A COMPARISON BETWEEN VERBAL AND WRITTEN BEHAVIOURAL CONTRACTING WITH ADOLESCENTS AND THEIR FAMILIES

by

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Abstract

Juvenile delinquency is becoming a source of ever increasing concern to the public. To date, the area of adolescent research has been sorely neglected in the social sciences and corrections fields. Rising rates of delinquent behaviour, costs of adjudication, treatment and compensation have reached the point where the search for effective means of treatment and prevention is becoming crucial. Thus far, most treatment programmes have been unable to successfully stem this rising tide, and some may even contribute to it. The recent development of behavioural technology represents a promising prospect in delinquent interventions, but additional research is required before these techniques can be considered adequate. Behavioural contracting is seen as one such strategy that is appropriate to a community preventive approach and focuses on the interactions of family members, which is thought to be a vital factor in the development and maintenance of delinquent behaviours. The method attempts to restore the reciprocity of reinforcers in a family with an established pattern of coercion, hostility, negative, or otherwise poor interrelationships. Evaluative literature indicates that this approach may be most effective when used in conjunction with other methods.

Twenty-two families referred to a community lay agency for behavioural problems in the adolescents and preadolescents at school or home were observed over a four to six week period. Half the families participated in a formal *quid pro quo* contract and the other half in verbal implicit contracts. All families received the agency's regular programme of intervention. Data consisted of structured separate interviews of the
parents and youth, progress to treatment goals monitored by staff, and school behaviour ratings completed by teachers. Results indicated that both groups showed consistent positive progress on most measures, but no differences between the two approaches were observed on any of the measures. The formal contract families tended to improve more rapidly initially but by the expiration of the contracts, no differences were apparent. The investigator concluded that both styles of contracting may be effective in such settings, since the contingency differences between a noninstitutional and a residential setting may not predispose one method to be superior over the other. The addition of such methods may provide therapists with more flexibility in tailoring an intervention programme to individual clients.

Supervisor
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H.L.
A Comparison Between Verbal and Written Behavioural Contracting with Adolescents and their Families

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Introduction

Contemporary society is evidencing intense concern over the rising dilemma of juvenile delinquency (Lipsitz, 1977). Spiralling costs associated with the adjudication and treatment of young offenders have led to frequent demands for action (Davidson and Seidman, 1975). Recent statistics underscore the strain placed on police, the courts, and social services by youth in crises. Canadian police apprehended nearly 225,000 youths in 1976, and 45,000 of them appeared in court, double that of a decade ago (Lewis, 1977). Over half the arrests for serious crimes in the United States in 1970 were people under eighteen years old (Delaney, 1977). Eleven per cent of all youth will be apprehended before their eighteenth birthday (Lipsitz, 1977; Nietzel et al., 1977; Shah, 1975), and this is probably underestimated because most delinquents will not appear in court (Amos, 1969), and only one third will be formally charged by police in Canada (McNeil, 1977).

Society exacerbates this dilemma in that young adolescents "...are the most overlooked and underserved of all the nation's minors, a condition that reflects society's deep mistrust or even dislike of early adolescents..." (Delaney, 1977). This and other clarion calls have spawned a tremendous volume of delinquency research that a review of this scope could not hope to cover. There are some central issues to
this investigation that will be examined that deal with operant conceptualizations of the delinquent's background, and the modification and prevention of delinquent behaviour. These developments have occurred primarily within the last decade (Davidson and Seidman, 1975) and therefore are still being studied extensively.

Exactly what constitutes a delinquent has posed a difficult conceptual controversy that is reflected in the many definitions of delinquency available in the literature. In Canada, the Juvenile Delinquent's Act of 1908 defines a delinquent as anyone who

...violates any provision of the Criminal Code or of any federal or provincial statute, or of any bylaw or ordinance of any municipality, or who is guilty of sexual immorality or any similar form of vice, or who is liable by reason of any other act, to be committed to an industrial school or juvenile reformatory under the provision of any federal or provincial statute. (Morris, 1976, p.8).

