AN APPLICATION OF HUMANISTIC BEHAVIORAL TECHNIQUES IN THE INDIVIDUAL TREATMENT OF BEHAVIORAL PROBLEMS

by

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ABSTRACT

The general purpose of this study was to investigate the applicability of humanistic behavior therapy to the adjustment problems of a delinquent youth. The therapy took place in the community as opposed to a traditional clinic based approach. Pertinent historical factors, previous treatment failures, current needs, and the psychodynamic and behavioral treatment approaches are reviewed. The case study and behavior therapy approaches are justified and a behavioral assessment dictated the specific treatment.

The on-going behavioral assessment identified three target behaviors.

1. The first problem behavior was the client's aggressiveness toward his younger brother.
2. The second problem behavior was drug use.
3. The third problem behavior was a lack of adequate interpersonal and social skills.

The first target behavior responded significantly over the one year period when a covert incompatible response technique was employed. The second target behavior was also modified considerably. An attempt to experimentally manipulate varying degrees of freedom did not intervene successfully, and it is assumed that the vicarious phenomenon generally referred to as "modeling" accounted for the decrease in frequency of drug use.

The effects of the therapy with the third target behavior were equivocal. Minor achievements were evident, but the subject never acquired the ability to independently self-analyze his behavior.

The study concluded that a more comprehensive pretherapeutic assessment would have been helpful. Furthermore, had a reintegration facility been available, it is possible that more intensive and successful treatment would have been possible.

The recommendations included: using a team approach in similar undertakings; using another follow-up team in a continuous treatment effort; redefining the clinical services model as it is often found in academia; consideration of a residential treatment facility for delinquents that is community based and staffed by professional teacher-parents.

CHAPTER 1

INTRODUCTION

This paper utilizes the case study method to discuss the application of humanistic behavior therapy techniques to the adjustment problems of an eighteen-year old male parolee. Pertinent historical factors, previous treatment failures, current needs, and the psychodynamic and behavioral treatment approaches are reviewed. The case study and behavior therapy approaches are justified and a behavioral assessment dictates the specific treatment. The results and outcome discussion summarize this presentation. Additionally, it should be noted that the names used are fictitious. Much of the information contained in this dissertation is confidential and was derived from the Parole Division of the Arizona Department of Corrections.

The Problem

The problem was David's world of precarious equilibrium and his re-integration into society. In July of 1971, David was described by a psychiatrist at the Southern Arizona Mental Health Clinic (Arizona Department of Corrections, 1972) as "the most disturbed person that has come through Southern Arizona Mental Health Clinic in a very long time." At that time, David was diagnosed as "an acute schizophrenic." In September of 1971, David was examined by another psychiatrist prior to

placement at either the State Hospital or the Arizona State Industrial School. The diagnosis was "anti-social personality with drug abuse (Arizona Department of Corrections, 1972)". The opinion qualified that David was not psychotic at the time of the interview although his "reality testing was at times barely adequate."

Prior to these conflicting reports, David had been arrested in February of 1968 for a liquor violation. He was then placed on probation which was successfully completed. Subsequently, in December of 1969, David was arrested but dismissed for possession and use of marijuana, and in January of 1971 he was arrested for three violations of narcotics laws, essentially possession of narcotics paraphernalia. This last arrest resulted in indefinite probation and the first diagnosis mentioned earlier. In April of 1971, David was committed to the Arizona State Hospital (Arizona Department of Corrections, 1972) by his mother for exhibiting self-destructive behavior, but was released three weeks later. His unusual behavior was attributed to a "toxic psychosis" in remission and the staff felt hospitalization was unnecessary. The hospital recommended that David live with his natural father and not with his mother for the time being. In addition, they recommended that David contact Awareness House in Tucson. This was not done. In July of 1971, David ran away from home--probation was revoked and an arrest warrant was issued. When arrested, David was appraised as a juvenile and was sentenced to the Arizona State Department of Corrections (1972) for "the necessary detention and psychiatric assistance." The committing offense was listed as "runaway."

In July of 1972, David was recommended for parole. Dr. Thomas Fisher, a University of Arizona faculty member and psychologist at the detention facility (Arizona State Industrial School), arranged for the author to work with David and his family upon his release in August of 1972. David's release and his initial parole period were contingent upon his involvement in psychological counseling.

These historical facts suggest the impression that David's case had been handled in an expedient but deleterious manner. David had never been involved in any aggressive or provocative behavior, but on the basis of his self-destructive actions, he was assigned to an institution. It was hopeful to note that David's classification of maladjustment was essentially one of the learning-psychological category, which is usually easier to treat, versus an organic-structural (e.g., brain injury) or a biochemical-functional one (e.g., endocrine disturbance).

During the initial interview upon David's release, he presented himself as a withdrawn, suspicious young man who spoke in a rambling, disjointed conversational manner. This meeting was attended by Dr. Fisher, the parole officer, David, his mother, and the author. It was apparent to everyone that David needed a treatment program on a regular basis. David said simply that he was functioning at "the seventy-five percent level." He said that he wanted to recover "the missing twenty-five percent." David's mother said that she was very nervous having David in the home and while she wanted him there, she was concerned that he might again retreat to drugs. David's mother presented the impression of an attractive, concerned mother who attempted to field

most of the questions that were directed toward David. At this time, the author made a contract with David and his mother to meet and work on their problems for the next six weeks. This initial trial contract was later renegotiated and a six-month agreement was made.

Historical Factors

David's mother married a George Sanchez in 1950. Two children resulted from this union: Yolanda, age 24, and David, age 18. Yolanda was employed by World Manufacturing of Tucson and by all reports and observations was a well adjusted member of society. The Sanchez marriage ended in divorce in 1955, and Mrs. Sanchez received custody of the two children. It can be noted that David was very attached to his natural father, who never had time or interest in him even though he continued to reside in Tucson. The following year, Mrs. Sanchez married a Mr. Gonzales and one child resulted from this marriage, Phil, age 16. Like Yolanda, Phil evidenced no overt signs of pathology. In 1964, this marriage had resulted in divorce with all three children remaining with Mrs. Gonzales.

Mrs. Gonzales was employed by the Times Bank and earned approximately $600 monthly. In addition, she received $35 a month from Mr. Sanchez for support and $40 a month from Mr. Gonzales. The former worked as a car lot owner and the latter as a hairdresser. Mrs. Gonzales said that she was very disappointed over these marital failures and postulated that these problems may have been to some extent a compounding problem as far as David was concerned.

David's academic progress was marked by truancy and poor grades. He completed the tenth grade but left the following year (November 1970) due to lack of interest and failing grades.

To further set the stage, it can be noted that David's intellectual capacities as tested in September of 1971 via the Wechsler Adult Intelligence Scale revealed a Verbal I.Q. of 98, a Performance I.Q. of 86 and a Full Scale I.Q. of 93. These scores are in the lower range of the average intelligence level and perhaps represent an underestimation of his ability, as David was incarcerated at the time. Tests given as of July 1973 indicate the following scores: WAIS verbal score of 105, performance score of 94, and full scale 100 (Arizona Department of Corrections, 1972 and 1973).

This review of further historical factors points to a disturbed set of familial transactions, parental rejection and institutionalization for reasons other than the primary welfare of David.

Current Needs

In general terms, David's problem areas were identified as: threatening behavior towards David's younger brother Phil, drug use, inappropriate reactions to parental concern, and negativism. In addition, a behavioral analysis was requested by the family along with suggestions for more adaptive ways of relating to David. Examples and operational definitions of presenting problems are thoroughly discussed in Chapter 3.

Previous Treatment Failures

In previous unsuccessful treatment attempts, David was singled out as the problem and all treatments focused upon him. Family members had not been interviewed, with the occasional exception of the mother. This review of summaries by previous therapists underscored the pathology in David's behavior in no uncertain terms. This problem was felt to be so extensive and massive as to necessitate chemotherapy and specific phenothiazine intervention for a considerable period of time (six months).

In September of 1971, the Arizona Youth Center (Arizona Department of Corrections, 1972) included this statement in a report: "David is an admittedly heavy user of drugs and this seems to be his main pleasure, goal, etc., in life. It is the only thing he will talk about." The staff psychometrist stated in the same month, "In summary, David is a severely disturbed youth. . . ." Prior to this, David's counselor at the Arizona Mental Health Center (Arizona Department of Corrections, 1972) reported that David "is a crazy kid and is definitely psychotic whether drug induced or not."

In 1972, the counseling summary by the treatment specialist at the Arizona State Industrial School (Arizona Department of Corrections, 1972) included the following:

> I have demanded that David stay more alert. He has really shown improvement. The amount of time he sits and stares is slowly but surely being shortened. Dave seems to have no really serious problems at home. His involvement with drugs seems to stem solely from peer pressures. I will continue to demand more and more of David. Perhaps we can snap him out of these schizoid trances that he lapses into.

In May of 1972, the treatment specialist determined that "David is a boy who has semi-residual intelligence left from his last encounter with drugs. I would hate to see the rest of his potential be lost because he couldn't resist dope (Arizona Department of Corrections, 1972)."

These selections of opinions concerning David have been presented to indicate their often contradictory, inaccurate, stereotypic, and cursory nature. Furthermore, they do not appear indicative of a broad viewpoint extending to a relaxed, tolerant, and efficacious attitude toward variant behavior patterns.

