Western Michigan University

The Journal of Sociology & Social Welfare

Volume 6
Issue 3 *May*

Article 6

May 1979

Requisites for the Establishment, Implementation, and Evaluation of Social Work Treatment Programs for Anti-Social Children

John S. Wodarski
University of Georgia

REQUISITES FOR THE ESTABLISHMENT, IMPLEMENTATION, AND EVALUATION OF SOCIAL WORK TREATMENT PROGRAMS FOR ANTI-SOCIAL CHILDREN[1]

John S. Wodarski, Ph.D.
Director
Research Institute
School of Social Work
University of Georgia
Athens, Georgia

ABSTRACT

Requisites for the establishment, implementation and evaluation of social work treatment programs for anti-social children are reviewed. Specific items discussed are: how does one ascertain the level at which change efforts should be directed, i.e., individual, group, organizational, or societal; what is the appropriate context for behavioral change; who should act as the change agent; what characteristics should the worker possess; what are the rationale for service provided; how long should the treatment continue; how does one prepare for the termination of treatment and maintenance of behavior; what organizational factors of treatment contexts are pertinent to the constructive delivery of services; what are the requisites for the adequate evaluation of treatment programs, and what are the characteristics of efficacious therapeutic programs for anti-social children. Throughout the manuscript relevant future research issues are reviewed.

---

[1]Paper presented at the Annual Program Meeting of the Society for the Study of Social Problems, San Francisco, August 1975. Preparation of this manuscript was facilitated through funding from U.S.P.H.S. research grant MH 18813, and MH 21905 awarded by the National Institute of Mental Health, Center for Studies of Crime and Delinquency.

Introduction

Many social work researchers, theorists, and practitioners have called for the establishment of social work services on a more rational basis and for the empirical evaluation of services in order to assess whether anti-social children's needs are being adequately met (Brown, 1968; Fisher, 1973 a, b; Geismar et al., 1972; Handler, 1975; Henderson and Shore, 1974; Lipton, Martinson and Wilks, 1975; Meyer, Borgatta, and Jones, 1965; Mullen and Dumpson, 1972; Lundman, 1976; Lundman, McFarlane, and Scarpitti, 1976; Reid and Shyne, 1969; Sarri and Selo, 1974; Schwartz, 1966 and 1971; Voit, 1975; Wodarski and Pedi, 1977). A review of the literature, however, reveals little consideration of steps involved in the planning and implementation of treatment programs and their subsequent evaluation. It is more unfortunate that steps involved in the evaluation of treatment programs tend to be elaborated without regard to the procedures involved in establishing and implementing them. Indeed, implementation and evaluation are interrelated. Adequate evaluation of services is not practicable without meeting key requisites for the establishment and implementation phases of social work treatment programs. Thus, the central aim of this paper is to discuss basic requisites for planning, implementing and evaluating social work treatment programs for anti-social children.

Recent research investigations provide data to suggest that many treatment contexts are inappropriate for the provision of services. For example, in most treatment programs for anti-social children there occur critical dysfunctions as a result of homogeneously grouping anti-social children together for the purposes of treatment. Moreover, most programs provide treatment in social contexts other than those where the problematic behaviors first, or most frequently, occur. Thus, even if pro-social behaviors are learned during the course of treatment, the capacity to generalize such learned behaviors to the open environment is unduly limited. Likewise, in such treatment contexts the labeled anti-social client typically receives services along with others who are similarly defined, thereby increasing the likelihood that the child will acquire a more negative and stigmatizing label. As some researchers suggest, this may lead toward establishment of a deviant self concept and/or deviant identity. Also, in such settings the client is less likely to be provided the opportunity to view adequate role models. Interaction with normal peers is severely constrained and role models provided in segregated treatment milieus may be more deviant than those provided in other treatment settings, thus diminishing the likelihood of positive reinforcement from peers for pro-social behaviors (Feldman, Wodarski, Flax, and Goodman, 1972; Feldman, Wodarski, Goodman, and Flax, 1973; Lundman, Sykes, and Clark, 1978; Wodarski, Feldman, and Pedi, 1975 and 1976 a, b; Wodarski and Pedi, 1977).

This presentation focuses initially on ascertaining the level at which change efforts should be directed, i.e., individual, group, organizational, or societal. Next, the discussion addresses a series of major treatment considerations. What is the appropriate context for behavioral change? Who should act as the change agent? What characteristics should he/she possess? What are the rationale for service provided? How long should treatment continue? How does one prepare for the termination of treatment? How does one ensure that behaviors acquired in treatment are maintained, and so forth? The discussion also will focus on the organizational factors of contexts of treatment which are pertinent to the creation of services, structural components and the training of staff. Finally, the paper reviews the characteristics of efficacious therapeutic programs for anti-social children and a number of requisites for the adequate evaluation of these programs. Specific items discussed are: securing an adequate pretreatment baseline of behaviors, specifying the behaviors to be changed, specifying workers' behaviors in terms of relationship formation and intervention, measures of worker and client behavior, specification of criteria for evaluation of treatment efficacy, monitoring of treatment implementation, reliability of measures, designs and statistics applicable to clinical evaluation, follow-up, implementation of findings, and so forth. Throughout the manuscript relevant future research issues are reviewed.

Implementation of Change Strategy: Level of Intervention

Social work has been characterized historically as a profession that emphasizes a one-to-one relationship with clients in order to achieve behavioral change (Glenn and Kunnes, 1973; Ryan, 1971). The profession has seldom addressed itself adequately to the appropriateness of the various service delivery mechanisms for certain types of clients, however. Few empirical studies have delineated the parameters or criteria for determining whether one-to-one or group level treatment is best for achieving behavioral change in a given anti-social child.