Similarly the United States Children's Bureau defines delinquency this way:

Juvenile delinquency cases are those referred to courts for acts defined in the statutes of the state as the violation of law or municipal ordinance by children or youth of juvenile age, or for conduct so seriously antisocial as to interfere with the rights of others or to menace the welfare of the delinquent himself or of the community. (Cavan, 1962, p. 15).

Shah (1975) and Cavan (1962) urged that any definition of delinquency should also take into account public tolerance of nonconforming behaviour, and additionally, that delinquency should be regarded as part of a continuum of conformity-nonconformity to social norms. Friedman (1969a) cautions against viewing delinquency as a unitary entity, advocating that
it is a covariate with other behaviour, personality, and other pathologies. Other definitions reflect cultural or interactional standpoints (for example, see Gibbens and Ahrenfeldt, 1969; Wirt and Briggs, 1962). Shah (1975) describes a predelinquent, unlike a delinquent legally apprehended for his behaviour, as a source of concern because his behaviour could predispose him to legal intervention. Since a legal definition might lead to the arrest of youth for petty violations nearly all minors commit (Shah, 1975; Ohlin, 1973), a more acceptable conceptualization reflecting the aims of this study will be used. It states that

...irrespective of the legal definition, a child might be regarded as delinquent when his antisocial conduct inflicted suffering upon others, or when his family found him difficult to control, so that he became a serious concern to the community, which then reacted punitively. All these factors are subject to different cultural interpretations. (Gibbens and Ahrenfeldt, 1969, p. 24)

Operant Theories of Delinquency and Predelinquency

Operant causal theories of delinquency are empirically based upon observed differences between stable families and families of delinquent adolescent offspring. These differences, found primarily in the interaction among family members and in the distribution of reinforcements within the family, indicate that families in conflict over a period of time have few positive exchanges with each other, and are more frequently coercing each other than cooperating and helping (Weathers and Liberman, 1975b). Rather than isolating the adolescent from his family, the operant approach considers him within the family network which Lipsitz (1977) felt was potentially the most effective influence on the development
of a person. Friedman (1969a) stated that, regardless of the adolescent's familial status, he is still an integral member of the family who is attempting to come to grips with two major controllers or reinforcers in his life, the family and the peer group. The peer group represents a source of satisfaction external to the family, but which can still be considered a result of the same long term social forces that shape the family such as school, employment, social conformity, and so on. As a result, the values of deviant groups are often found to follow general social values (McCord and McCord, 1969). Pollak (1969) defined the family as a system of interdependent gratification and development and "...since members of a family act as chief gratifiers of major need areas for one another, they must be able to give as well as to receive from one another in patterns of behaviour that operate under an exchange principle" (Pollak, 1969, p. 13). Delinquency consists, in his view, of a reaction to anxiety created by an imbalance in the gratification of immediate needs versus future development. Cavan (1962) also felt a major issue was the inability of the delinquent to delay gratification and the tendency to judge behavioural options in the narrow terms of pleasure versus punishment/disapproval. The teenager is more capable of committing severe forms of offenses, and is thus more likely to come to the attention of authorities since his behaviour is more visible and represents more of a challenge to the parents' authority than a child's (Delaney, 1977). For the first time in his life, with the development of new conceptions of parental behaviour standards, the preadolescent or adolescent may be comparing current parental behaviour with ideal goals, and the disparity may have some strong disruptive effects on
family interaction (Lipsitz, 1977).

A very commonly cited characteristic of parents of delinquency prone families is inconsistency in methods of discipline. While punishment has been found to be effective in shaping cooperation (Wahler et al., 1977, note 1), parents of these families tend to be harsh in their discipline and inconsistent in its use (Friedman, 1969b; Cavan, 1962). They set too many rules and punish infractions inconsistently (Alexander and Parson, 1975). Johnson and Lobitz (1974) found that parents could produce deviant behaviour in their children on a cue from the experimenter, and did so by increasing the number of demands on their children which increased the frequency of negative responding, and subsequently, the absolute amount of noncompliance. The distributions of rates of deviant behaviour in children were found to overlap between deviants and non-deviants, but the best discriminators between normal families and families referred for psychological intervention were parental negativeness and frequency of commands. Other evidence also points to the usefulness of training parents to reduce demand frequency and increase clarity of requests in order to maximize chances of compliance (Wahler et al., 1977, note 1). Lipsitz (1977) felt that three basic conclusions emerged from the parenting research on middle class families: extreme parenting styles, either authoritarian or permissive, were not helpful; democratic interactions were most facilitating to the adolescents' development; and parental attitudes and standards of behaviour should change as the teenager matures.