The therapeutic posture of these previous therapists can best be described as short term, face to face psychoanalytically-oriented psychotherapy. Concomitantly, chemotherapy was introduced into the therapy setting to arrest David's incipient pattern of chronic drug abuse. David's reaction to this sort of probing, inquisitive approach was affective withdrawal. He questioned the author as to background, orientation and motivation. He was unwilling to again subject himself to this "insight" model, but he was anxious to solve his immediate problems and "function one hundred percent instead of seventy-five percent like it is now."

Treatment

The treatment can best be described as humanistic behaviorism; the synthesis of behavioral methods with humanistic goals. That is, the attempt was made to first establish a warm, accepting and empathic relationship with David and his family. The author shared with David and his family personal experiences paralleling their own, the family

has felt free to drop by or call the author at any time, and in general a real feeling of friendship and trust appears to have developed. Secondly, the method utilized essentially learning theory adaptations in the form of a set of conditioning programs for the treatment of the behaviors in the target areas. This consisted of applying experimentally established laws and paradigms of learning to overcome David's unadaptive responses. This necessitated the full cooperation and comprehension of all involved.

The target areas were selected cojointly with David, the family, the parole officer and a consulting psychologist and psychiatrist. The target behaviors were generally maladaptive in the long run but frequently terminated the pressure of immediate aversive stimuli, while being maintained by positive social reinforcers as defined in Chapter 3. These behaviors were selected primarily from the perspective of the parole department. That is to say, if David's problems with his brother were not immediately solved, he would not be able to remain at home and this would mean that he would be returned to some supervised status.

The treatment program required several different phases of behavior modification. These procedures assume that behavior is shaped and maintained by its consequences (i.e., positive and negative reinforcement contingencies). Problem areas can be defined either in terms of excesses or deficits and in David's case, it was the former. In general, the intervention consisted of altering the consequences of David's behavior in an attempt to decrease the probability of maladaptive target behaviors, while increasing existing prosocial behavior.

Concurrent with David's behavior change program, the family was assisted in developing more adaptive ways of relating to David. In general, they were encouraged to provide more positive social reinforcement contingent on David's adaptive prosocial behavior and therefore there was less need for aversive control. The latter was pivotal and partially insured the persistence of any behavioral change.

Summary

This chapter has been an introduction of the problem, a review of historical factors, a statement of current needs, and an overview of the treatment proposal.

Chapter 2 concerns itself with defining schizophrenia, psychodynamic and behavior therapy approaches, and therapeutic comparisons.

CHAPTER 2

THEORETICAL DISCUSSION

David has been described, treated, and categorized by a number of psychiatrists on the basis of the diagnosis of schizophrenia. While this appraisal has not been shared by all the professionals who came into contact with David, it is essential to address the treatment to this possibility of schizophrenia be it incipient, remitted, process or reactive. A brief review of schizophrenia, therefore, appears appropriate.

Schizophrenia can be described as a group of psychotic reactions characterized by fundamental disturbances in reality relationships, by a conceptual world determined excessively by feeling (autism), and by marked affective, intellectual, and overt behavioral disturbances (Jackson 1960). This rather complicated and awesome-sounding disorder is further complicated by considerable controversy concerning its etiology. The main positions of etiology have been the genetical, biochemical, psychological, pysiological, and family dynamic viewpoints. An inclusive statement found by this author concerning this major mental health problem is that it is a somatopsychic disease, one in which the cerebral physiology, dictated and altered as it is by genic inheritance, and by prenatal and postnatal environments, unites in a symbiotic reaction with a social-emotional environment, that is adverse

to that person, to create psychological defense mechanisms that may be both physiologically debilitating and inappropriate for the organism's protection (Jackson 1960).

Of the term itself, there seems to be some confusion. As Hoch (1967) has pointed out, Georgia is the only state which consistently diagnoses more manic-depressive than schizophrenics on first admissions and discrepancies between different states run as high as 60 percent. The diagnosis carries as much of a ring of authenticity as "alcoholic" or "diabetic," but this appears to be a fiction. Variation in terms of diagnosis appears to be extensive, especially among experienced clinicians. In one study, three experienced clinicians agreed in only 20 percent of their patients and met with majority agreement in only 48 percent (Arnoff 1954). In view of this widespread disagreement, Jackson (1960) warns that it is sometimes difficult to deal with some of the precise statements made concerning cases of so-called schizophrenia.

Treatment approaches for schizophrenia vary greatly, as David's case illustrates. The first classification model sees schizophrenia as a strictly organic disease with its own periodicity. Causative factors being bacteria, constitution, heredity, glandular malfunctioning, parasites, etc.

The second model holds that the biological vulnerability of an individual so crippled is too great to survive in our world as we find it. The third model sees the schizophrenic as a person biologically unable of coping with major environmental stresses such as adolescence, marriage, divorce, parenthood, etc.

Fourth, there is a model that views schizophrenia much like a progressive psychosomatic disorder in which major stresses produce internal changes which bring about further changes, lower adaptive levels, etc. Fifth, another model sees the schizophrenic as a regressed individual who retreats before an avalanche of severe psychic trauma inflicted in youth and revivified by developmental environmental factors.

The final model views schizophrenia as a subtly occurring maladaptation which is correlated to and caused by covert familial operations (Cancro 1971, Jackson 1960, Laing 1967). An interesting generalization apropos to this last model would be the feeling of many experts that there has never been a schizophrenic who came from a stable family--at least none has been found (Lidz, Fleck, and Cornelison 1960).

The five models for explaining schizophrenic behaviors discussed here may require different therapeutic intervention programs depending upon different viewpoints. However, this dissertation does not emphasize causative factors. Rather, it focuses on the functional aspects of the behavioral problems.

Psychodynamic Approaches

Because of David's exposure to the psychodynamic model, a review of some of its major tenets is included. This approach, the stepchild of the psychoanalytic profession, attempted to concern itself with a few crucial areas when dealing for a short period of time with a person such as David. The meaningfulness of the patient's statements, the productivity of the patient during the sessions, the therapeutic

experiencing (quality of the patient's verbal behavior during treatment), and associative freedom have been isolated as main concepts (Luborsky and Spence 1971), and are to be reflected in the institutional reports concerning our subject. Anecdotally, it can be noted that these previous institutional therapists placed reasonable faith in the efficacy of the institutions for which they worked, the appropriateness of chemotherapy and the importance of reflection in the therapy setting. The latter was a recurring theme in the transcripts concerning David's treatment sessions. His so-called "craziness," dysfunction and destructive tendencies were discussed with him repeatedly.

Psychodynamic approaches concern themselves with the question of "what to do until the ego comes;" the thinking being that persons such as David suffer from specific disturbances of the ego and superego control systems. An "anatomical chart" of the ego disturbances and superego pathology must be formulated and then a specific strategic attack is made on the impulsive disturbances which plague them. Redl and Wineman (1957) feel, that in short, these children need a supportive design to bolster their deficient ego functions, and a "counter-delusional design to dissolve their defenses." Group life is felt to be an important diagnostic and therapeutic tool in this charting procedure. This hopefully takes place in a hygienically prepared climate as our institutions for youth propose to approximate and eventually achieve. These situations are felt to offer the child a chance for affective discharge within organizational, sublimational and frustration acceptance levels. Ego-nutritive experiential arenas are felt to be provided within the framework of a psychodynamic institution such

as Detroit's Pioneer House in 1946-1948. A well known term to imply the exposure of a child to total environmental treatment is "milieu therapy" originally used in Bettleheim and Sylvester (1949).

The goals of a psychoanalytically-oriented psychodynamic institution such as Pioneer House are postulated to be achieved in a number of different methods. The most important of these being impulse drainage, frustration avoidance and frustration budgeting, concessions to sociological dictates, "individual antisepsis" (consideration of individual needs), group psychological hygiene (an extension of individual antisepsis), organizational and sublimation development, insertion of depersonalized programmed controls, protective and preventive institutional interference, cultivation of interest-contagion and extension of experimental range.

The question of punishment, an important one in institutional settings, is felt by the psychodynamic model to be associated with the pleasure-pain principle of Freudianism. In application, it is the insertion of an unpleasant event or the threat of same in anticipation that it will enable the person to control impulses which otherwise could not be "domesticated." Basically, it is felt to supply the person with additional aggressive energy for drive control. Specific conditions under which such control becomes effective must be carefully delineated in order to avoid counter-productivity.

Prior to and including institutional placement, a number of intensive techniques are felt to be essential to the planning of strategy. These were employed by the therapists interviewing David prior to his placements and in considerably modified forms by the

treatment specialists at the juvenile institution. Psychodynamically, these include "symptom cultivation" by means of strategic non-interference and/or exploitative interference. The ego is felt to be prone to extrication by dream interpretation and interpretation of nighttime phobias, as well as extrication under the impact of liberation from fear. The "reality rub-in" is an additional interview technique as well as interpretation through direct counter-delusional action (Redl and Wineman 1957; Dewald 1972; Sherman 1971-72).

Behavior Therapy

Comparatively speaking, the behavior therapy approach is in its infancy. Consequently, advocates, critics, and Don Quixotes have attached themselves tenaciously in such a manner as to often make accurate appraisal rather difficult. This paper is presented for practitioners who are deliberating the effectiveness of behavior therapy with behavioral probems similar to the one in this manuscript.