Individual Treatment vs. Group Treatment

Even though recent years have witnessed a growing emphasis on group treatment for anti-social children due to various conceptualizations that place a heavy emphasis on the roles the children's peers play in the causation of delinquency, relatively few clients are treated in this manner as compared to those treated in casework. Yet there are a number of obvious deficiencies in placement of clients in casework services. The casework relationship is unlike many situations we face in daily interaction. In contrast, the provision of services in groups offers the following

benefits. The group interactional situation more frequently typifies many kinds of daily interactions. Services which facilitate the development of behaviors which enable people to interact in groups are likely to better prepare them for participation in larger society; that is, will help them learn social skills necessary to secure reinforcement (Feldman and Wodarski, 1975). From a social learning theory perspective, it is posited that if a behavior is learned in a group context, it is likely to come under the control of a greater number of discriminative stimuli; therefore, greater generalization of the behavior can occur for a broader variety of interactional contexts. There are additional substantiated rationales for working with individuals in groups. Groups provide a context where new behaviors can be tested in a realistic atmosphere. Clients can get immediate peer feedback regarding their problem-solving behaviors. They are provided with role models to facilitate the acquisition of requisite social behavior. Groups provide a more valid locus for accurate diagnosis and a more potent means for changing client behavior (Meyer and Smith, 1977; Rose, 1977).

These theoretical rationales indicate that treating children in groups should facilitate the acquisition of socially relevant behavior. However, criteria need to be developed concerning who can benefit from group treatment. Such knowledge will only be forthcoming when adequately designed research projects are executed in which children are assigned randomly to individual and group treatment to control for confounding factors such as type of anti-social behavior, age, sex, income level, academic abilities, and so forth.

In instances where an individual does not possess the necessary social behaviors to engage in a group, a one-to-one treatment relationship may provide the best treatment context. For example, many anti-social children would be lost quickly in a group simply because they do not have the essential social behaviors for interaction. Likewise, with hyperactive children it may be necessary to work on an individual basis until their dysfunctional behaviors are brought under sufficient control to allow them to participate in a group context. However, as soon as they develop the necessary social skills therapeutic changes are likely to be further facilitated if they can be placed in a group (Jacobs and Spradlin, 1974).

Larger Social Units for Change

Even broadly defined social policy decisions can directly affect the behaviors that will be exhibited by children. For example, certain economic policy decisions (e.g., those pertinent to teenage employment and other social phenomena) have a determinate effect on behaviors that children will exhibit in the future.

A decision to adopt a full employment policy will obviously affect children. Additionally, a national children's rights policy would ensure that each child is provided with adequate housing, education, justice, medical and social services, and so forth.

If, following a behavioral analysis, a change agent decides that a child is exhibiting appropriate behaviors for his social context and he determines that a treatment organization or institution is not providing adequate reinforcers for appropriate behaviors, or that it is punishing appropriate behavior, the change agent must then decide to engage in organizational or institutional change. This may involve changing a social policy, a bureaucratic means of dealing with people, or other strategies. In order to alter an organization the worker will have to study its reinforcement contingencies and assess whether or not he has the power to change these structures so that the child can be helped. In social work practice the primary focus has been on changing the individual. Future conceptualizations should provide various means of indicating and delineating how human behavior can be changed by interventions on multilevels. The obvious question that will face social workers is how to coordinate these multilevel interventions. Thus, following such a framework of human behavior, an "inappropriate" behavior exhibited by a client must be examined according to who defined it as inappropriate and where requisite interventions should take place.

Such interventions at the macro-level are increasingly more critical since follow-up data collected five years later on antisocial children who participated in a year-long behavior modification program, which produced extremely impressive behavioral changes in the children, indicate that virtually none of the positive changes were maintained (McCombs, Filipczak, Rusilko, Koustenis, and Wodarski, 1977; McCombs, Filipczak, Friedman and Wodarski, 1978). Possibly, maintenance could be improved when change is also directed at macrolevels.

Implementation of Change Strategy: By Whom, Why, and How Long?

Context of Behavioral Change

Unfortunately, if a child exhibits a problematic behavior in a social context such as a school, the behavioral change strategies all too frequently are provided in another social context, such as a child guidance clinic, family service agency, community mental health center, and so forth. Such procedures create many structural barriers to effective intervention (Kazdin, 1977; Stokes and Baer, 1977). Therapeutic change should be provided in the same contexts where the problematic behaviors are exhibited. If therapeutic strategies are implemented in other contexts the

probabilities are reduced that newly learned behaviors can be sufficiently generalized and maintained. Considerable study is needed to delineate those variables that facilitate the generalization and maintenance of behavior change. These may include substituting "naturally occurring" reinforcers, training relatives or other individuals in the client's environment, gradually removing or fading the contingencies, varying the conditions of training, using different schedules of reinforcement, using delayed reinforcement and self-control procedures and so forth (Kazdin, 1975). Such procedures will be employed in future sophisticated and effective social service delivery systems.

By Whom Should Change Be Delivered?

We have little evidence to suggest what personal characteristics of change agents facilitate the delivery of services to children. One could propose some general hypotheses, e.g., workers should be reinforcing indiviudals with whom children can identify; they should possess empathy, unconditional positive regard, interpersonal warmth, verbal congruence, confidence, acceptance, trust, verbal ability, physical attractiveness; and so forth (Carkhuff and Berenson, 1967; Carkhuff, 1969 and 1971; Fisher, 1975; Suinn, 1974; Truax and Carkhuff, 1967; Wells and Miller, 1973; Vitalo, 1975). Likewise Rosenthal (1966) and Rosenthal and Rosnow (1969) have suggested the worker's expectations of positive change in clients is also necessary. Additional research suggests that a behavioral change agent should have considerable verbal ability, should be motivated to help others change, should possess a wide variety of social skills, and should have adequate social adjustment (Gruver, 1971; Berkowitz and Graziano, 1972). Even though other social science disciplines are beginning to gather preliminary data concerning the attributes and skills of helping agents, there is virtually no literature in the field of social work to indicate what type of characteristics a worker should possess in order to help children. Presently such decisions are made quite arbitrarily. The notion that professional training enables all workers to be equally effective in producing behavioral change is yet to be substantiated. Much more research is needed to delineate the characteristics of effective change agents. Thereafter, hopefully, schools of social work will be able to develop more appropriate selection measures and to create more effective educational technologies to facilitate the acquisition of requisite skills and attributes.

