TRAINING PARENTS OF HARD CORE DELINQUENTS AS BEHAVIOUR MANAGERS OF THEIR CHILDREN

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Abstract

This study measured the effectiveness of a behaviour modification training program with parents of hard core delinquents.

Ten parents of hard core delinquents were assigned to an experimental group and ten to a control group. Both groups completed the Walker Problem Behavior Identification Checklist before and after the study. The comparison between the pre- and post-testing showed statistically significant differences for the experimental group. Parents of the experimental group were assisted with designing and carrying out behaviour management projects with their deviant children. Twenty-eight projects were completed. A parenting fee was paid to participants with a bonus for improved parenting.

Résumé

Cette étude a examiné chez les parents de délinquants endurcis l'efficacité d'un programme d'entrainement visant la modification du comportement. On a réparti dix parents de jeunes délinquants à un groupe contrôle, dix autres à un groupe expérimental. Chaque groupe a rempli le Walker Problem Behavior Identification Checklist avant et après l'étude. La comparaison des résultats obtenus avant et après l'étude chez le groupe expérimental révèle des différences significatives. On avait aidé les parents du groupe expérimental à formuler et à employer des stratégies de contrôle de comportement avec leurs enfants délinquants. On élabora vingt-huit stratégies au cours de l'étude. Tous les parents reçurent un honoraire de même qu'un boni pour être devenus de meilleurs parents.

Parents, the most significant reinforcement dispensers (Tharp & Wetzel, 1969), have considerable control over the environment of their children. However, in many homes a consistent pattern of reinforcing socially adaptive responses is lacking or weak. For example, parents under stress do not provide the structure necessary for teaching adaptive social behaviours (Patterson & Reid, 1971). Thus, many child behaviours receive reinforcement, not according to the rules of a systematic management program, but to the immediate whims and fancies of an indulging or neglectful adult who is under stress or overwhelmed by his or her own problems. Hawkins, Peterson, Schweid, and Bijou (1966) showed that parents provided social reinforcers whenever aggressive and negativistic child behaviours occurred and the rates of deviant behaviour and reinforcement tended to co-vary over days. Patterson, Ray, and Shaw (1969) have demonstrated that social reinforcers were supplied by the parents and siblings for an impressive variety of deviant behaviours. Various single case studies using parents as intervention agents with out-of-control, aggressive, and "predelinquent" child behaviours have been reported (Bernal, Duryee, Pruett & Burns, 1968; Zeilberger, Sampen & Sloane, 1966). Procedures in training the parents varied from training in the clinician's office (Williams, 1969; Shah, 1967), in the home (O'Leary, O'Leary & Becker, 1967; Hawkins, et al., 1966), individually (Zeilberger, Sampen & Sloane, 1968), or in groups (Lindsley, 1966; Patterson, et al., 1967). In most cases reported, the parents expressed interest and requested help in modifying their child's behaviour.

Parents whom teachers, probation officers, counsellors, and social workers often describe as "hopeless", "uncooperative", "disinterested", "couldn't care less", "overwhelmed by problems", "too confused", "hostile", and the like seldom come to social agencies seeking help to overcome their parenting problems. It is often assumed that their earlier association with agencies when their children were in kindergarten or elementary schools had not been very productive. The parenting models proposed to these parents had not brought about the desired results (Cone & Sloop, 1971).

The present study was designed to teach

parenting skills to parents of "hard core delinquent" teenagers in a large metropolitan city to help them alter some of the conflict producing behaviours, and to observe the effect of the altered home management program on the frequency and quality of officially recorded delinquent acts.

For the purpose of this study, the term "hard core delinquent" was defined by the probation officers of a Canadian metropolitan city (population over one million) as a persistent offender, constantly in trouble with the law and likely to be transferred to adult court. Under existing provincial legislation, short of transferring these youths to adult court, the disposition available to the court is to place them on probation. The scarcity of rehabilitation programs places the responsibility to change the behaviour of the delinquent on the probation officer and the family, who are often without the necessary resources to accomplish this task.

METHOD

Subjects

Twenty parents, each of whom had a "hard core delinquent" youth in their care, volunteered to participate in the program. Their children, 16 boys and four girls, ranging in age from 13.6 to 16.1 years, were former school dropouts and on the advice of the probation officers attended an educational rehabilitation program (Csapo & Agg, 1976) which enrolled approximately .5% of the juveniles who were classified as the most chronic cases by the probation officers.