Reports of recent years give witness to the increasing use of behavior therapy and contingent reinforcement to modify severely debilitated behavior patterns of persons both institutionally and non-institutionally situated (Ayllon, quoted by Bandura 1969, p. 373; Gardner 1967). Lindsley makes explicit an assumption which underlies essentially all operant behavior. "If psychosis is what makes, or has made, this person psychotic, then psychosis is the behavioral deviation that caused this person to be hospitalized, or that is keeping him hospitalized (Lindsley 1960, p. 66)." This is to say, attention is placed on observable, measurable, overt operant behaviors, while

mediating processes are of secondary importance. Lindsley proposes that the most important aspect of psychotic behavior is that it occurs frequently and in competition with acceptable behavior. In David's case, his very freedom was contingent upon his ability to react appropriately. He had been labeled as a high risk case with a high recidivism factor predicted. His reinforcement for acceptable behavior was increasing amounts of personal freedom progressing from an hourly basis to ultimate release from parole supervision and total freedom within society's parameters. In this treatment model, as in all approaches, the rapid behavioral alterations attributable to positive incentive schedules is obviously not the only factor. The behavior under consideration is a function of social interaction and, consequently, modeling stimulus control. The reputation and prestige of the change agent or therapist are undeniable factors. It has been pointed out that substantially different behavior can occur under the same contingent reinforcement schedules depending upon the behavior of the prime therapist (Schwartz and Hawkins 1965).

Behavioral treatments in cases similar to David's underscore the applicability of behavior therapy (Wolpe and Lazarus 1966). However, the type of reinforcement and its scheduling can influence outcomes considerably. The reinforcement used with David was selected-out by societal mandate but agreed to by everyone involved as to relevance for the situation. Studies have pointed to the necessity for clear deferentiation of promotion through sequential goals (Ullman and Krasner 1965). Stage contingent forms of behavior therapy explicate exact goals that usher in the next goal involving extinguishing and

counterconditioning. This is felt to be superior to a system in which specific and often unrelated responses were individually reinforced without labeling and staging.

One of the most attractive aspects of behavior therapy is the observation that it appears universally employed at the vestibule stages of therapy to assist the patient in reaching an accessible level, an accessible level being an ability to respond to more verbally-oriented therapeutic technique. This being done, other forms of therapy of diverse persuasions can be instituted (Gurland 1972). This is to say, behavior therapy is widely used in institutional and non-institutional settings at least for brief periods of time without being labeled and usually in a non-systematic way.

Specific studies do not direct their attention to a prototype of David; the component behaviors have been treated successfully via behavior techniques. Illustrative of this is the successful intervention of potentially aggressive behavior by covert desensitization (Gurland 1972). The problem was analogous to David and his brother in that one patient was very adept at illiciting unusual and dangerous reactions from another through deliberate verbal incantations. The recipient of this game-playing was counseled as to some very basic concepts concerning reinforcement, scheduling of reinforcement, reinforcer significance, etc. This individual was very perplexed as to the reasons for his unusual reactions to this provocation, and gradually began to realize how much power he allowed this significant other to have. When these incidents were repeated, the recipient was instructed in the

use of an immediate covert desensitization technique that enabled him to walk away often enough to extinguish the verbal abuse.

Concerning behavior therapy with drug addiction, a twelve-year follow-up study of narcotic addicts (Vaillant 1966) concluded that one of the few important characteristics and ultimate determinants of abstinence was the conditioning of substitutes for narcotics and gratifying non-family object relationships. The substitutes for narcotics were varied and not necessarily chosen by the therapist. However, in most cases the alternatives selected were reinforced based on the thinking that almost anything is better than narcotic addiction. In fourteen out of thirty cases, the principal substitute was alcohol, one of marijuana substitution, while a number joined evangelical or mystical sects. Employment and new meaningful non-parental relationships represented alternatives that were more constructive and, consequently, more openly conditioned. Recently, Cohen (1971) has proposed a number of possible alternatives including political, intellectual, creative-aesthetic, philosophical and spiritual-mystical areas that can be employed by the conditioning therapist with persons of this disposition.

Ullman and Krasner (1965) investigated the acquisition of "healthy" versus "sick" talk during brief structured interviews, with sixty male schizophrenics. "Healthy" talk was defined as verbalizations relating to optimism, mental health, enthusiasm, etc., while "sick" talk was the converse. The significant results showed that the reinforcement of sick talk led to an increase of this response category, while reinforcement of healthy talk led to a significant decrease in sick talk.

Moreover, psychometric measures indicated that as sick talk was reduced, self reports concerning mental and physical health increased. Encouraging results were reported by Rickard, Digman, and Horner (1960) concerning the application of differential reinforcement to delusional and rational speech in a chronic schizophrenic patient. Rational speech was socially reinforced in intensive sessions and resulted in nearly continuous rational speech. However, decrements in non-delusional speech were recorded when the reinforcement was intermittent and non-contingent.

Comparative Therapeutic Outcomes

A review of the literature revealed a dearth of studies dealing with the comparison of behavior therapy techniques with alternative approaches in the area of grossly inappropriate or psychotic behavior. A classic study by King, Armitage, and Tilton (1960) is worthy of mention. Data on four groups of twelve chronic schizophrenics were collected and correlated in terms of dysfunction and chronicity. The first group was exposed initially to operant interpersonal therapy in simple operant behavior, progressing to complex operant behavior and finally collective coping. The second group was called a verbal therapy contrast group with conventional one to one verbal therapy progressing to group verbal therapy. The third group was a minimally structured recreationally oriented contrast group, while the fourth was a no-treatment contrast group. Pre- and post-intervention results in the form of various institutional clinical rating scales were the dependent variables.

The results, maintained over a six-month post treatment period, indicated that the operant interpersonal technique was the most effective. Surprisingly, the recreational approach was superior over the verbal therapy control group. These results compared favorably with the results of "total push therapy" which includes conventional psychotherapy, chemotherapy, aversive conditioning, etc. (Tourney et al. 1960).

Another attempt to compare relative effectiveness (Fairweather et al. 1960) of therapeutic programs involved ninety-six male patients randomly assigned to the various treatments. Three classifications by diagnosis were used: non-psychotic, short-term psychotic (less than one year), and long-term psychotic (more than one year). The four classifications by treatment were a contrast group, an individual psychotherapy group, a group psychotherapy group, and a group living group better called a conditioning therapy by group approach. Multiple criteria of improvement were used including the MMPI, the TAT, and the Holland Vocational Preference Inventory, a special Q sort and subjective behavior ratings. As might be expected of such a complex undertaking, the results were many and very complicated. The most relevant findings were that individual treatment took the longest, with group living conditioning the next. Short-term psychotics and non-psychotics required the least treatment, with approximately equal duration. Most significantly, the three therapy groups did show changes and the contrast group did not.

An evaluation of therapeutic outcomes is a considerable undertaking, and those who have done so are unable to make definitive

statements. Bergin (1971) concludes that psychology has apparently had a "modestly positive" effect over the past forty years, according to his study. His task was difficult as he was examining averaged group data which obscures the existence of the multiple processes used in therapy.

Summary

This study has discussed the disease entities of schizophrenia but reformulated them into component behaviors (Chapter 1), some of which were changed by modifying their consequences. The relevance of this chapter is that David had been diagnosed as schizophrenic, he had been exposed to psychodynamic treatment institutionally and non-institutionally, and most recently was exposed to behavior therapy.

Chapter 3 will concern itself with a treatment justification in terms of the case study approach and behavior therapy. Additionally, terms used will be operationally defined and the treatment explicated.

CHAPTER 3

INTERVENTION STRATEGIES

Case Study Justification

A survey of traditional research designs might lead one to assume that legitimate and acceptable psychological and educational research is the exclusive domain of large populations and highly sophisticated statistical manipulations. However, this type of design has been termed "grossly inadequate and irrelevant" for the scientific study of the individual (Thoresen and Mahoney, in press; Maslow 1966). An alternative is the single case study.

The advances of clinical experimentation and innovation are felt by many to be the greatest asset in therapeutic theory and practice. Lazarus (1971) and Erickson (1953) underscore the importance of clinical innovation stating that the nature and character of a single finding can often be more informative and significant than a voluminous aggregate of data whose meaning is dependent upon statistical manipulation.

At the same time there are conspicuous reasons for applying nomothetic or general principles to idographic or individual studies in research. Eysenck (1964) reports that case study may cast doubt upon a general theory. Lazarus (1971) states that case studies often provide a salient heuristic to subsequent and more sterile research.

Additionally, a case study often permits the investigation, although poorly controlled, of rare but important phenomenon (Lazarus, 1971).

Theoretical amplification or "placing meat on the theoretical skeleton" has been well illustrated by Wolpe (1958) and Wolpe and Lazarus (1966). Furthermore, case studies provide the opportunity for highly creative and innovative applications of accepted principles as evidenced by countless institutional anecdotes.

Finally, Sidman (1962) documents that the clinician can establish a reliable baseline for the occurrence of certain behavior in an individual study and then demonstrate changes following the modification of a particular contingency. Sidman then suggests we may return the behavior to its original level by repeating contingency modification to achieve the well known A-B-A design. This is to say--under certain circumstances a case study may furnish enough experimental control as to be "scientifically acceptable" data. However, in this particular study utilization of the A-B-A design would be unethical because it would allow dangerous self-destructive behavior to reoccur. Consequently, the format used most closely resembles the "multiple baseline design," i.e., where the efficacy of a single therapeutic intervention technique is demonstrated across several different problem behaviors.