If a worker chooses to employ a child's parents, teachers, peers, or others as change agents he will have to assess at the very least how motivated these individuals are to help alleviate the dysfunctional behavior, how consistently they will apply change

techniques, what means are available to monitor the implementation of treatment to ensure that it is appropriately applied, and if the chosen change agent possesses characteristics such as similar social attributes, similar sex, and so forth that could facilitate the client's identification with the worker (Tharp and Wetzel, 1969; Bandura, 1969 and 1977).

Rationale for Service Provided

The rationale for offering a program should be based primarily on empirical grounds. The decision making process should reflect that the change agents have considered what type of agency should house the service, that they have made an assessment of the organizational characteristics of the treatment context, and that the interests of agency personnel have been considered in planning the service. A number of additional questions also should be posited. How can the program be implemented with minimal disruption? What new communication structures need to be added? What types of measurements can be used in evaluating the service? What accountability mechanisms need to be set up? What procedures can be utilized for monitoring execution of the program (Wodarski and Feldman, 1974)?

Duration

No empirical guidelines exist regarding how long a service should be provided, that is, when client behavior has improved sufficiently, in terms of quality and quantity, to indicate that services are no longer necessary. Such criteria should be established before the service is to be provided and these should indicate how the program will be evaluated. The criteria should enable workers to determine whether or not a service is meeting the needs of the client. Moreover, they should help reveal the particular factors involved in deciding whether or not a service should be terminated. The more concrete the criteria, the less this process will be based on subjective factors.

Organizational Factors Pertinent to the Creation of Therapeutic Services for Children

Structural Components

Few agencies have considered the key organizational requisites for the evaluation of therapeutic services. In fact, most agencies are physically structured in a sub-optimum manner for the delivery or evaluation of treatment. For example, few agencies provide observational areas with one-way mirrors where therapists can observe each other and isolate effective techniques for working with a child or his family unit. Viewing areas enable the

unobtrusive gathering of samples of a child's behavior and facilitate the recording of interaction between parents and the child. They can facilitate training programs where parents learn to change interactional patterns with their child, and they can provide a means by which parents can view and model behaviors which the therapist exhibits in working with the child. These features also may enable workers to secure necessary data for the systematic evaluation of therapeutic services. The provision of such feedback to workers enables them to sharpen their practice skills, adds to practice knowledge, and provides another vehicle for teaching practice skills.

Another technological advance that will be of considerable help in evaluating the services provided to children is the use of videotapes. Videotapes can document many verbal and nonverbal interactions. They can provide a more effective and reliable medium through which therapeutic services can be evaluated. Likewise, with proper analysis they can help to sharpen practice skills and lead to a better understanding of how verbal and nonverbal behaviors exhibited by clients and workers influence their mutual interactions (Wodarski, 1975).

Training of Change Agents

Literature is just beginning to accumulate on the procedures that should be utilized in the training of change agents. One relevant training program has been developed on a pilot basis by the author (Wodarski, 1974). It has evolved as part of an evaluative research project regarding the assessment of a community-based treatment program for anti-social children. The training program consisted of initially presenting to students the basic rationale for using a behavioral model in training change agents, that is, it permits objectives to be clearly operationalized and measured. During the training process the students gained an in-depth knowledge of behavior modification principles through extensive reading. Second, three essential elements were reviewed which form the foundation of the training process: the operationalization of client behaviors to be modified, the operationalization of treatment interventions (behaviors to be exhibited by the change agent), and the acquisition of data to determine if the isolated events chosen to modify the client's behaviors (antecedents and consequences) have influenced the rate of the child's behavior. Next students were exposed to observational scales used to measure client and change agents' behaviors and to experimental designs that they could implement to evaluate their practice behavior. The incorporation of this knowledge in their subsequent training was emphasized. Role playing by various professional change agents was used to demonstrate such techniques as reinforcement, punishment, and so forth. Videotapes of professionals and students

simulating small group interaction where they practiced the application of treatment techniques were used in order to help the change agents acquire requisite practice behaviors. It also was emphasized how periodic feedback from practitioners and students can enhance learning and practice skills. Before work with a client was initiated the students were required to review a tape of clients interacting in a group, to make a diagnosis, to design a corresponding intervention plan, and to specify how the success of the intervention would be determined.

Evaluation and Characteristics of an Efficacious Therapeutic Program for Anti-Social Children

Adequate Specification of Behaviors and Baselines

An adequate treatment program must take into account the need for reliable specification of target behaviors; that is, those behaviors which are to be changed. For example, a treatment program to alleviate anti-social behavior might employ behavioral rating scales where the deviant behaviors are concretely specified. These could include such observable behaviors as hitting others, damaging physical property, running away, climbing and jumping out of windows, making loud noises and aggressive or threatening verbal statements, throwing objects, such as paper, candy, erasers, chairs, and so forth.