Condry and Simon (1974) found that children who are adult oriented have parents described as more active in their responsibilities,
more nurturant, more consistent and demanding in discipline, and more available for companionship. Peer oriented children had nagging and rejecting mothers who had poor disciplinary methods, described as lacking in control and neglectful. McCord and McCord (1969) have found that consistent discipline is more important than just a technique of parenting because it transmits a value to adolescents that may be sufficiently strong to counter even the presence of a criminal role model, which was found to be a highly correlating factor with delinquency.

Empey and Lubeck (1971) found in their experimental population of community programme residents, that almost half the male delinquents viewed discipline and control as important, especially in the protection of the community.

Families of delinquents also tend to have poor interactional networks that Friedman (1969a) characterized as immature, irresponsible, hostile, and rejecting. A large body of literature has determined that the interactions of delinquents' families are infrequent, unproductive, and consist usually of more negative than positive statements (Alexander and Parsons, 1975; Stuart and Lott, 1972; Stuart, 1971; Patterson and Reid, 1970; Tharp and Wetzel, 1969). Disruptions of routines often lead to restatements of family rules that are done in a negatively reinforcing manner (Tharp and Wetzel, 1969). As a result of the infrequency of parent-child dialogue, its occurrence may be interpreted as an attentional response, and therefore positively reinforcing. Even if the dialogue is negative, it can still be an attentional response, so that any behaviour that led to it, even a maladaptive form, is likely to occur again. In this way, parents can condition their children to behave deviantly without
intending to do so (Wahler et al., 1977, note 1; Stuart, 1971; Johnson and Brown, 1969). Stuart (1971) and Patterson and Reid (1970) have found that increasing the amount of positive reinforcement for desired behaviour can decrease the incidence of deviant behaviour in both parents and children. The therapists' roles were seen to be especially important in reinforcing family communication, the clear presentation of demands, and the negotiating and compromising of tasks and reinforcements. Patterson and Reid (1976, note 2) have also indicated that aversive behaviour in families may be a function of one member using coercive painful stimuli to change the behaviour in others, perhaps because the power of an individual's reinforcers decreased (Weiss et al., 1974). For every deviant response, Patterson and Reid could often find a triggering and maintaining behaviour in other family members. A large part of a child's coercive behaviour was found to be preceded by an attack from someone else in the family which was frequently halted upon emission of the child's coercive response. The use of verbal punishment tended to double the probability that aggression would occur in the child in the next time frame. Since coercive behaviour produced a desired consequence, it was more likely that this coercive pattern would occur again in order to produce further desired consequences, so that coercion would become a pattern of behaviour replacing the previously noncoercive behaviour. Called an escalation cycle, the pattern may result in coercion being used earlier in the interaction of family members than when desired consequences were obtained through more pleasant means. The mother was identified by Patterson and Reid as most often triggering aggression in the offspring, and this seems to support other findings that the behaviour
and relationship of the mother to the delinquent is most crucial (Cavan, 1962), and has the strongest effect on the child (Lipsitz, 1977; Larson, Fitzgerald, and Martin, 1971). Patterson and Reid found that after successful therapy, the perceptions between the mother and her children would become more positive. They stressed reducing the frequency of commands and elicitors of aggression, while increasing the consistency and effectiveness of parenting. Wahler, and his research team, have also noted that parental cues can account for as much of a child's deviant behaviour as parentally controlled consequences, and therefore, therapy should concentrate on the antecedents and consequents of those exchanges considered deviant. Pollak (1969) hypothesized that satisfactory human interaction within the family at any given time should lead to future satisfactory interaction. He saw parenting as not only a process of teaching children, but also a pattern of changing parental roles as youth grew up. As family relationships become more complex the likelihood of a problem increases, and the interdependence of the family system implies that difficulties in one family member are bound to affect another. Patterson et al. (1973), have stated that while child management can be improved without altering parental problems, ultimately parents with problems are more likely to revert to old child rearing patterns which may have been part of the original problem. Wahler et al. (1977, note 1) also felt that therapeutic change was less likely to be maintained in families with difficult living conditions.