Behavior Therapy

The individual in this study had been involved with a number of "therapeutic" injunctions--arrest and trial, institutionalization, chemotherapy, and various psychotherapies. None of these had proved

behaviorally effective. Notwithstanding the therapeutic relevance of behavior therapy as reviewed in Chapter 2, in a sense its time may have come due to the failures of its forerunners.

Behavior therapy postulates that behavior, regardless of its strength, is at least partially a result of learning processes. Behavior is not thought of as being symptomatic of underlying emotional problems, but rather as a result of historical interactions between the individual and present environmental conditions.

The primary behavioral technique utilized in this study was based essentially on principles of operant conditioning which is often called behavior modification. Operant conditioning refers to the relationship between behavior and the environment; and the environment includes everything that has an effect on the organism, whether or not that effect is immediate. In operant terms, behavior produces changes in the environment and these environmental changes become functionally related to the future occurrence of the behavior. Therefore, operant behavior is subject to influence by consequence and subsequently, the way to change an operant behavior is to alter and/or manipulate the consequences of that behavior.

Behavioral Assessment and Treatment Procedure

The selection of the treatment techniques used with David was a continuous process based on a systematic behavioral assessment. This analytic process focused on external or environmental determinants of specific problem behaviors as opposed to more traditional psychiatric and psychological approaches to assessment and treatment which

emphasize identifying and changing internal determinants of abnormal behaviors. The process of behavioral assessment is comprised of three basic steps. The first step is to determine the controlling stimuli which maintain the problem behaviors. In the third step the therapist must consider the results of the first two steps, prepare a plan for behavioral change, and provide for subsequent evaluation. This is to say, the hypotheses that result from this assessment will give the direction for the selection and implementation of the behavior change techniques to be used. The treatment is inherent and explicit in behavioral assessment.

Step One: Identifying the Problem Behaviors

David's problem behaviors have been reviewed in preceding chapters as being essentially self-destructive. All but the first problem behavior, which was verbal or actual threatening attacks on his brother, have been identified at some point during arrest and resultant incarceration. In terms of priority, the second problem behavior was drug usage, followed by inappropriate reactions to parental concern and finally negativism. David, his family, Doctors Fisher and Gurland, and the parole officer participated in selecting this hierarchy. To reiterate, the motivation to change the problem behaviors was based upon David's very freedom, as he was eighteen years old and on state parole until the age of twenty-one. Feedback from all concerned were constantly employed to re-evaluate the stated problem behaviors. At times where they were misperceived or mislabeled, adjustments were made.

The approach used classified the problem behaviors in terms of excess or deficit. This is admittedly culturally dictated, and anecdotally, a classification may also change significantly as the general conditions of life are altered. The initial hypothesis presented was that David's problems were essentially those of excesses. Excesses are defined as problematic because of excess in frequency, insensity, duration or occurrence as measured under specified conditions of the environment. Furthermore, this behavior change program included measures to decrease the strength of a problem behavior while at the same time taking other steps to increase the strength of another, desirable behavior. For example, a deer hunting trip is prosocial behavior incompatible with the anti-social behavior of attacking one's brother.

Step Two: Identifying Controlling Stimuli

In the broadest sense, this step included an accurate description of the setting and circumstances surrounding the occurrence of the problem behaviors. Specifically, we were concerned with identifying the antecedent stimuli and the consequent stimuli of the behavior.

A brief history of David's problem behaviors was taken. Questions such as, "when did the excess begin," "under what circumstances does it occur" and "has it changed its form since it began" were asked. Answers to these questions about the history of the problem behaviors provided clues which were followed up when an attempt was made to specify the situation in which the problems occurred.

Antecedent stimuli are those which precede or occur together with a behavior. The three classes of antecedent stimuli that were

assessed were physical stimuli, social stimuli and David's own behavior, both private and public, that elicited a subsequent problem behavior. These three classes were subjectively defined in broad and inclusive terms, but the approach assumes that these antecedent stimuli do not cause the behavioral excesses. Antecedent stimuli simply make responses more likely to occur. After the response does occur, it is maintained and strengthened by a reinforcing stimulus event.

After the relevant antecedent stimuli were found, the focus shifted to finding the stimuli changes following the occurrence of the problem behaviors. Operant learning theory states that any stable pattern of behavior leads to reinforcement which can be either positive or negative. That is, a stimulus event which maintains or strengthens a behavior can involve either addition (positive reinforcement) or subtraction (negative reinforcement).

The possible reinforcers investigated that controlled consequences for the problem behaviors included changes in David's internal or physiological environment that we label as pleasurable. Thus, one kind of consequent stimulus event maintaining heroin use was the pleasurable sensations following intake. More often, positive reinforcers are external stimuli rather than internal stimuli. These may be objects or social reinforcers such as praise or attention.

The means of determining David's reinforcers were based on observation but differed in terms of sources of the observer and the means for gathering the data. The author's observations were one method. Additionally, David and those who knew him were requested to list his favorite activities.

Step Three: Evaluating Treatment Effectiveness

The basic strategy for evaluating treatment effectiveness is to assess the occurrence of the problem behaviors before, during, and after treatment. Measuring the behaviors prior to instituting any changes in the environment is called establishing the baseline level of the behaviors. Treatment effectiveness is always measured with respect to the baseline level of the behaviors. After the behavior change program is implemented, the behavior is measured regularly to observe what effect the intervention is having. This is called monitoring the behavior. Finally, the behavior is monitored for a period of time after the goal of the intervention appears to have been achieved. This is done to make certain that the behavior change is maintained in the natural environment after treatment is terminated. This step is called "follow-up assessment." All of this is dependent on the first step of assessment, identifying the problem behaviors precisely.

All the measures related to the target behaviors were systematically recorded in familial settings. The strategy for recording private behavior utilized David himself as the observer. For example, in terms of the first problem behavior, David was asked to keep a record of aggressive and negative thoughts and actions concerning his brother, when and how they occurred, thoughts about engaging in retaliatory behavior, and so forth.

Summary

This chapter has presented a justification of the case study method, an overview of behavior therapy, and a detailed review of the process of behavioral assessment and treatment as it was employed in dealing with David.

CHAPTER 4

INTERVENTION OUTCOMES

In this chapter the three target behaviors are discussed. Where relevant, the problem, baseline, analysis, selection of modification procedures, treatment, effects of treatment, possible confounding variables, and a discussion are included.

Target Behavior One (Aggressiveness Toward Brother)

Problem

The first problem behavior identified was David's aggressiveness toward his younger brother Phil. During the first postinstitutional week, there were seventeen actual and threatened incidents of physical violence initiated by David and directed specifically toward Phil. Two incidents involved the use of a knife by David, on one occasion he used a pair of scissors, while another involved a small baseball bat. Actual physical contact was never made with any of these objects, although David did hit his brother twice and wrenched his arm on another occasion.

It is important to note that prior to David's release from the institution, there had never been frequent incidents of aggressive behavior toward his brother. This behavior began to occur only after his release from the institution, and it was in reaction to provocation or extensive "baiting" on the part of Phil. Although the opportunity

presented itself, David never inflicted any significant physical injury to Phil. However, it was felt that it was a distinct possibility that should these attempts continue, actual physical attack might ensue.

The problem simply stated was actual or verbal threatening attacks by David on Phil following "baiting" behavior by Phil. A specific example of this problem behavior occurred the fifth day after David's release. David, his mother, and brother were watching television in the evening. About ten o'clock, Phil began to address David as "ex con" and asked him if it wasn't beyond the bed check period. David said nothing. Mrs. Gonzales told Phil to shut up, and Phil responded that inmates could not be out of their cells after ten o'clock. David jumped up when this last remark was made, grabbed a pair of scissors that his mother had left lying on a nearby table and rushed toward Phil. David made several thrusts toward Phil and there were numerous verbal threats on either side. Mrs. Gonzales reported that she screamed as loudly as possible and successfully retrieved the scissors from David. Phil then reiterated some of his initial remarks and David immediately reacted and succeeded in hitting Phil on the shoulder. The session ended with David returning to watch television, Phil went to his room threatening to call the police and David's parole officer to have him returned to prison, and Mrs. Gonzales, who was in a very agitated state, called the author and requested advice.

Baseline

This behavioral excess was reported only at home; it was recorded in terms of frequency of target behavior, it was recorded by the mother and/or ex post facto reports by David and Phil, and covered a time period of seven days. Data collection concerning this target behavior was maintained exclusively by the family members. The author has not personally observed any of the actual or attempted physical attacks reported in this section.

Analysis

It is hypothesized that David's recent institutional environment positively reinforced sporadic outbursts of actual or threatened physical proportions such as David. Behavior of an aggressive or violent nature has historically been absent in David's repertoire, and he can best be described as passive. However, it appears that the first target behavior served a very useful purpose by immediately terminating Phil's aversive verbalizations. David has never been proud of his periods of institutionalization and rarely volunteered any information concerning these periods. His brother was well aware of David's embarrassment in this area and apparently delighted in eliciting aggressive behavior from his brother. Phil was apparently reinforced for this "baiting" behavior because of David's inability to handle his violent outbursts. That is, David's behavior did not serve to reduce the frequency of Phil's statements.