A prerequisite for the adequate evaluation of any therapeutic service is to secure a baseline prior to implementation of treatment. This enables the investigator to assess how his treatment interventions compare with no treatment interventions. The best type of baseline measure is secured by behavioral observers, who generally have learned to establish reliability on behavioral categories through an extensive training procedure. If observations of behaviors cannot be secured by trained observers, there are other less desirable data sources, such as baselines taken by the client himself or by significant others in his environment. Even though less reliable, these baselines many times are necessary due to various organizational or other environmental constraints. Some of these constraints may involve lack of money for trained observers or the investigation of a behavior that occurs at a time when it is not readily observable by others. When the researcher uses baseline data not secured by a trained observer, the data should be obtained from two or more independent sources in order to check on consistency.

The following are various practical considerations that should be addressed before a researcher decides on the exact procedures for securing a baseline. The first consideration involves where the baseline should be taken. A context should be chosen in which

the individual's behavior occurs at a high frequency. If the behavior occurs in more than one context, baselines may be secured for the various contexts. This enables the assessment of a broader range of contexts where the behavior occurs, contributes to the determination of whether or not behavioral changes in one context are analogous to those in another, and provides a more accurate measure of behavior. Additional considerations pertain to where the behavior occurs. If the behavior is readily accessible to observation, there will be no problem. If it is inaccessible, such as a behavior that occurs late at night or in contexts where observation is not possible, the investigator will have to use reports by the client, or others who are present when the behavior occurs, to secure the data. As previously mentioned, it is preferable to have a trained observer secure data. In any case, an individual who is consistent and reliable should be chosen. Finally, whether the person who secures data is a trained observer or someone else, a necessary requisite for evaluation of the service is the execution of periodic reliability checks to ensure that the data being provided are consistent (Nelson, Lipinski, and Black, 1975).

Conceptualization and Operationalization of Treatment

Appropriate conceptualization and operationalization of treatment interventions are imperative for the development of effective programs. A worker must be able to specify what behaviors he will implement in order to apply a given treatment strategy. This represents a difficult requirement for many, if not most, theoretical frameworks. Usually therapeutic services are described on a global level and are assigned a broad label such as transactional analysis, behavior modification, family therapy, and so forth. However, such labels are valuable only so long as they specify the operations involved in implementing the services. For instance, the global label of behavior modification can be separated into the following distinct behavioral acts: directions, positive contact, praise, positive attention, holding, criticism, threats, punishment, negative attention, time out, application of a token economy, and so forth (Wodarski, Feldman, and Pedi, 1974; Wodarski and Pedi, 1978). Moreover, essential attributes of the change agent that facilitate the implementation of treatment should be delineated.

Measures of Therapist and Client Behavior

Various measures, such as checklists filled out by children and/or significant others (e.g., group leaders, parents, referral agencies, grandparents, and so forth) and behavioral time sampling schedules, can be utilized to assess change in children. Likewise, behavioral rating scales can be used to assess the behaviors exhibited by a change agent. There are excellent texts available

which describe the various measures that can be used.[2] They specify particular items measured and the appropriate clientele, types of data provided, reliability, and procedures involved in administration. The type of measurement process selected generally will depend upon the behaviors chosen for modification, the availability of technical equipment, the cost of securing various types of data, the context of measurement, and the frequency, duration, and intensity of the target behavior (Bijou et al., 1969).[3]

The literature over the last decade has called for the utilization of multi-criterion measurement processes for the evaluation of therapeutic services. However, the few investigators who have utilized multi-criterion measurement indicate that many changes secured on certain inventories do not correspond necessarily with results of other measurement processes utilized. For example, in studies by Wodarski et al. (1975, 1976 a, b and 1977) it was found that little correlation exists between self-inventory and behavioral rating scales. In many instances, a change can occur on one of the measurements and not on another. The strongest data are derived from behavioral observation scales simply because observers are trained for long periods of time to secure reliable and accurate data. If an appropriate behavioral observation scale is not available, then the investigator can develop his own scale by observing children systematically and then accurately defining the relevant behaviors so that two people can consistently agree that they have occurred.

Both self-inventories and behavioral scales have certain drawbacks. Self-inventories have low reliability but they cost less; also, they may measure behavioral tendencies that behavioral scales do not measure. Behavioral scales provide highly reliable data but are more costly and, depending on the breadth of observation, they may provide data that are limited to a specific social context. The decision to utilize a particular measurement process rests on the aims of the research project.

---

[2]Such texts include Orval G. Johnson (ed.) Tests and Measurements in Child Development: A Handbook (in press), and Paul McReynolds (ed.) Advances in Psychological Assessment, Vol. 3, 1975. Both are Jossey-Bass publications.

[3]For an excellent discussion of measurement techniques see: Bijou, S. W., Peterson, R. F., Hames, F. R., Allen, K. E. and Johnston, M. W., "Methodology for Experimental Studies of Young Children in Natural Settings, The Psychological Record, 19, 1969, pp. 177-210; Thomas, E. J. (ed.) Behavior Modification Procedure: A Sourcebook, Chicago, Aldine, 1974.

Specification of Criteria for Evaluation of Treatment Efficacy

Any therapeutic program should specify the criteria by which the service will be evaluated. This should be done before the treatment is implemented. For example, evaluation may occur by means of behavioral observations provided by trained observers and/or through the use of checklists filled out by children and significant others. In view of the multi-dimensional nature of human behavior it seems necessary for professionals to evaluate more than a single criterion in order to develop a comprehensive and rational basis for the provision of services. Moreover, highly sophisticated treatment programs will endeavor to quantify the extent of behavioral change targeted and actually achieved and the social relevance of changes that have occurred; that is, do they really matter in terms of the client's ability to function in his environment (Kazdin, 1977).

Treatment Monitoring

Having met all prior prerequisites, it then becomes necessary to monitor the implementation of treatment. Such monitoring should take place throughout treatment so that necessary adjustments can be made over time if the quality of treatment varies. If behavioral change is obtained and if the investigator can provide data to indicate that treatments were differentially implemented, the change agents can claim with confidence that their treatment has been responsible for the observed modifications in behavior. However, if such data cannot be provided when client change has occurred, many rival hypotheses can be postulated to account for the results (Wodarski and Pedi, 1977).