Ten parents and their children were assigned to the experimental group and ten to the control group. The subjects of the experimental and control groups were matched on sex, age, and demographic criteria, such as parental employment or unemployment, standard or substandard housing, intact or single parent families and whether or not recipients of social assistance.

Since one child ran away and one family moved away from the city during the second month of the study, the size of the experimental group was reduced to eight families. The control group was similarly reduced to eight families due to a family breakup resulting in a child's removal from home, and the transfer of another child to a full time recreational program out of town. In addition, one parent in the experimental group and two parents in the control group were replaced by other parents during the third and fifth month of the study, which reduced the sample even further.

Setting

The subjects lived in a large metropolitan area. Their children attended an educational rehabilitation program for juveniles. The group meetings for parents took place in an alternate school. Individual consultation, family interaction, observation of parent and child behaviours were conducted in the home by ten graduate students who acted as parent advisers.

Procedure

Procedurally, this study consisted of a number of discrete yet interrelated activities. These may be categorized under the following headings:

(1) Training parents as behaviour managers
(2) Administration of the parenting fee
(3) Training of coders
(4) Collection of data

1. Training Parents as Behaviour Managers

(a) Group sessions. The first group session was attended by the parents of both the experimental and control groups and it was during this meeting that the technical requirements, number and duration of home visits, and length of the research project were explained. In addition, parents completed the Walker Problem Behavior Identification Checklist (WPBIC). The second group session was organized for the experimental group only. The film "Who Did What To Whom?" by Mager (1972) was shown, and this was followed by a presentation of learning theory principles as they relate to parenting. The Books, *Living With Children,* (Patterson & Gullion, 1968) and *Pocketful of Praises,* (Csapo, 1973) were distributed as homework to be completed within a two week period. The group training session lasted seven hours.

(b) Individual Sessions. A graduate student from the Department of Counselling Psychology was paired with each family and assumed the role of parent advisor. The parent advisor taught the parent to define, pinpoint, observe and record targeted behaviour, and to identify contingencies using learning theory principles. The advisor helped the parent work out a behavioural contract with the child, and reinforced parents for ignoring inappropriate behaviours and reinforcing appropriate behaviours. In addition to teaching parents to become more effective behaviour managers of their children, the parent advisors collected weekly data from the parent, as well as paying the parenting fee and bonus for improved parenting. The average professional time spent with each family was one hour and 10 minutes per week.

2. Administration of the Parent Fee

In this study, it was assumed that the role of the parent could be shifted from that of an arbitrary manager of child behaviours to a consistent and systematic dispenser of social reinforcement. Money was used as a reinforcer contingent on the family's performance. Thus, $5.00 per week was provided to parents of the experimental group for

participating in the experiment, and an additional parenting fee of $2.00 per week for improved parenting. The amount of $10.00 was paid to both the experimental group and the control group for the completion of measuring instruments.

3. Training of Coders

The behavioural coding system developed by Patterson, et al. (1969) was used to analyze family interaction in the experimental group before, during, and after the termination of the intervention. Two categories, "crying" and "whining" were eliminated from the behavioural coding system and replaced by swearing, tattling and demanding. The operational definitions of these two new categories were as follows:

swearing: verbalization of specified profane terminology.

tattle: verbalization involving disclosure of information about the behaviour of a member or members of the family which resulted in negative verbal or physical reaction.

demand: a direct verbal request for immediate action.

These categories were more appropriate for this age group and resulted in a 30-category coding system.

The observers were trained to a median reliability level of .82 with a range of .72 to .95 prior to coding the family in the study. For the calculation of the percentage of inter-observer reliability during training and while participating in this study only events which were coded by subject number, coding category and in proper sequence constituted an agreement. Percentage of agreement was calculated as the proportion of the total number of recorded events by either observer for which they were in agreement divided by the sum of the total number of events recorded by both observers for every 30 seconds of interaction.