Selection of Modification Procedure

The author attempted to work with Phil and attempt to reduce the "baiting" (S^D's for David's aggression). Phil was uncooperative and more importantly, it was felt that David would continually experience similar situations in the natural environment, and consequently David needed to develop coping behavior.

Certain reinforcers were assumed available. Primarily, Phil was reinforced for "baiting" by control over David's aggressive outbursts. Secondly, there was a high probability of David losing parole status if this aggression continued. Furthermore, it was felt that extinction was likely to occur under certain conditions. If David were to ignore Phil's "baiting," it probably would have subsided. David at this point in time, however, appeared unable to simply do nothing even though he recognized that he was probably encouraging Phil's behavior. This would have required additional baseline data, as the data collected represented David's behavior, not Phil's.

Treatment

The treatment consisted of establishing a response incompatible with aggression. In this case, a covert response followed by David deliberately walking away from Phil. There appeared to be a 1-1 correspondence, i.e., every "baiting" (Phil) resulting in aggression (David). This can be described as follows:

Pre-Treatment:

Phil "baits"	David aggresses	Momentary cessation of Phil's "baiting"
S^D	R	C

Treatment:

Phil "baits"	David's covert	incompatible	
S^D	R_{S_D}	R walking away	C nonaggression avoids threat of reincarceration

The significant factor in this abrupt behavior change, as indicated in Figure 1, is that on the evening of the seventh day after his release David, his mother, and this writer had an extended session at The University of Arizona. David appeared very attentive to, and impressed by, the discussion that his brother was the most powerful member of the household in a manipulative way, and certainly more powerful than David. I pointed out that Phil had unusual power and could cause David to become very aggressive and risk parole violation. David said he recognized this when he thought about it, but knew of no other way to silence his brother. I suggested an incompatible covert response. That is, David and I composed a brief verse for David to say to himself as he deliberately walked out of Phil's presence. David was willing to do this as he realized that his previous efforts were short lived, and furthermore, if he injured his brother the parole division would undoubtedly remove him from the home.

I am older and the controller
Phil is younger and a blunder

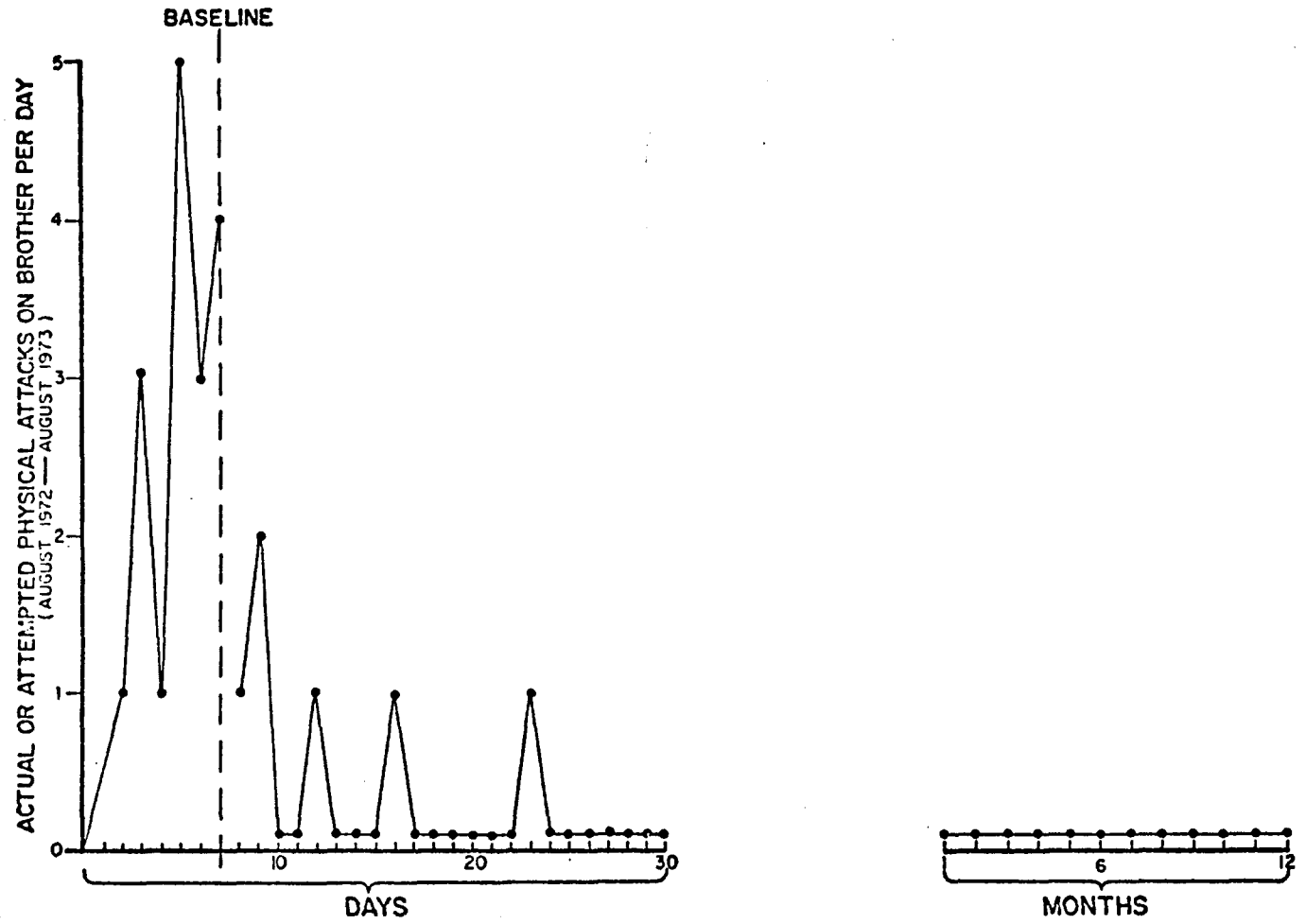

Figure 1. Introduction of Behavior Modification

This simple statement not only reminded David of his sibling power, but also provided for a method to extend the time between Phil's provocation and David's response. Furthermore, while David was privately repeating this verse and walking away from Phil, it would be impossible for an aggressive act to take place.

Mrs. Gonzales, Yolanda, and the author jointly rehearsed corrective actions if and when David's aggressive behavior occurred again. They consisted essentially of verbal disapproval in the form of simple correction while being alert for any appropriate sibling interaction eligible for verbal approval.

Furthermore, during both the baseline and behavior change period, there was encouragement for nonaggressive cooperating behavior between the brothers. Joint activities were arranged for David and Phil, such as visits to the grandparents, swimming at a friend's home, cleaning up the yard together, etc. Subsequent encouragement was in the form of verbal approval from Mrs. Gonzales, Yolanda and the grandparents.

Effects of Treatment

In reference to Figure 1, it can be noted that the baseline median was three incidents of the target behavior per day and a mean of 2.4. The first seven days of treatment reduced the median to zero, and the mean was .6 as it related to actual or attempted physical attacks on the younger brother per day. The second seven days of treatment had a median of zero and a mean of .1. A one-year follow-up indicated only one recurrence of the target behavior after two weeks of treatment and this occurred on day sixteen.

Possible Confounding Variables

Evidence points to the specific behavior change technique used rather than behavior change as a function of increased familial attention. Because David had been absent from the home for well over a year, he was subject to an inordinate amount of attention immediately upon his release. Consequently, although specific data were not available, attention from family members was considerably less during the post-baseline period. The possibility exists that David's reaction was only transitory. This was the first experience to "ex-con baiting" and may have diminished through the passage of time without any specific treatment.

A final confounding variable would be drug usage as discussed later in this chapter. This behavior invariably influenced David's behavior, but it was impossible to ascertain its precise influence.

Discussion

Though the question of pseudo-treatment is a legitimate one, however, the actual or attempted physical attacks related behavior changed significantly after the baseline period. Intradomain confounding does prevent the establishment of a cause-effect relationship. In a noninstitutional setting with uncontrolled interaction among various individuals, it is impossible to identify all the variables at work. Nonetheless, it is factual to state that David was initially unable to control his behavior when provoked by Phil; he was concerned by his lack of alternatives; he did employ a covert incompatible response and the behavior did greatly decrease in frequency by consensus, or family validation.

Target Behavior Two (Drug Abuse)

David's history of drug usage dates back to age thirteen. It is important to note that David has never been physically dependent on any drug and his pattern of use has been dictated more by availability and cost. David's peer group has considerable familiarity with drug use, often for its considerable social utility. Typically, David had used drugs with one other peer such as his cousin, who is a heroin addict, or with a small group of three to five who meet casually at a nearby park to smoke marijuana cigarettes.

Problem

The problem behavior was identified as a behavioral excess in the form of drug use. While David's family and the Department of Corrections considered decreased drug use crucial to David's parole success, David took the position of many youths that all of his friends used drugs and some day the whole world would realize the enormous benefits to be derived from drug use.

After some discussion, however, David realized that in order for him to remain on parole, his drug usage would have to be curtailed. In fact, considering his age of eighteen upon release to parole supervision, even alcohol was illegal for him to purchase or consume.

Baseline

Although David grudgingly stated that he would avoid drugs while on parole, his cyclical violation of this oath had been a source of considerable concern during the past year. During the first week of David's release, he found a number of phenothiazine tablets at home

which had been prescribed some twenty months earlier. He and his cousin promptly consumed this drug.

