND _____ NUMBER OF 602 OFFENSES _____

PARENT
PARENTAL MARITAL STATUS _____

MOTHER'S OCCUPATION: _____ FATHER'S OCCUPATION _____

COMMENTS: _____

APPENDIX C

WEEKLY GRADE REPORT FORM

NAME	GRADE	REASON
SIGNED:		DATE:

VOCATIONAL INSTRUCTOR/COUNSELOR

APPENDIX D

INCIDENT REPORT FORM

NAME(S) : _____

DATE: _____ TIME _____

LEGAL RIGHTS GIVEN: YES NO WAIVED RIGHTS: YES NO

NOT APPLICABLE

CIRCUMSTANCES: _____

RESOLUTION: _____

ACTION TAKEN: _____

SIGNED: _____ STAFF MEMBER

TITLE: _____

APPENDIX E

REALITY THERAPY TREATMENT PLAN

- 1-2 Ground rules set
Explored the meanings of responsibility and irresponsibility
- 3-4 Explored concepts of Reality Therapy
Defined irresponsibility and responsibility within the Reality Therapy framework
The idea of friendship and trust was explored
- 5-6 Focused on the control each subject felt he exerted over the environment
Focus was generalized to the community in terms of irresponsible behavior in drugs, opposite-sex relationships, family and school
- 7-8 Continued discussion of irresponsible behaviors
Alternatives and personal attributes also discussed
- 9-10 Individuals listed specific behaviors they might like to change
- 11-24 The remaining sessions focused on individual commitments to change irresponsible behaviors and provide a warm atmosphere conducive to trust and open discussion.

APPENDIX F

MULTIMODAL ASSESSMENT FORM

MODALITY	INTERVENTION
BEHAVIOR	
AFFECT	
SENSORY	
IMAGERY	
COGNITION	
INTERPERSONAL RELATIONSHIPS	
DRUGS (PHYSIOLOGICAL)	

APPENDIX G

MULTIMODAL TREATMENT PLAN

1. Ground rules set
Pleasant Events Schedule completed (focusing on desired reinforcements for future contingency contracts)
2. Misbehaviors indicated on Multimodal Assessments, probation officer reports, grades, incident reports, and institutional adjustment scores explored.
Pleasant Events Schedule reviewed
Reinforcers for contracts listed
Introduction to relaxation training
3. Contracts written
Credit card system set for conflicts avoided and un-avoided
Specific contexts of anger explored using frequency grid
4. Contracts reviewed
Introduced diaries
Branden's Sentence Completion
5. Reviewed contracts and made revisions
Present peer relations explored
Differences in communication (passive, aggressive, assertive)
Present study problems in school discussed
Basic study skills and how to increase attention span introduced
6. Laxarus' Relaxation Tape
Explored how this could be utilized with communication with peers, family and social
7. Group guided fantasy (explored individual's negative self image)
Cognitive restructuring on negative assumptions
8. Contracts reviewed and revised
Diaries reviewed
Work on negative self talk and imagery continued
Explored "failure orientation" and "machismo"

9. Diaries reviewed
Explored future goals
Role playing as a "successful person"
10. Explored individual's behavior which is internally and externally motivated
Role playing continued
11. Contracts and diaries reviewed and revised
Relaxation training continued
Patterns of communication explored with reference to how relaxation training could be used as an alternative to anxiety
12. Personal boundaries explored
Situations given of non-assertive behavior
Role rehearsal and role playing
13. Reviewed progress on contracts
Discussed diaries
"I need" vs. "I want" discussed
Personal boundaries explored ("How do I stop myself from meeting needs and wants")
14. Discussed ways in which friendships, gang memberships and other relationships affect an individual's life
15. Contracts and diaries reviewed
Role playing used in order to increase awareness of personal boundaries, needs, and alternatives to aggressive behavior
16. Family relationships explored
Group fantasy (talking with parents)
Messages and meanings explored
17. Individuals discussed personal needs and wants within the family
Discussed ways each could meet their needs and wants
Role rehearsal used as means of effectively communicating with family members
18. Contracts and diaries reviewed
Drugs discussed
Feelings of drug use and misuse explored
Talked of the positive and negative reinforcement drugs provide when dealing with people in certain social situations
19. Continued discussing benefits and liabilities of drugs
Cognitive restructuring and re-education of drugs and their psychological and physiological effects.

20. Discussed the present institutional situation
Explored patterns of communicating with institutional personnel, family and peers
21. Discussed alternative to delinquent behavior
Specific situations reviewed
22. Continued exploring alternatives to delinquent behavior
Plan for goals discussed
Needs and wants specified
23. Contracts reviewed
Individual plans defined
Explored assets, deficits, and realities of individual goals and possibilities of meeting them
24. Contracts reviewed and assessed
Continued to define plans for the future