Blechman (1974) has observed that families in conflict are also averse to problem solving and tend to disrupt such efforts through frequent use of insults, complaints, punishing statements, and placing the importance
of personal investments over group compromises. They also tend to dwell on their problems without attending to, agreeing on, or negotiating with suggested compromises. Conflictual families have often never acquired problem solving skills, and their negative behaviour is a function of remaining in relationships that fail to satisfy their needs and which hampers the acquisition or application of problem solving skills (Blechman et al., 1976). From this point of view, any technique that could engender the acquisition of problem solving skills in the family should be a promising therapeutic strategy.

Negotiation within a family system, crucial to positive interaction and problem solving, is unique for several reasons according to Weiss et al. (1974). Reinforcements to be traded usually cannot be appraised in terms of currency value. The family operates within a closed system in which the emission and reception of reinforcers are very dependent upon the behaviour of other family members. Any negotiation between these members cannot be done in the same way that a commercial deal is transacted as the use of many business techniques such as placing priority on personal gain could be very damaging to family interrelationships. Thus, the act of negotiation involves a very sensitive and abstract process that can have profound effect on the family's subsequent communication, both inside and outside the family environment. Kifer et al. (1974) found that delinquents often came to the attention of the authorities because of their inability to respond appropriately to conflict situations. Training in negotiation skills seemed to increase the incidence of negotiation and agreement within their small subject population of families.

Delinquents have been distinguished from nondelinquents by their
response to educational demands (Swift et al., 1973). These differences have been reliably measured using such instruments as the Hahnemann High School Behavior Rating Scale (Spivack and Swift, 1973), and are indicative of difficulties in handling not only school, but most of the demands of the adolescent period. Profiles can be generated using this scale that are useful in designing programmes for both delinquent and nondelinquent students requiring special attention. Stuart et al. (1976) have neatly described how the school, family, and peer constellation can operate. Parents and/or teachers inadequately cue and/or reinforce positive behaviour in youth; parents and/or teachers reinforce deviant behaviour by overattending to it; peer pressure reinforces problematic behaviour over prosocial behaviour. They recommended therapy be directed to adults as the prime mediators of adolescents and suggested evaluating it by measuring interactional changes in the family. The school may be charged with the responsibility of identifying predelinquency because it has the most daytime contact with the teenagers, and as a result, efficient school programmes should work within the school, while cooperating with the family and other social agencies (Van Dyke, 1970). They can incorporate such features as providing youth with same sexed teachers who represent desirable role models, providing adequate numbers of professionals in a preventive rather than remedial sense, adjusting course content to teach predelinquents more life adjustment skills, offering some job placement services as well as retraining dropouts, and utilizing the schools more during the summer break for recreational purposes. The delinquent or predelinquent who is faced with academic failure and dropping out of school is very often socially stigmatized through such
messages as not being bright, not having any decent employment prospects, and being unable to compete or compare himself with those who finish school. These stereotypes may even be more harmful to the adolescent's future than the act of dropping out of school because they obscure the real underlying issues. Lipsitz (1977) cited research that indicated that dropping out of school is not a phenomenon itself that can be reduced or eliminated. Instead, it seemed to be indicative of other problems that begin earlier and are evidenced by low aspirations, low self concepts, poor academic ability, and above average levels of delinquency. Current trends of attempting to keep older adolescents in school and working preventively with young children were scored for ignoring the problems that were occurring in the later school years.

The importance of schooling, aside from its intrinsic values, also consists of an opportunity for an adolescent to be among his peers while benefitting from an education (Cohen and Filipczak, 1971), and thus, this powerful influence should not be ignored when treating the delinquent or predelinquent. Successful modification of problem behaviour in children requires intervention in both home and school, since concentration in one area does not necessarily carry over to the other (Patterson, 1974; Patterson et al., 1973). Patterson (1974) successfully modified conduct problems in both home and school using programmes tailored for each. Home treatment consisted of teaching parents principles of behavioural management using didactic, group modeling, role playing, and contracting methods. School treatment consisted of direct behaviour modification, contingency management and contracting methods between the youth, the school, and the family. Teachers took over responsibility for administering the programme
once it was running smoothly. Termination and follow-up measures indi-
cated successful conditioning of prosocial behaviour in the school and
extinction of problem behaviour at home in a majority of cases of
socially aggressive problems such as fighting. Asocial problems such
as running away showed less success using the same external observation
data, but did indicate similar rates of success using parent report data.