Table 1 records the incidents of drug use for a one-year period and also records a complete list of all drugs he has ever used.

Analysis

It may be useful to consider the pharmacodynamic similarity of the drugs. Heroin and barbituates as contrasted to marijuana, psychedelics and amphetamines are affect decreasers. They provide a blunting of effects and apparently provide the user with a feeling of nothingness that skirts coming to terms with psychological disequilibrium. Marijuana, psychedelics and even amphetamines, on the other hand, are used more often by people seeking an increase in affective states. These people appear to be more interested in explaining intrapsychic factors, existential concerns, etc.

It is interesting to note that David's drug of choice had usually been in the latter category. David reported approximately 32 LSD-25 experiences, "more than twenty or twenty-five" incidents of amphetamine tablet use, "countless" experiences with marijuana, "more than twenty" hashish experiences, two experiences with cocaine, two incidents of methamphetamine injection and "five maybe ten" experiences with mescaline. While David has been a poly-drug user, this information seems to indicate a profile of essentially stimulant-psychedelic drugs.

Furthermore, while it seems that the user's drug of choice is not solely the product of his environment--this factor warrants review. David's exposure to heroin was primarily due to his relationship with

Table 1. Incidents of Drug Use for One-Year Period, August 1972 - August 1973

Drug	Number of Times Used	Remarks
Alcohol	not recorded, used weekly	5 incidents of vomiting
Alcohol injection	2	wine
Amphetamine tablet	2	1 tablet each occasion
Barbituates	5	2-3 "Reds" each occasion
Cannabis	47	cigarette
Cocaine	0	previous use
Hashish	9	pipe
Heroin	7	no other opiate use
LSD-25	0	previous use
Methadone injection	1	----------
Methamphetamine injection	0	previous use
Methaqualone	1	alleged "Quack"
Methadone Oral	2	non-prescription
Mescaline	0	previous experience
Tranquilizers	3	1 Phenothiazine 2 Librium

his cousin. These boys are the same age, and have been life-long friends. The cousin, Andy, comes from a background similar to David's. The socio-economic factors place both families in the same category, and both sisters have been married and divorced twice. Andy, however, has a reputation of a far different sort than David. Based on information obtained from this author's wife, who has for the last year worked in a community-based heroin detoxification hospital setting, Andy, unlike David, has a reputation as a "rip-off artist" and has been involved in rather serious criminal activities including large-scale transactions of heroin. Anecdotally, this author was instrumental in getting Andy to enter the aforementioned treatment facility only to have him dismissed the next day for smoking a marijuana cigarette in the ward. All of the experiences reported by David involving heroin and methadone mentioned in Table 1 occurred with Andy. On five occasions Andy came to David's house and recruited him for heroin use, but on three other occasions refused to share his heroin--presumably because of his addiction. On these occasions David twice injected himself with wine and once with water. David's defense of Andy's status and need for acceptance by his cousin has been felt to be primary contributors to the incidents of heroin use. The incidents of barbituate, tranquilizer, and methaqualone use were isolated, and appear to have been dependent upon social involvement. Usually they were not used in conjunction with Andy and his activities.

Selection of Modification Procedures

This author responded to David in a tolerant and permissive manner concerning use of alcohol, cannabis and hashish. Needless to say, these drugs are prevalent in our society, and no direct attempt has been made to restrict their use. Alcohol was present in David's home, and both his sister and brother smoked marijuana. Total abstinence was never considered to be a goal--whereas, socially acceptable alcohol and marijuana drug use was. In the absence of addiction and chronicity, this appeared appropriate.

It was felt that varying degrees of freedom could be experimentally manipulated to serve as reinforcing events to modify this behavioral excess. The antecedent and consequent stimuli were painstakingly recorded, but the author was unable to influence David's pattern of drug use by the specific application of reinforcement principles. For example, in conjunction with the parole officer, the author manipulated the number of required visits to the parole office, the number of unannounced visits to David's home by the parole officer, travel and vacation time, etc., in a deliberate attempt to modify David's drug use. Nonetheless, successes were short-lived and it soon became apparent that powerful, immediate, competing social reinforcers mitigated against more temporally removed degrees of freedom.

Treatment

The target behavior occurred notwithstanding therapeutic intervention during the first four months. The author was unable to influence David's pattern of drug use by the specific application of reinforcement principles. Rewards of varying degrees of freedom

dispensed by the author had no observable treatment effect. For example, when the author rewarded a non-drug use period by removing a required appearance to the parole office, David as often as not responded by using drugs on the same day the reward was presented. This treatment failed even though David was never physically addicted and even though the parole personnel and police in general were a very negative stimuli.

Effects of Treatment

Figures 2 and 3 indicate the significant progress made in dealing with the second target behavior. There was a remarkable decrease in drug use during the last six months of this study. Apparently, new modes of behavior were acquired and existing patterns were modified because of the vicarious phenomena generally referred to as "modeling," "observational learning," "copying," "contagion," etc. It has been pointed out that essentially "all learning phenomena resulting from direct experiences can occur on a vicarious basis through observation of other persons' behavior and its consequences for them (Bandura 1969, p. 118)." Modeling influences the observer to acquire new response patterns, modify inhibitory responses in observers and facilitate the occurrence of uniquely similar responses previously learned (Bandura 1969).

Discussion

While the proposed treatment obviously failed, a reasonable explanation of the salutary effects would be that during the year there

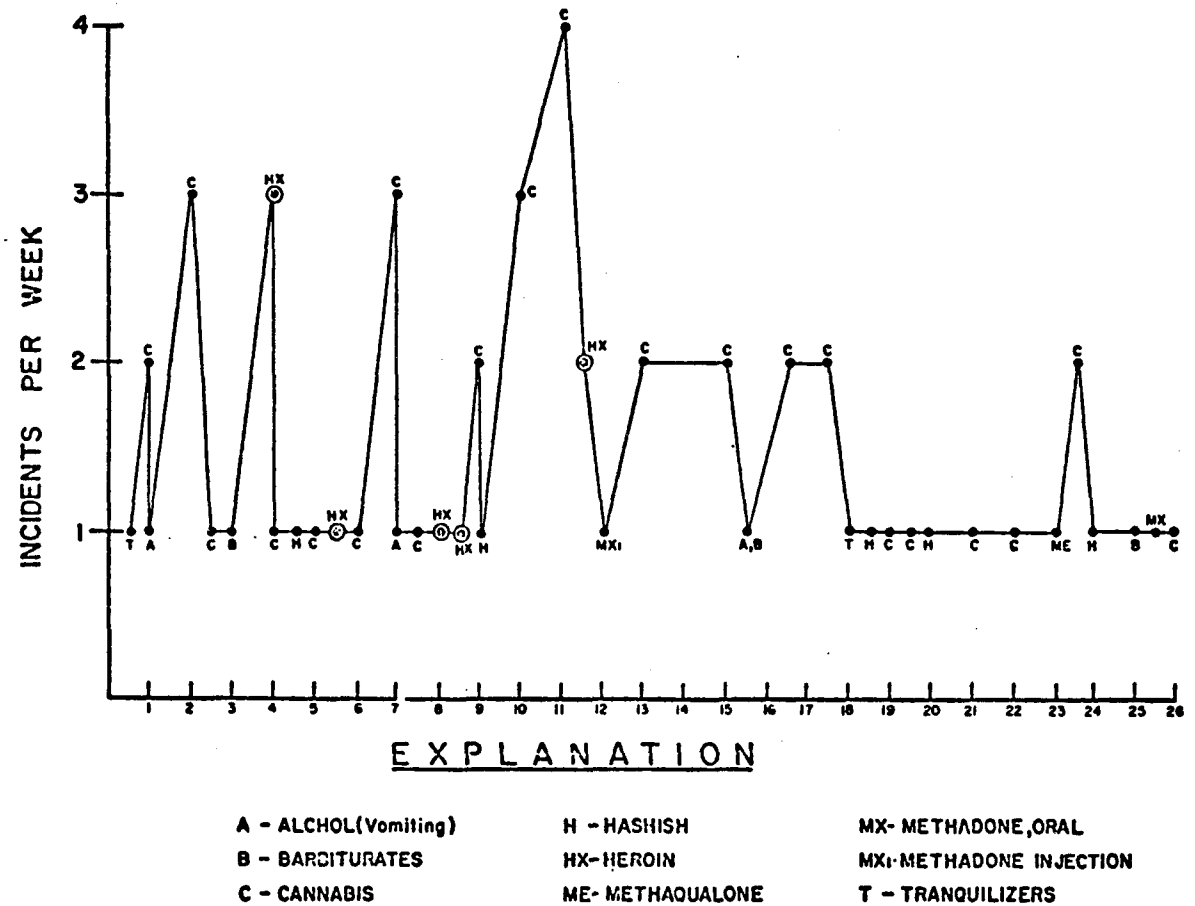

Figure 2. Incidents of Drug Use (August 1972 to January 1973)