4. Collection of the Data

In an attempt to measure the outcomes of the parent training sessions, five types of data were collected. These were:

(a) Behavioural Coding Data
(b) Walker Problem Behavior Identification Checklist Data
(c) Parent Observation Data
(d) Officially Recorded Offenses
(e) Parent Knowledge of Behaviour Management

(a) *Behavioural Coding Data.* Coders recorded continuously the behavioural sequence of the family members, the reactions to these behaviours, the behaviours directed to the delinquent child and his responses to the initiations. The daily observation took place during the late afternoon in the kitchen and an adjoining room. The observation sequence was regulated by an interval timer built into a clipboard together with an auditory jack which gave signals at regular six second intervals. Every 30 seconds the observers were directed to move to the next line on their coding sheet. Each family member was observed in rotation by the coder for five minute segments and each session consisted of 30 minutes of observation. The observation was structured by the following rules:

1. Family members remain in the rooms.
2. No telephone calls out and answer incoming calls briefly.
3. No conversation with observers.
4. No guests present during the observation.

Patterson's (1969) rules also included no television viewing during the observation. However, in the majority of the homes the television normally ran continuously all day. It was decided that turning off the television would create a very artificial home environment for the families, consequently the rule interfering with television viewing was omitted.

Three coding observations were carried out in each home prior to intervention, two during intervention, two at the termination of the intervention, and two six weeks to two months after the last contact.

(b) *Walker Problem Behavior Identification Checklist (WPBIC).* The parents of the experimental group and of the control group rated the behaviours of their children on the 50-item checklist (Walker, 1971) before and after the intervention.

The ratings on each subject on the WPBIC were scored on five factors within the checklist:

(i) acting-out (disruptive, aggressive, defiant);
(ii) social withdrawal (restricted functioning, avoidance behaviour, low rates of peer interaction);
(iii) distractibility (short attention span, inadequate study skills, high rates of non-attending);
(iv) disturbed peer relationships (inadequate social skills, high rates of coercive demanding, high rates of dispensing punishing stimuli in social interaction);
(v) immature (dependent, high rates of initiations to teacher, inadequate social and study skills).

(c) *Parent Observation Data.* Together with the parents, the advisors identified child behaviours in the family which were particularly disruptive or desirable but needed strengthening. Parents were then assisted by their advisor to carry out specific behaviour management projects. Once the projects were developed, the parents were encouraged to form contracts with their child designed either to increase or decrease the targeted behaviours. Each project consisted of a baseline, an intervention phase, and a postcheck followed eight weeks after the termination of the parent advisor's

intervention. Data were collected daily by the parents for the duration of the study.

(d) *Officially Recorded Offenses.* Delinquencies recorded by the Juvenile Court were examined before and after the study for each hard core delinquent in both experimental and control groups.

(e) *Parent Knowledge of Behaviour Management.* A questionnaire designed to establish knowledge of behaviour management principles (Kuchenmuller, 1975) was administered to each parent prior to and after the study.

RESULTS

The results of this study are categorized under the following headings:

(1) Coding Data
(2) Walker Problem Behavior Checklist (WPBIC) Data
(3) Parent Projects Data
(4) Officially Recorded Offenses
(5) Parent Knowledge of Behaviour Management Procedures and Learning Theory Principles

1. *Coding Data*

Inter-observer Reliability: The median for all observations between coders was .82. Table I illustrates the changes in rates of observed deviant behaviours of the subjects using the modified version of the Patterson et al. (1969) coding system. A comparison between pre- and post-coding for total deviant behaviours for the experimental groups using the Wilcoxon Matched Pairs Signed Rank Test (Siegel, 1959) ($T = 1$, $p < .01$) showed a significant reduction for total deviant behaviours. The total deviant behaviours are the sum of all deviant categories coded.

TABLE I

Rates of Coded Deviant Child Behaviours at Baseline and Terminal Probe For The Experimental Group Using the Modified Patterson Coding System

	Baseline	Terminal Probe
Behavior	Total Deviant	Total Deviant
Subjects		
1	2.455	.301
2	.556	.151
3	1.537	.252
4	.208	.103
5	.609	.001
6	.079	.003
7	.008	.002
8	.009	.001

($T = 1$, $p < .01$)

2. *Walker Problem Behavior Checklist Data (WPBIC)*

The pretest and posttest scores on the Walker Problem Behavior Identification Checklist, illustrated in Table II, were analyzed by two factor analysis of variance with repeated measures on factor "B" (Winer, 1971). The results were significant at the $p < .093$ level ($F(1,11) = 3.38$). Figure 1 shows the interaction for cell means.