Reliable Measures

Reliability must be secured for all measures utilized in evaluating a program. Without this basic scientific requisite, evaluative efforts may be ill-spent and there can be no assurance of consistency in the data secured. The reliability requirement often is disregarded in evaluative research thus allowing for the postulation of rival hypotheses to account for the findings (Wodarski and Buckholdt, 1975).

Designs

Frequently it has been assumed that the only way that therapeutic services can be evaluated is through the employment of classical experimental designs, e.g., those where participants are assigned randomly to one or more experimental or control groups. However, such designs may have many deficits and may not be the most appropriate for the evaluation of services. They may be

expensive in terms of money, energy required to implement them and administration (Wodarski and Buckholdt, 1975). Moreover, the criterion of random assignment of subjects is usually hard to meet in the evaluation of services provided to children. New designs, however, are emerging from behavior modification literature. These can be easily implemented in social work; they are economical in terms of money, energy required to implement them, and administrative execution. Above all, they provide data which will enable a worker to determine if his interventions have had an effect on client behaviors.

It is interesting to note that the emphasis in the evaluation of services in social work has been on the use of traditional experimental designs which involve grouping clients into experimental and control groups. This research philosophy is diametrically opposed to a basic practice assumption, namely that every individual is unique and needs to be considered in his own gestalt. The single case study, which has been championed in recent behavior modification research, may alleviate many of the measurement problems discussed. In this approach the client serves as his own control, and a client's change is evaluated against data provided by himself during a baseline period which precedes the application of treatment. This type of methdology also alleviates the moral and legal aspects of placing a client in a no-treatment control group. It is too early to predict the effects of various legal decisions on the use of traditional control groups in evaluative research. The use of these may be challenged in the future on two legal bases: (1) denial of the right to treatment, and (2) denial of equal protection.[4]

---

[4]For a detailed discussion of these issues see Birnbaum, M. The rights to treatment, American Bar Association Journal, 46, (1960), 499-505; Harris, R. W. Note: Implementing the right to treatment for involuntary confined mental patients: Wyatt vs. Stickney, New Mexico Law Review, 3 (1973), 338-351; Note: A right to treatment for juveniles?, Washington University Law Quarterly (1973), 152-196; Practicing Law Institute, the Mental Health Law Project, Legal rights of the mentally handicapped. Vols. I and II, Practicing Law Institute, New York, 1974; Rastatter, P. C. Note: The rights of the mentally ill during incarceration. The Developing Law, 25 University of Florida Law Review, (1973), 494; Martin, R. Legal Challenges to Behavior Modification. Champaign, Illinois: Research Press, 1975; Wodarski, J. S., Recent supreme court legal decisions: implications for social work practice. Paper presented at 103rd Annual Forum, National Conference on Social Welfare, Washington, D.C., June, 1976.

The data presented in Figure 1 provide an example of a time-series design used to evaluate group work service provided to 10 five- and six-year-old anti-social children. In this figure percentage frequencies of pro-social, non-social, and anti-social behavior are graphed for a group of children who met for two-hour sessions over a period of 14 weeks at a community center. This classical design in behavior modification consists of four basic phases and is commonly referred to as the ABAB design. In the first phase the children are exposed to a baseline period. During this period the group worker does not rationally plan interventions that are likely to influence the pro-social, non-social, or anti-social behavior within the group. This is analogous to a traditional diagnostic technique postulated by Sallie Churchill (1965) where the group worker refrains from interventions so that he can more accurately determine the treatment needs of the group. After the children's observed incidences of anti-social behavior have stabilized, treatment is begun (Phase II). Members' behaviors are monitored until they once again stabilize, whereupon a baseline condition is reintroduced (Phase II, or the reversal period). The procedure enables the therapist and others who evaluate the treatment program to determine whether the treatment itself was responsible for the various changes in behavior. Immediately after it becomes evident that the treatment has been effective in reducing anti-social behavior the treatment procedures are applied once again.

In some situations the ABAB design may not be feasible due to the types of behaviors being modified and/or for various ethical reasons. The primary reason for utilizing an alternate design is that in the ABAB design the modified behavior usually will not reverse itself and, in many instances, reversals would be too damaging to the client or significant others. For example, when fighting is brought under control in a home it would not be feasible to do a reversal of this behavior since, in the past, undue physical harm may have been inflicted on others. A design that may be utilized in lieu of the ABAB design is the multiple baseline design, where a series of behaviors for modification are operationalized. Predictions are made regarding how the various techniques will affect different behaviors. Each behavior is then modified according to a time schedule. Usually one or two behaviors are modified at a time. For example, the worker might want to decrease such behaviors as yelling, fighting, throwing objects, or straying from the group, and to increase pro-social behaviors, such as task participation, appropriate verbal comments, and so forth. The worker in this instance might choose first to ignore the yelling and to use positive reinforcement to increase appropriate verbal comments. Once the yelling decreases and the appropriate verbal comments increase he would sequentially modify the second, third, and fourth behaviors. In Table 1 an outline

is provided regarding how such a process operates. The technique being employed becomes more efficacious each time the behaviors change in the direction predicted for each child. This replication of results increases the practitioner's confidence in his techniques and is necessary in evaluative research since the conclusions gained from any one study or interventive attempt are always considered tentative.

Another design which can be used is the AB design. In actuality it is the first half of the ABAB design. It involves securing a baseline and introducing treatment after the behavior to be altered is stabilized. This is a minimum prerequisite for evaluating the effectiveness of interventive attempts.