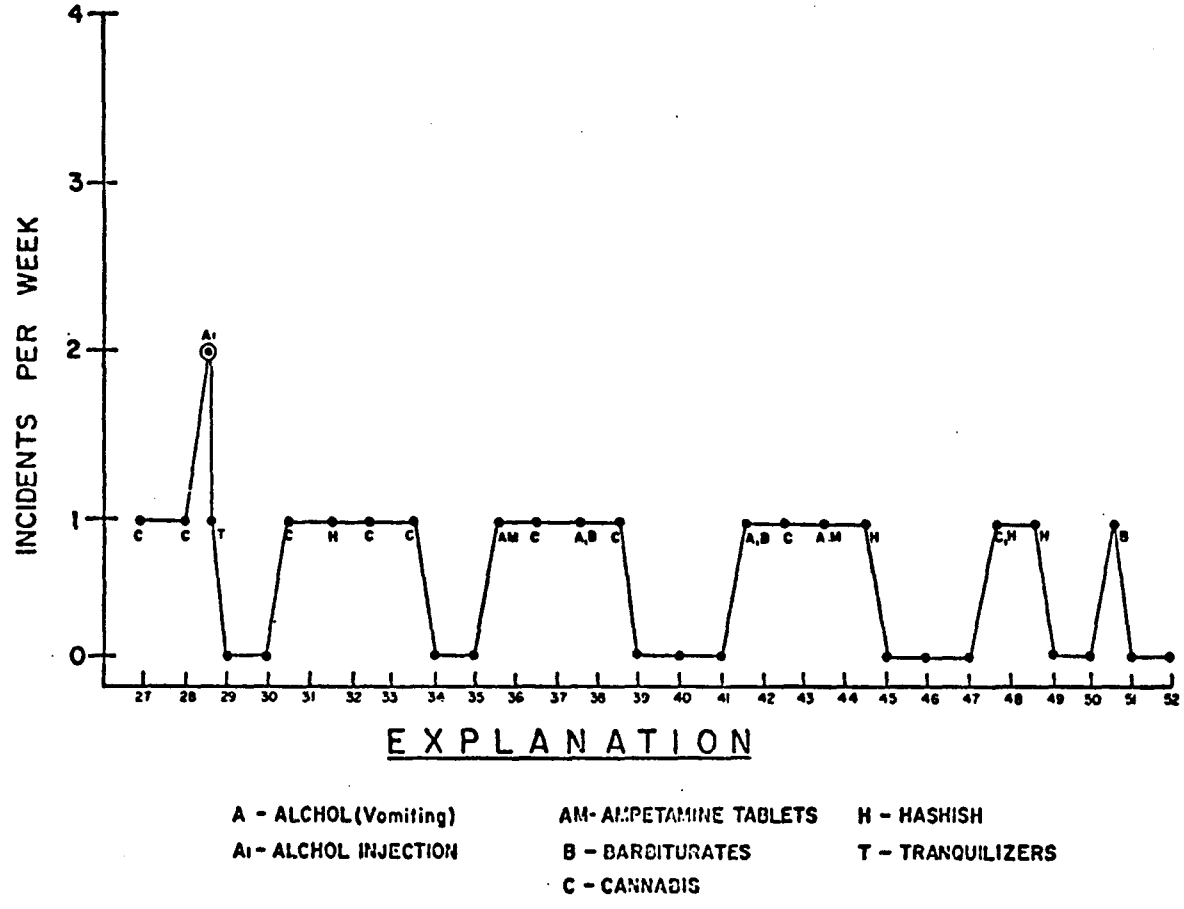

Figure 3. Incidents of Drug Use (February 1973 to July 1973)

were more than 500 hours of therapist-client involvement. Evidently, vicarious learning accounted for the major portion of behavior change.

David spent a great deal of time with the author and his wife during weekend visits, not to mention a five-day camping trip to the Grand Canyon. David became an intimate observer of how the author dealt with the every-day problems of living. Additionally, he closely modeled the author's hair style, dress and even incorporated a number of expressions peculiar to the author into his vocabulary. Initially he referred to the author as "my counselor," but for most of the treatment period he made reference to the author as "my friend" according to family and friends.

The use of drugs other than the occasional and social use of alcohol and marijuana met with a nonrewarding response from the author. The author acknowledged that people seem to need to alter their state of consciousness, but David was encouraged to do this only in a socially appropriate and not self destructive manner. There was never an incident of David bringing drugs into the author's presence or attempting to slip off and use a drug of his choice. David used alcohol with the author and his wife, and this apparently satisfied his need for drug use at these times.

Furthermore, the characteristics of this author seemed to be those David wished to emulate. David's experiences with law enforcement and correctional personnel gave him a clear-cut image of the type of person ("pig") he did not want to become. The author in terms of dress, speech, and mannerisms was at considerable variance with David's negative authoritarian image and had the superficial validity of an

acceptable modeling agent. Because of this interaction, David for the first time in his life was exposed consistently to an adult male in free society. Prior to this, in the absence of a father, older brother, and mature friends, David had good reason to state that "everybody I know uses drugs."

Target Behavior Three (Lack of Adequate Interpersonal and Social Skills)

The third and fourth target behaviors were identified in previous chapters as inappropriate reactions to parental concern and negativism. These problems were perceived as behavioral excesses. However, as this behavioral experiment was conducted, inappropriate reactions to parental concern decreased in frequency and were consequently never considered for treatment per se. Furthermore, it became apparent during this behavioral procedure that negativism was not an appropriate target behavior. Rather, David was seen as a lonely individual who was deficient in the areas of interpersonal skills and appropriate peer interaction. This would be identified under the paradigm as a behavioral deficit. For example, this author observed that at social events David would remain very much in the background. Behaviorally, he had minimal verbal contacts and only accidental physical contacts and only accidental physical contacts with other people. David can be described as a dark-skinned, even featured young man who often attracts admiring glances from girls of his age group.

Problem

A lack of adequate interpersonal and social skills was considered problematic for David because of the resultant "loneliness." David was aware of this deficit and has expressed to the author the painful loneliness he suffered. Specifically, David lacked the ability to evaluate his interpersonal behavior; David lacked the ability to bring this aspect of his behavior under his control; and David lacked verbal initiative in interpersonal situations.

Baseline

This problem behavior was first brought to the author's attention by David's sister. Recognizing this, she related that she often took David out with her to social events when she did not have a date. She reported that David typically had very little interaction with others, but would drink excessively, twice vomiting in her car on the way home. Yolanda also pointed out that David was considerably more assertive at home when her girlfriends visited. There David quickly initiated conversations, and to the annoyance of his sister, kissed and hugged her girlfriends prematurely. Additional baseline information was that David never enjoyed a close, continuing relationship with anyone, male or female, outside of his family. He has never had a girlfriend, and he has had only a sporadic and apparently superficial friendship with his cousin, Andy. Nonetheless, observation by the author revealed that in a warm and accepting environment, which the author and his wife provided, David exhibited a far higher frequency of appropriate interpersonal behavior. Examples included close

physical proximity to people, asking people what they did, were they having a good time, etc. These behaviors were available in David's repertoire and the third target behavior was to increase the frequency of appropriate social interaction.

Analysis

Although David was deficient in this interpersonal area, he was accepted and his behavior was maintained in the sub-culture which his cousin represented. This segment of society can be described as interested primarily in the acquisition and use of drugs. All other behaviors paled by comparison. David was all too often the willing companion of his cousin and his cousin's friends. The only requisite behavior was drug use, and to this David gladly acceded. Apparently, David desperately wanted friends, as he perceived them, and would go to any lengths to secure them. For example, in one six-day period he spent $51 in buying beer and alcoholic drinks for his so-called friends.

Selection of Modification Procedure

A number of alternatives were considered in approaching this problem. Combined treatment was the final result. Behavioral rehearsal was quickly discarded because of David's reluctance to use this approach. Total environmental alteration was perhaps the most desirable treatment alternative, but unfortunately there was no residential facility in Southern Arizona serving youths with such problems. Environmental manipulation took place when David was able to attend recreational and group therapy for six weeks at a local outpatient drug clinic. The author became quite concerned, however, when the

group therapist stated that David was a "pathological liar" who would only benefit from attack therapy. By the time this appraisal was made, David perceived not only the group therapy but also the recreational therapy as being punishing. This alternative was also discarded.

An attempt to modify the home environment was somewhat successful in that the family agreed that David made periodic efforts to be "kinda nice." Nonetheless, the author was continuously outnumbered by unknown social agents at the home who created unknown contingencies in shaping undesirable behaviors. Both David's sister and brother had a wide circle of friends who visited often and in large numbers. The author attempted to modify the stimuli to which David was exposed at home, but in many cases the family and friends became frustrated with David and he soon was disregarded in his own home.

The author realized that the eventual outcome of this treatment was a function of the mutual reinforcers supplied within David's social system. Since the author would only be present during the opening scenes, it was decided that it would be most efficacious to train David to functionally analyze his interpersonal behavior and instruct him in procedural methods for environmental change which would hopefully help him bring his behavior under his control.

Treatment

The first step was to observe David's interpersonal behavior and request self reports of the results. At this time the data was analyzed jointly and procedural changes were discussed. In this way, David became his own therapist or change agent as he learned this type

of self analysis. In general terms, this modification procedure consisted of teaching David behavior analysis that would hopefully generalize as changes in overt behavior received reinforcements in the natural environment. The author assisted David in interpreting the actual interpersonal behaviors in which he engaged. They were discussed in terms of initiation, content, duration and satisfaction. David was instructed in methods of actively altering unsatisfactory relationships by specific verbal and physical methods. For example, David was assisted in techniques of initiating conversations with persons in whose presence he felt shy or awkward. Additionally, content that might puzzle a listener was discussed and specific recommendations were given as to statements which should be avoided.