Treatment of Delinquency

Another major part of the delinquency controversy concerns treatment
programmes. A survey of programmes indicates that intervention stra-
tegies range from directly modifying delinquent behaviour (O'Leary and
Wilson, 1975) to teaching socially reinforcing behaviour such as estab-
lishing strong personal relationships (Schwitzgebel and Kolb, 1964),
though recent emphasis seems to be on the former type (Stuart and Lott,
1972). Programmes can be classified as institutional settings, community
residential, community nonresidential, and preventive.

The soaring juvenile crime rate and accompanying concern places
extreme pressure on treatment programmes to account for the efficiency
of their methods, and this has led to the development of many new forms
of treatment. As public fiscal spending becomes more restricted, it
becomes necessary to justify the expense of large sums of money on
juvenile rehabilitation methods, and unfortunately, many of them have
not held up well under this close scrutiny (Davidson and Robinson, 1975).
The consternation created by programme failures breeds hesitancy at
developing new programmes for fear of additional failure, and thus the
dilemma of what to do with the juvenile offender becomes even more crucial.
It is not surprising that Dean and Reppucci (1974) have been critical of the neglect of juvenile corrections shown by social scientists in contrast to the attention given adult corrections, since the changes that accompany adolescence in general have also been greatly ignored by professionals (Delaney, 1977). "Despite the critical importance of this age group, the intellectual and economic resources of the research community are not being allocated to its study. In fact, where this age group is concerned, there appears to be no research community at present" (Lipsitz, 1977, p. xv; see Appendix B).

Dean and Reppucci have criticized many of the over four hundred institutions in the United States as being understaffed, oversized, evil, and unnecessary in the face of other more viable alternatives, and incapable of providing the wide range of services required by a diverse population of young offenders. The notions of treating an adolescent while imprisoning him are incompatible to them, and many procedures designed to replace existing ones are doomed because, instead of replacing old services, they are often used in combination with them. A moral issue also exists in that many treatment institutions require longer placements than outright criminal incarceration (Morris, 1976). Even with the expansion and modernization of many institutions, they still lag far behind the needs of adolescents and the demands of the communities, and the extent of these needs are often difficult to measure due to the fact that most apprehended delinquents never reach the courts (Lewis, 1977; Ohlin, 1973; Van Dyke, 1970; Amos, 1969).

Many institutional treatment programmes have failed for two apparent reasons. They do not come to grips with the contradictory influence of
peers and the family (O'Leary and Wilson, 1972), and they do not facilitate a smooth transition from institution to society (Burchard, 1973).

Institutions tend to bring out negative behaviour patterns on the part of staff and residents alike. Youths rarely receive the humane guidance and attention they have missed at home. They are challenged to escape by the very presence of iron bars, locks and gates. Furthermore, they often learn more destructive criminal techniques while in institutional commitment.

(Report of the Joint Committee, 1972, p.6)

Institutions, originally designed to reassure society by removing offenders from the public eye, deterring crime and rehabilitating offenders, have not succeeded (Burdman, 1969). Frequently, they have not dealt with the intended target population (Spears, 1977), and when they did, a considerable body of research indicates that a more skilled and experienced offender emerged (Bishop, 1973; Buehler et al., 1973; Ohlin, 1973; Empey and Lubeck, 1971; Amos, 1969). Much of this has been traced to inadequacies in the juvenile justice system (Lipstiz, 1977; Nietzel et al., 1977; Shah, 1975; Ohlin, 1973; Empey and Lubeck, 1971), and the tendency for institutions to permanently stigmatize youth (Empey and Lubeck, 1971). In Canada, judicial reform has been proposed (see Appendix A, The Young Offenders Act), but the government has, until now, balked at its implementation because of the projected staggering legal costs (Lewis, 1977). So the emphasis swings circuitously back to existing programmes.