In summary, all of these designs can be easily implemented in social work. Above all, they provide data which will enable a worker to determine if his interventions have had an effect on client behaviors (Wodarski and Buckholdt, 1975). It is not practicable to indicate what particular designs should be used at a given time because this depends on the context of the social work practice situation, the behaviors to be modified, time considerations, administrative concerns, and so forth.[5]

Statistics

Evaluation will involve several means of assessing whether or not significant change has taken place. Evaluation of therapeutic services will entail the construction of tables and graphs of client and therapist behaviors. Usually graphs are constructed from measures of central tendencies such as the mean, mode, or the median. A common error in social work practice is to focus solely on what is to be changed in the client and to proceed only to measure that. Sophisticated evaluation programs will measure the behaviors of the client and the change agent simultaneously in order to enable the assessment of what effects the change agent's behavior has had on the client. Guidelines regarding acceptable levels of change are being developed. They will indicate whether or not a

---

[5]For a detailed description of the various designs that might be used to evaluate social work practice interventions see Gottman, J. M. "N-of-one and N-of-two research in psychotherapy," Psychological Bulletin, 80 (1973), pp. 93-105; Browning, R. M. and Stover, D. P., Behavior modification in child treatment, Chicago: Aldine-Atherton, 1971, pp. 75-110; Barlow, D. H. and Herson, J., "Single case experimental designs: uses in applied clinical research," Archives of General Psychiatry, 29 (1973), pp. 319-325; Herson, M. and Barlow, D. H. Single case experimental designs, New York: Pergamon Press, 1976.

program has had a positive effect in terms of the investment of professional effort, financial resources, and significance for the client (Gottman and Lieblum, 1974; Wodarski, Hudson, and Buckholdt, 1976). To aid in the evaluation endeavor, computer programs are now available that will summarize, graph, and place data in tabular form.[6]

Follow-up

The proper assessment of any therapeutic program with children involves follow-up, a procedure employed by surprisingly few investigators. Crucial questions answered by follow-up include whether a therapeutic program has changed behaviors in a desired direction, how long were these behaviors maintained, and to what other contexts did they generalize. Pertinent questions remain as to when and where a follow-up should occur, for how long it should last, and who should secure the measurement. Empirical guidelines for these are yet to be developed. Failure to provide an adequate follow-up period is a major deficiency of many evaluative studies executed in the social sciences.

Implementation of Findings

It is necessary for evaluators to relate their results to practitioners if social work practice knowledge is to be advanced. Formal and informal channels of communication can be employed to communicate the evaluation of therapeutic services. Formal channels may consist of professional newsletters, conferences, and journals. However, research indicates that these channels are not utilized frequently, or that they do not influence practice behaviors as much as informal channels, e.g., indigenous leaders and peer relationships (Kolevzon, 1977; McNaul, 1972; Rosenblatt, 1968; Weed and Greenwald, 1973). Thus, the social work evaluator must assess indigenous leaders in the profession and determine what peer relationships influence practice behaviors most. He must then utilize these to communicate his research results and thereby influence practice.

Summary

The establishment, implementation, and evaluation of social work treatment programs for anti-social children is an interrelated

---

[6]The following computer program packages summarize, graph, and place data in tabular form: NYBMUL, Finn, J. D., Buffalo, N.Y.: Computing Center Press, 1969; SPSS, Nie, N., Bent, D. and Hull, C. H., New York: McGraw-Hill, 1975; BMD, Dixon, W. J. (ed.), Berkeley: University of California Press, 1970.

process. It has been emphasized that considerable time should be spent in dealing with the items reviewed here in order to establish a program which is relevant to client needs and which can be implemented in such a manner that enables a proper evaluation. Sufficient time spent in the planning and establishment phases greatly facilitates implementation and evaluation.

References

Bandura, A. Principles of behavior modification. New York: Holt, Rinehart and Winston, 1969.

Bandura, A. Social learning theory. New Jersey: Prentice Hall, 1977.

Berkowitz, B. P. and Graziano, A. N. Training parents as behavior therapists: A review. Behavior Research and Therapy, 1972, 10, 297-317.

Bijou, S. W., Peterson, R. F., Hames, F. R., Allen, K. E., and Johnston, M. W. Methodology for experimental studies of young children in natural settings. The Psychological Record, 1969, 19, 177-210.

Brown, C. E. (Ed.). The multi-problem dilemma. Metuchen, N.J.: The Scarecrow Press, Inc., 1968.

Carkhuff, R. R. Helping and human relations. New York: Holt, Rinehart and Winston, 1969.

Carkhuff, R. R. Training as a preferred mode of treatment. Journal of Counseling Psychology, 1971, 18, 123-131.

Carkhuff, R. R. and Berenson, B. G. Beyond counseling and therapy. New York: Holt, Rinehart and Winston, 1967.

Churchill, S. R. Social group work: A diagnostic tool in child guidance. American Journal of Orthopsychiatry, 1965, 35, 581-588.

Feldman, R. A. and Wodarski, J. S. Contemporary approaches to group treatment. San Francisco: Jossey-Bass Publishers, 1975.

Feldman, R. A., Wodarski, J. S., Flax, N. and Goodman, M. Treating delinquents in traditional agencies. Social Work, 1972, 17 (5), 71-78.

Feldman, R. A., Wodarski, J. S., Goodman, M. and Flax, N. Prosocial and anti-social boys together. Social Work, 1973, 18 (5), 26-37.

Fisher, J. Has mighty casework struck out? Social Work, 1973, 18 (4), 107-110.(a)

Fisher, J. Is casework effective? A review. Social Work, 1973, 18 (11), 5-20.(b)

Fisher, J. Training for effective therapeutic practice. Psychotherapy, Research and Practice, 1975, 12 (1), 118-123.