Effects of Treatment

The effects of this approach were equivocal. David became reasonably adept at analyzing his own behavior in functional terms. At times, however, there was considerable variance between observer and self reports. During this period, he exhibited sufficient skills to convince one of his sister's girlfriends to sleep in the same bed as he. While this sharing did not result in a sexual union, it was reported by David as an elating first. Unfortunately, David began to brag that the girl was his girlfriend, but resenting this, she terminated all contact with David. David had difficulty in comprehending this sudden reversal.

David became facile at interpreting some actual interpersonal behaviors of low intensity, especially if few people and minimal drug

use was involved. The above example occurred when only David, Yolanda and her girlfriend were present. On another occasion when there were five visitors at his home, one of the older boys there threatened to punch David for "interfering," and David promptly came to the author's home to stay for two days. In this rather stressful situation, David was unable to exhibit appropriate interpersonal behavior.

Discussion

As aptitude test results indicate (Arizona Department of Corrections, 1972, 1973), David undoubtedly had the ability to incorporate the procedure of analyzing behavior and altering unsatisfactory situations. However, David's unpredictable responses to stress pointed to the need for a more structured environment to thoroughly embrace these behaviors. Specifically, David needed frequent reinforcement to "look, see and listen," i.e., to actually know what contingencies affected him as a social being. David never acquired the ability to independently self-analyze his behavior.

Summary

After establishing the baseline for three target behaviors namely, aggression toward brother, drug use, and lack of adequate interpersonal and social skills, the intervention strategies utilizing behavioral and humanistic principles were applied. The post-intervention data for all the three target behaviors indicated significant decrease in the frequency of the problematic behaviors. Such a reduction in the frequency of undesirable behaviors indicated that the intervention strategies were at least partially successful.

CHAPTER 5

SUMMARY, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS

Summary

The author at first assessed David's problems as mainly excesses. This was a superficial appraisal because David's prominent problem was that of a deficit, a gnawing vacuum of despair and loneliness. However, due to the fact that it was very doubtful that David would be retained on parole status if he injured his brother or used drugs, these behaviors were dealt with as expediently as possible.

The treatment was significantly different from prior efforts in that David was not labeled as "crazy," schizophrenic, etc., and he was not the only family member receiving therapy. Such an approach would only have perpetuated previous treatment failures.

The approach used was humanistic. Before employing any specific techniques, there was first developed a sense of caring, and a commitment of empathy and understanding. Because of the author's involvement, the Gonzales family and the author remain close friends today. The treatment itself was more concerned with changing specific response patterns rather than hypothetical disease processes or personality structures. The solution was a compromise that was negotiated between the therapeutically most desirable and the operationally most feasible alternatives. No directed attempt was made to restore David

to a predefined state of psychological equilibrium. In brief, this treatment concerned itself with a continuous readjustment of David's physical and social environment and a learning and unlearning of response patterns and self-attitudes.

The author concluded that at no time during the year spent with David did he ever exhibit behavior commonly referred to as "schizophrenic" or "psychotic." Although there were problem behaviors, component behaviors were the main focus while promiscuous terms were avoided.

The first step of identifying the problem behavior as excesses had superficial validity and reflects the temporal constraints at work upon David's release. The pretherapeutic target behaviors did not survive the on-going reevaluation. As the treatment program progressed and more information about David's behavior and social environment was available, it became apparent that David had serious behavioral deficits. For example, he did not possess the necessary interpersonal skills that would allow him to establish and maintain meaningful personal relationships. In addition, he did not possess a consistent and effective model for solving many of the personal and social conflicts that plagued his life. Were an optimal treatment facility available, such as a half-way house or reintegration facility, it is possible that the original classification of excesses would have given way to one of a class of responses that did not occur with sufficient frequency or intensity under socially acceptable conditions.

Treatment effectiveness in terms of baseline data proceeded in a downward fashion from a very auspicious start with the first target

behavior. As noted in the previous chapter, the target behavior of inadequate interpersonal and social skills did not respond substantially to the intervention techniques.

David's behavioral gains were so impressive that he was submitted for "absolute discharge" from parole supervision on July 23, 1973, by his parole officer. David's case was to be reviewed on July 30, 1973, and the parole officer was confident that he would be released as both he and the author had enthusiastically supported this action. However, on July 29, 1973, David undid in a few minutes what he had achieved in a year. The author and his wife had planned to go to a nearby river with David and ride inner tubes. The trip was cancelled when the author's wife had to work. David instead went to Nogales, Mexico with his cousin and another youth. David had $118 in his possession and was willing to pay for most of the expenses. They all drank while in Nogales, and took pills of an unknown type. When returning through customs, David was stopped and requested to submit to a search. He refused and was told by the Immigration Officer and an F.B.I. agent to enter a searching room. David was resistive and a physical battle took place. He was subsequently subdued, charged with assault upon a federal officer, and jailed. This information was obtained from David, one of his companions, and the official report. The next day his case to be reviewed for early discharge was removed from the docket of the Arizona Parole Boards. David now awaits a federal trial for the felony offense of assault upon a federal officer.

Limitations

There is no doubt that the case study method in the natural environment has been a very complex undertaking. In David's case, not only was his immediate family and the parole personnel involved, but also his cousin and his family, as well as David's grandparents. They were all in contact with the author at one time or another, making suggestions, disagreeing, but all too often the carefully developed contingency plans were sabotaged. Additionally, the backdrop to all this was the cohesion and loyalty that often is a norm among Mexican-Americans. One prevailing problem was the fact that David's cousin exhibited undeniably self-destructive behavior. This young man has been physically addicted to heroin for some four years; this is serious enough in and of itself. Unfortunately, this behavior has been reinforced because Andy is allowed to live at home and use heroin with his parents' knowledge. David was well aware of Andy's unusual status and privileges. Andy's parents viewed use of this drug as a developmental phase. This author maintained a steadfast opposition to all injectable drug usage, especially heroin. The conflict no doubt created confusion to David.

While the confounding variables in a case study such as this increase at an alarming rate, the character of the findings in research of this nature penetrates even the most "objective researcher." It was, therefore, a difficult task to distill out the reality from the embellished reality; the facts from subjective fantasy. Difficult because the author and his wife came to know David intimately, and to err because of intense concern. The author all too often found himself ready

to jettison therapeutic strategy and father David, protect David or allow emotion to dictate where reason was needed. Consequently, this has been a review of great triumphs and undeniable agony.

Recommendations

Hindsight suggests that a case study of this complexity and length would do well to employ the efforts of two persons. One to work directly with the family of immediate concern, and the second to deal with the greater environment; in this case primarily Andy and his family. In this manner, more thorough treatment would be afforded in terms of allocation of time alone, and the many decisions which have to be made would benefit from the team approach.

Definite time constraints are needed as therapy could proceed far beyond the needs of a student's academic program. The period used for this study (one year) would appear insufficient in situations of involved and long standing behavior problems. A solution might be the utilization of another team of therapists or change agents. This process should be continuous and might very well span a six to eight year period as treatment efforts shift from David, for example, to Andy and his family.

Conclusions

Society's needs today are unprecedented. Increases in population and population density as well as a multitude of other variables have increased focus upon our mental health problems. The amelioration of individual psychological suffering is not the only reason for this

attention because the potential consequences for our culture are equally significant. With this in mind, it appears crucial for graduate training to invade all types of cultural, economic and social environments and employ the preventive methods of their technology. Traditionally, students working with the guidance of faculty members in protracted treatment settings inherit the problems long since dismissed by society's revolving door concept. For example, were it not for the author's involvement, David would have been returned to an institution as a parole violator three months after his release because of a written psychometric report done for David via the Department of Vocational Rehabilitation. The author's intervention, while not completely successful, underscores to the important intervention that takes place on a daily basis in a case study such as this. Unfortunately, this intervention did not occur years earlier.

This dissertation underscores the importance of redefining the clinical services model as it is often presented in academic settings. The traditional office based interview approach had definitely failed with David and it was necessary for the author to involve himself in a first hand manner with David's environment. The community based approach exposed data that would have been difficult or impossible to acquire with the traditional clinic based model. In David's case, it would have been beneficial if some of the clinicians treating him had left the clinic and observed some of the environmental contingencies at work. The therapist or change agent is in a collaborative relationship with his client to assist the person in behaviorally coping with himself and with his environment on more acceptable terms. This

consultative approach by definition suggests a community basis rather than the prescriptive clinical basis.

Finally, having worked as a parole officer, the author has continually sought alternatives to the correctional model. It appears valid to state that were a family-style, professional residential program available, David's gains would have been greater than were possible in his old environment. Specifically, if qualified probation and parole personnel could provide 24 hour live-in treatment, a family of five to six youths could benefit from an intensive rehabilitative effort. This approach has been successful with Achievement Place, a residential treatment facility for delinquent boys in Lawrence, Kansas, employing behavior modification techniques. Financially this is no bold undertaking at all because the expense is understandably far less with the community based-family model. Behaviorally, the youths are exposed to trained professionals who model the behaviors to be acquired. The motivation system used is uniquely designed, and the results have been encouraging. In David's case, had he lived with the author and his wife for a year, far more might have been achieved.

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