REFERENCES

- Alberti, R. E., & Emmons, M. L. Your perfect right.
San Louis Obispo, California: Impact Publishing, 1970.
- Bandura, A. Aggression: A social learning analysis.
New Jersey: Prentice-Hall, 1973.
- Bandura, A. Psychotherapy as a learning process. Psychological Bulletin, 1961, 58, 143-159.
- Barr, N. The responsible world of reality therapy.
Psychology Today, 1974, 7, 64-104.
- Bassin, T., Bratter, T. E., Rackin, R. L., Eds. The reality therapy reader. New York: Harper & Row, 1976.
- Brayfield, A. H. Counseling psychology. Annual Review of Psychology, 1963, 14, 319-350.
- Buffalo, M. D., & Rodger, J. W. Behavioral norms, moral norms, and attachment: Problem of deviance and conformity. Social Problems, 1971, 19, 101-113.
- California 1973 Crime and Delinquency in California Enforcement Component Program Report (Crime and Arrest). State Department of Justice.
- Caplan, N. Treatment intervention and reciprocal interaction effects. Journal of Social Issues, 1968, 24, 63-88.
- 1975 California Statistical Abstract, State of California, Documents Section, Sacramento, California.
- Cohen, A. K., & Short, J. F., Jr. Research in Delinquent subcultures. Journal of Social Issues, 1958, 14, 20-37.
- Cohen, H. L. Behavior modification and socially deviant youths, in Behavior Modification in Education.
Chicago: University of Chicago Press, 1972, 291-316.
- Colby, K. M. Psychotherapeutic processes. Annual Review of Psychology, 1964, 15, 347-370.
- Crime in the United States, 1972. Uniform crime reports.
Issued by Clarence M. Kelly, F.B.I.

- Dinitz, S., Scarpitti, F. R., & Reckless, W. C. Delinquency vulnerability. American Sociological Review, 1962, 27, 515-517.
- Evans, J. H. Attitudes of adolescent delinquent boys. Psychological Reports, 1974, 34, 1175-1178.
- Eysenck, H. J. The effects of psychotherapy. New York: International Science Press, 1966.
- Feder, B. Goals for short term group psychotherapy. International Journal of Group Psychotherapy, 1962, 12, 503-507.
- Fensterheim, H., & Baer, J. Don't say yes when you want to say no. New York: Dell Publishing, 1962.
- Flescher, B. E. The differential impact of institutional correction programs upon self concept change in juvenile delinquents, August, 1974, California State College, San Bernardino.
- Frank, J. D. Therapeutic factors in psychotherapy. American Journal of Psychotherapy, 1951, 25, 350-361.
- Gersten, C. Evaluation of group therapy. International Journal of Group Psychotherapy, 1951, 1, 311-318.
- Glasser, William. Mental health or mental illness? New York: Harper & Row, 1970.
- Glasser, W. Reality therapy. New York: Harper & Row, 1965.
- Glasser, W. Schools without failure. New York: Harper & Row, 1969.
- Gold, M. Juvenile delinquency as a symptom of alienation. Journal of Social Issues, 1969, 25, 122-135.
- Goldiamond, I., & Dyrd, J. E. Some applications and implications of behavioral analysis for psychotherapy. Research in Psychotherapy, 1968, 2, 110-115.
- Gregory, I. Fundamentals of psychiatry. Philadelphia: W. B. Saunders, 1968.
- Grossberg, J. M. Behavior therapy: A review. Psychological Bulletin, 1964, 62, 73-85.
- Hindelang, M. J. Moral evaluations of illegal behaviors. Social Problems, 1974, 21, 370-385.

- Hobbs, T. R., & Holt, M. M. Effects of token reinforcement on behavior of delinquents in a cottage setting. Journal of Applied Behavior Analysis, 1973, 9, 189-198.
- Jesness, C. F., & DeRisi, W. J. Some variations in techniques of contingency management in a school for delinquents. Springfield, Ill.: Thomas Publishing, 1973, 196-235.
- Koenig, P. Glasser the logician. Psychology Today, 1974, 7, 66-67.
- Lazarus, A. Behavior therapy and beyond. New York: McGraw-Hill, 1971.
- Lazarus, A. In support of technical eclecticism. Psychological Reports, 1967, 21, 415-416.
- Lazarus, A. Multimodal behavior therapy. New York: Springer Publishing, 1976.
- Lazarus, A. Multimodal therapy: BASIC ID. Psychology Today, 1974, 7, 59-63.
- Lazarus, A. Multimodal behavior therapy: Treating the basic id. Journal of Nervous and Mental Diseases, 1973, 156, 404-411.
- Matthew, V. Differential identification: An empirical note. Social Problems, 1968, 15, 376-383.
- Persons, R. Psychological and behavioral change in delinquents following psychotherapy. Journal of Consulting Psychology, 1967, 31, 137-141.
- Persons, R. W. Psychotherapy with sociopathic offenders. Journal of Clinical Psychology, 1966, 22, 337-340.
- Persons, R. W. Relationship between psychotherapy with institutionalized boys and subsequent community adjustment. Journal of Consulting Psychology, 1967, 31, 137-141.
- Persons, R., & Pepinsky, H. Convergence in psychotherapy with delinquent boys. Journal of Consulting Psychology, 1966, 13, 329-334.
- Rickard, H. D., Ed. Behavioral interventions in human problems. New York: Pergamon Press, 1971.

- Rutherford, R. Behavioral decision model for delinquent and predelinquent adolescents. Adolescent, Spring 1976, 97-106.
- Schwitzegal, R., & Kolb, D. A. Inducing behavior change in adolescent delinquents. Behavior Research Therapy, 1964, 1, 297-304.
- Shelly, E. L., & Johnson, W. F., Jr. Evaluating an organized counseling service for youthful offenders. Journal of Counseling Psychology, 1961, 8, 351-354.
- Stumphauzer, J. Modifying delinquent behavior: Beginning and current practices. Adolescent, 1976, 11, 13-28.
- Ulrich, R., Stachnick, T., Mabry, J., Eds. Control of human behavior. New York. Scott, Foresman, 1970.
- U.S. Bureau of the Census, Statistical Abstract of the U.S. (96th ed.). Washington, D.C., 1975.
- Wolk, R. The relationship of group psychotherapy to institutional adjustment. Group Psychotherapy, 1963, 16, 141-144.
- Ziffenblatt, S. M. Improving study and homework behavior. New York: McGraw-Hill, 1976.