Geismar, L. L., LaGay, B., Wolock, I., Gerhart, V., and Fink, H. Early support of family life. Netuchen, New Jersey: The Scarecrow Press, 1972.

Glenn, M. and Kunnes, R. Repression or revolution. New York: Harper Colophon Books, 1973.

Gottman, J. M. and Leiblum, S. R. How to do psychotherapy and how to evaluate it. New York: Holt, Rinehart and Winston, Inc., 1974.

Gruver, G. G. College students and therapeutic agents. Psychological Bulletin, 1971, 76 (2), 111-127.

Handler, E. Social work and corrections: Comments on an uneasy partnership. Criminology, 1975, 13, 240-254.

Henderson, R. and Shore, B. K. Accountability for what and to whom. Social Work, 1974, 19 (4), 287-288.

Jacobs, A. and Spradlin (Eds.). The group as agents of change. New York: Behavioral Publications, 1974.

Kazdin, A. E. Behavior modification in applied settings. Homewood, Illinois: Dorsey, 1975.

Kazdin, A. E. The token economy. New York: Plenum Press, 1977.

Kolevzon, M. Negative findings revisited: Implications for social work practice and education. Clinical Social Work Journal, 1977, 5, 210-218.

Lipton, D., Martinson, R. and Wilks, J. The effectiveness of correctional treatment: A survey of treatment evaluation studies. New York: Praeger Publishers, 1975.

Lundman, R. J. Will diversion reduce recidivism. Crime and Delinquency, 1976, 22 (4), 428-437.

Lundman, R. J., McFarlane, P. T., and Scarpitti, F. R. Delinquency prevention-assessment of reported projects. Crime and Delinquency, 1976, 22 (3), 297-308.

Lundman, R. J., Sykes, R. E., and Clark, J. P. Police control of juveniles: A replication. Crime and Delinquency, 1978, 15 (1), 74-91.

McCombs, D., Filipczak, J., Friedman, R. M. and Wodarski, J. S. Long-term follow-up of behavior modification with high risk adolescents. Criminal Justice and Behavior, 1978, 5 (1), 21-34.

McCombs, D., Filipczak, J., Rusilko, S., Koustenis, G. and Wodarski, J. S. Follow-up on behavioral development with disruptive juveniles in public schools. Paper presented at 11th Annual Meeting, Association for the Advancement of Behavior Therapy, Atlanta, Georgia, December, 1977.

Meyer, H. J., Borgatta, E. F. and Jones, W. C. Girls at Vocational High: An experiment in social work intervention. New York: Russell Sage Foundation, 1965.

Meyer, R. G. and Smith, S. S. A crisis in group therapy. American Psychologist, 1977, 32, 638-643.

Mullen, E. J. and Dumpson, J. R. Evaluation of social intervention. San Francisco: Jossey-Bass, 1972.

McNaul, J. P. Relations between researchers and practitioners. In S. Z. Nagi and R. C. Corwin (Eds.), The social contexts of research. New York: Wiley and Sons, 1972.

Nelson, R. O., Lipinski, D. P., and Black, J. L. The effects of expectancy on the reactivity of self-recording. Behavior Therapy, 1975, 6 (3), 337-349.

Reid, J. W. and Shyne, A. W. Brief and extended casework. New York: Columbia University Press, 1969.

Rose, S. D. Group therapy: A behavioral approach. Englewood Cliffs: Prentice-Hall, 1977.

Rosenblatt, A. The practitioner's use and evaluation of research. Social Work, 1968, 13 (1), 53-59.

Rosenthal, R. Experimenter effects in behavioral research. New York: Appleton-Century-Crofts, 1966.

Rosenthal, R. and Rosnow, R. L. (Eds.). Artifact in behavioral research. New York: Academic Press, 1969.

Ryan, W. Blaming the victim. New York: Vintage Books, 1971.

Sarri, R. C. and Selo, E. Evaluation process and outcome in juvenile correction: Musings on a grim tale. In P. O. Davidson, F. W. Clark and L. A. Hammerlynck (Eds.), Evaluation of behavioral programs in community, residential, and school settings. Champaign, Illinois: Research Press, 1974.

Schwartz, W. Neighborhood centers. In H. S. Maas (Ed.), Five fields of social service: Reviews of research. New York: National Association of Social Workers, Inc., 1966.

Schwartz, W. Neighborhood centers and group work. In H. S. Maas (Ed.), Five fields of social service: Reviews of research. New York: National Association of Social Workers, Inc., 1971.

Stokes, T. F. and Baer, D. M. An implicit technology of generalization. Journal of applied behavior analysis, 1977, 12 (2), 349-367.

Suinn, R. M. Traits for selection of paraprofessionals for behavior-modification consultation training. Community Mental Health Journal, 1974, 10 (4), 441-449.

Tharp, R. G. and Wetzel, R. J. Behavior modification in the natural environment. New York: Academic Press, 1969.

Truax, C. B. and Carkhuff, R. R. Toward effective counseling and psycho-therapy: Training and practice. Chicago: Aldine-Atherton, 1967.

Vitalo, R. L. Guidelines in the functioning of a helping service. Community Mental Health Journal, 1975, 11 (2), 170-178.

Voit, E. Social work and corrections: Another view. Criminology, 1975, 13, 255-270.

Weed, P. and Greenwald, S. R. The mystics of statistics. Social Work, 1973, 18 (2), 113-115.

Wells, R. A. and Miller, D. Developing rel ionship skills in social work students. Social Work Education Reporter, 1973, 21 (1), 60-73.

Wodarski, J. S. A behavioral program for the training of social group workers. Journal of School Social Work, 1974, 1 (3), 38-54.

Wodarski, J. S. Use of videotapes in social work. Clinical Social Work Journal, 1975, 3 (2), 120-127.