TABLE II

Pretest and Posttest Scores of Deviant Behaviours on the Walker Problem Behavior Identification Checklist for the Delinquent Child of Experimental and Control Groups

	EXPERIMENTAL GROUP			CONTROL GROUP	
Families	PRE	POST	FAMILIES	PRE	POST
1	25	16	1	29	41
2	8	4	2	34	19
3	20	14	3	12.5	21.5
4	22	22	4	8	35
5	35	26	5	15	24
6	24.5	21.5	6	25	13
7	33	18.5			
x =	23.93	17.43		20.58	25.58

$F(1,11) = 3.38$, $p < .093$

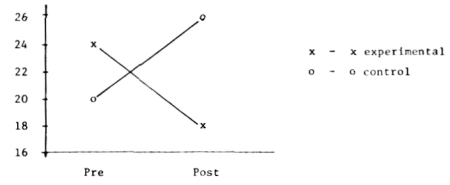

Figure 1. Pre and post change in deviant behaviors - for experimental and control families.

3. *Parent Project Data*

The experimental families completed 28 behaviour management projects. Fifteen of these projects aimed at decelerating inappropriate behaviours and 13 of them attempted to accelerate appropriate behaviours.

Table III gives the range and median for the 15 behaviours targeted for deceleration, and Table IV provides the same information for the 13 behaviours targeted for acceleration.

4. *Officially Recorded Offenses*

The average number of adjudged delinquencies for the experimental group prior to the study was 5.9 and for the control group 6.01. The offenses included burglary, car theft, prostitution, with the most frequently occurring offense being breaking and entering. During the study, no further offenses were recorded either for the experimental or control group.

5. *Parent Knowledge of Behaviour Management Procedures and Learning Theory Principles*

A comparison between the pretest scores on the Behaviour Management Questionnaire (Kuchenmuller, 1975) for the experimental and control parents showed no significant difference. The comparison between the posttest scores for the

TABLE III

Ranges and Medians of Targeted Appropriate Behaviours of the Delinquent Child in the Experimental Group, Before, During and After Intervention

Targeted Behaviors	BEFORE		DURING		AFTER	
Behaviors (see below)	Weekly Range In Days	Median	Weekly Range In Days	Median	Weekly Range In Days	Median
1	0-14	0.63	14-14	14	14-14	14
2	1-2	1.5	4-5	5.0	4-5	5.0
3	0-5	5.0	8-10	9.0	7-10	9.0
4	0-4	4.0	0-10	9.0	5-10	9.0
5	0-0	0	7-7	7.0	7-7	7.0
6	0-0	0	4-7	5.6	6-7	6.0
7	0-7	3.0	7-7	7.0	7-7	7.0
8	0-0	0	2-6	4.8	4-7	5.0
9	0-7	0.7	7-21	8.5	0-28	7.0
	Weekly Range in Minutes		Weekly Range in Minutes		Weekly Range in Minutes	
10	5-82	38.0	0-120	88.0	20-100	60.0
11	0-90	30.5	0-80	37.1	0-7	1.0
12	10-60	16.4	70-180	102.0	80-160	110.0
13	0-40	12.5	0-60	43.5	0-0	0

Targeted behaviors:

1. brushing teeth, 2. taking a shower or bath, 3. attending school, 4. home by curfew, 5. cleaning room and making bed, 6. putting laundry in laundryroom, 7. cleaning up after meals, 8. home by curfew, 9. complimenting sister, 10. minutes spent reading, 11. minutes spent with younger brother, 12. minutes spent with family, 13. minutes spent doing housework.

experimental and control families using the Wilcoxon Matched Pairs Signed Ranks Test (Siegel, 1956) showed a significant difference ($T = 2$, $p < .05$). Families of the experimental group had a significantly greater understanding of behaviour management procedures and learning theory principles than did the control group.

DISCUSSION

In spite of the difficulties involved in working with the families of "hard core" delinquent children, this study has provided considerable evidence of the effectiveness of teaching parents behavioural management procedures and learning theory principles. After participating in the training program, the parents of the experimental group perceived the behaviour of their children as improved. In addition, consultations with the parents indicated that they were generally satisfied with the improvement in the behaviours of their children.