Wodarski, J. S. and Buckholdt, D. Behavioral instruction in college classrooms: A review of methodological procedures. In J. M. Johnston (Ed.), Behavior Research and Technology in Higher Education. Springfield, Illinois: Charles C. Thomas, Publisher, 1975.

Wodarski, J. S. and Feldman, R. A. Practical aspects of field research. Clinical Social Work Journal, 1974, 2 (3), 182-193.

Wodarski, J. S., Feldman, R. A., and Pedi, S. Labeling by self and others: The comparison of behavior among anti-social and pro-social children in an open community agency. Criminal Justice and Behavior, 1975, 2 (3), 258-275.

Wodarski, J. S., Feldman, R. A. and Pedi, S. J. Objective measurement of the independent variable: A neglected methodological aspect of community-based behavioral research. Journal of Abnormal Child Psychology, 1974, 2 (3), 239-244.

Wodarski, J. S., Feldman, R. A. and Pedi, S. J. The comparison of anti-social and pro-social children on multi-criterion measures at summer camp. Journal of Abnormal Child Psychology, 1976, 50 (2), 256-272.(a)

Wodarski, J. S., Feldman, R. A., and Pedi, S. J. The comparison of pro-social and anti-social children on multi-criterion measures at summer camp: A three year study. Social Service Review, 1976, 3 (3), 255-273.(b)

Wodarski, J. S., Hudson, W., and Buckholdt, D. R. Issues in evaluative research: Implications for social work. Journal of Sociology and Social Welfare, 1976, 4 (1), 81-113.

Wodarski, J. S., and Pedi, S. J. The comparison of anti-social and pro-social children on multi-criterion measures at a community center: A three year study. Social Work, 1977, 22, 290-296.

Wodarski, J. S., and Pedi, S. J. The empirical evaluation of the effects of different group treatment strategies against a controlled treatment strategy on behavior exhibited by anti-social children, behavior of the therapist, and two self-ratings measuring anti-social behavior. Journal of Clinical Psychology, 1978, in press.

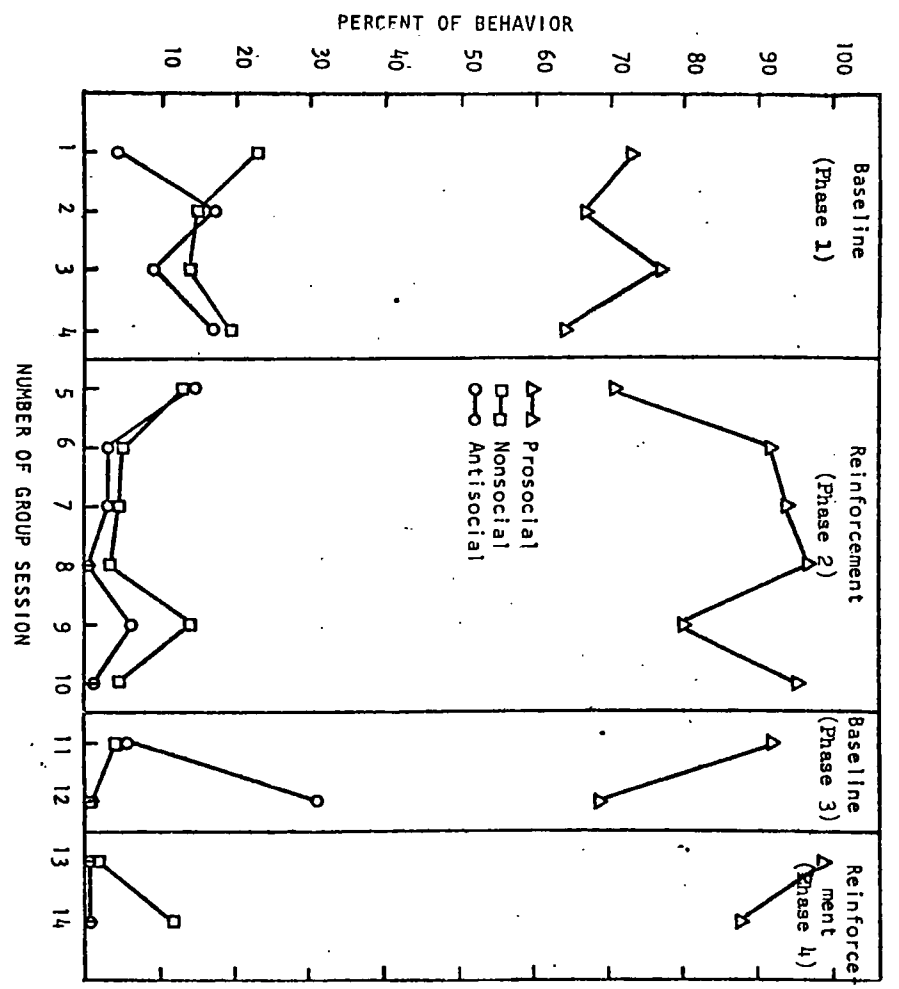

Figure 1: Average percentage of pro-social, non-social, and anti-social behaviors exhibited by ten children, according to number of group sessions.

Table 1

Example of Procedure for Multiple Baseline Design, Using Extinction to Decrease Anti-Social Behavior and Positive Reinforcement to Increase Pro-Social Behavior

Behavior to be Modified	I	II	III	IV
1. Not staying with group - task participation	Modification plan instituted			
2. Yelling - making appropriate verbal comments		Modification plan instituted		
3. Fighting - increasing helping behaviors, such as sharing and working together on a task			Modification plan instituted	
4. Throwing objects - cleaning up after group meeting				Modification plan instituted

NOTE: --- Lengths of time periods are not specified; these will depend on the rigor desired for showing the effects of the modification plan. A typical period lasts until the behavior stabilizes at a variance of less than 10% for three to five days.