With some group instruction and individual assistance from the advisors, the parents designed projects or programs to modify not only the behaviours of the "delinquent child", but also the behaviours of other members of the family. In some cases, they designed programs to change their own behaviour (e.g., learning to play the guitar, or helping younger child with homework). In a number of instances, the parents of the experimental group successfully changed a series of targeted behaviours of their out-of-control and deliquent children. In general, the changed behaviours were maintained after monetary reinforcement was withdrawn. The post check indicated maintenance in 89.28% of the targeted behaviours. The most likely explanation for this is that even though the monetary reinforcement was withdrawn, the social reinforcement which was originally paired with the concrete reinforcement continued. Parents "learned" to notice appropriate behaviours and to reinforce them socially, thus creating a social environment for the acceleration of desirable behaviours.

This study lends considerable support for the use of learning theory principles and procedures in working with hard core adolescents and their families. The average advising and consulting time spent with each family was one hour and ten

TABLE IV

Ranges and Medians of Targeted Inappropriate Behaviours of the Delinquent Child in the Experimental Group Before, During and After Intervention

TARGETED BEHAVIORS	BEFORE		DURING		AFTER	
Behaviors (See Below)	Weekly Range in Days	Median	Weekly Range in Days	Median	Weekly Range in Days	Median
1	0-2	1.0	0-7	5.6	0-7	5.8
2	0-3	1.8	0-7	5.0	0-7	5.7
3	1-6	3.4	0-8	3.0	0-4	3.0
4	10-35	20.0	10-10	3.4	0-1	0.3
5	0-1	.7	0-5	4.6	0-5	4.3
6	3-6	4.2	0-2	0.8	0-2	0.9
7	0-10	10.0	0-0	0	0-0	0
8	0-14	3.7	0-1	1.0	0-2	1.3
9	5-8	6.0	0-1	0.1	0-2	0.3
10	0-4	2.1	0-7	5.5	0-7	5.0
11	0-1	1.6	0-7	4.8	0-7	4.8
12	10-16	12.0	0-0	0	0-0	0
13	0-1	0.7	0-0	0	0-2	0.2
14	0-2	1.9	0-0	0	0-2	0.2
15	0-3	2.4	0-7	5.9	0-7	5.0

Targeted behaviors:

1. Going to bed by curfew, 2. Being home by curfew, 3. Swearing, 4. Being bossy, 5. Getting up at first call, 6. Slices of bread eaten, 7. Dropping paper bags and coat on floor, 8. Teasing, 9. Talking back to mother, 10. Being in by curfew, 11.Curfew, 12. Flicking hands into siblings' faces, 13. Fighting with sister, 14. Calling sister dirty names, 15. Coming home by curfew.

minutes per week. This expenditure of time appears to be acceptable to many community service agencies. Probation officers, juvenile court workers, mental health clinics, teachers and counsellors could benefit by using this approach with their clients.

Methodologically, this study raises several issues. First, it was originally thought that the coding system used would be appropriate at the adolescent age level as it was with young children (Patterson, et al. 1972). The results of the coding system indicate a low rate of inappropriate behaviours. According to the coders, the observation periods were, in many cases, characterized by family members sitting and staring, very limited or no verbal contact. The TV sets which were turned on continuously in the majority of the homes during waking hours provided opportunity for escape from social interaction. Coding behaviours using the Patterson (1972) coding procedures are relatively unproductive with the adolescent.

Secondly, the present study could have been considerably improved by increasing the number of subjects, by following the subjects over a longer period of time, and by coding family interactions in the families selected for control.

CONCLUSIONS

This study was designed primarily to investigate the effectiveness of teaching parents social learning principles and techniques in order to alter the behaviour of out-of-control, agressive and "delinquent" children. Comparisons of baseline, intervention and post intervention data indicated a significant decrease in targeted deviant behaviours, and an increase in socially acceptable behaviours. Written and verbal statements of the parents indicated that they viewed their children more positively after intervention.

It is reasonable to assume on the basis of this and other studies, that training parents in techniques of social learning will result in improved parenting. The techniques of social learning theory are straightforward, easily understood, and deal directly with the everyday problems parents are concerned with. Pamphlets for parent training are readily available (Becker, 1971; Csapo, 1972; Patterson & Gullion, 1968; Valett, 1969).

Further investigation is needed to answer the following questions: Is group training for parents more effective than individualized training? What are the variables that effectively maintain the altered role of parent as a systematic reinforce-

ment dispenser? How should training programs be sequenced? What are the various reinforcers that counsellors, teachers, and social workers can use as incentives for improved parenting?

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