One positive innovation in institutional programmes concerns the introduction of operant techniques (Nietzel et al., 1977; Dean and Reppucci, 1974; Bishop, 1973; Burchard, 1973) which has led to the establishment of more natural contingencies within the institutional environment (Burchard and Harrig, 1976). An example of such an innovative institutional
behavioural programme is the CASE II project that took place within the National Training School for Boys (Cohen and Filipczak, 1971). CASE II consisted of a twenty-four hour educational system within an institutional setting that utilized response contingent reinforcement, programmed instruction, and a curriculum designed to encourage academic success in adolescents with records of prior consistent failure. The programme was oriented to increasing the self-control in delinquents while deemphasizing the forced discipline characteristic of other institutions, and utilized a point system contingent on academic performance. Reintegration of delinquents into society was another facet facilitated by the CASE II staff who participated in parole negotiations and established such goal responses as the expenditure of earned points on appropriate things. The authors noted improved academic performance and reduced short term recidivism, and CASE II has become a prototype for other projects (Wellner, 1975). It should be noted, however, that even behavioural programmes have been unable so far to prevent recurring long term recidivism (Dean and Reppucci, 1974).

Burchard (1973) reviewed several other similar projects, and concluded that although behavioural programmes show promising potential, the problem of generalization of learned behaviour outside the institution was still an area of concern. The A-B-A reversal design clearly showed that removal of therapeutic contingencies results in some behavioural deterioration. Secondly, he pointed out that programmes such as CASE II produce some negative side effects, so that the best possible approach was not only the one that produced the greatest behavioural change, but also the one with the least negative side effects. Wahler et al. (1977, note 1),
also surmised that residential treatment programmes alone could not guarantee continued maintenance of therapeutic gains, unless the child's natural environment was also considered. Ohlin (1973) concluded that

...despite these promising new trends, there is still too little of every known service to deal with the problems of delinquent children and youth. Programs everywhere are underfinanced and understaffed. The juvenile justice system is still dominated by custodial concerns. It gets young people who have ordinarily been screened through many alternative sources of help and in the end commits them to traditionally large institutions for juvenile offenders often only milder versions of adult prisons. Clearly the trend in professional thinking is away from large institutions to small group homes and other forms of community-based services. The regimentation of residential institutions for juvenile offenders, the corrosive effects of inmate subcultures and peer group experiences have led most professional people to conclude that they do more harm than good. Thus, there has been increasing pressure for diversion of children from this system and a desire to create smaller community-based residential programs integrated with other treatment services available in the local community. At the same time, the problems of racial and ethnic group conflict that appear in the outside community are finding expression within large residential institutions as well. Concern about such problems has undoubtedly lent support to policies of decentralization into smaller community-based units. Finally, there is a growing professional consensus that the prevention and treatment of delinquency will only become effective when communities accept the obligation to develop the means to confront and deal with problems on institutional and personal failure where these problems are created. (pp. 189-190).

Community based programmes have been organized in response to the difficulties with institutions (James, 1975; Dean and Reppucci, 1974). They typically consist of programmes designed for specialized probation, nonresidential intensive therapy and residential programmes including group and foster homes. Behavioural procedures in these programmes have the advantages of involving the family, the school, and other agencies,
and offer the delinquent more options than traditional probationary or institutional programmes, while allowing him to retain more of his freedom. At risk, however, is the inability to control contingencies to the same extent as the institution, but this is likely offset by the availability of more varied and flexible forms of positive reinforcement. The presence of a peer group may be beneficial if group pressure to conformity can be directed to prosocial goals. The elimination of many authority figures found in institutions, which Empey and Lubeck (1971) felt may be the single more unifying factor of a delinquent inmate subculture, makes conformity to social norms more attractive to the adolescent, who is no longer pressured into rejecting these values. The normative emphasis of community programmes, however, may not be sufficient for more difficult youth to follow, and Empey and Lubeck felt the presence of local detention facilities could provide an effective sanction for community programmes to use, rather than expulsion from the programme and possible incarceration. In British Columbia, there appears to be an attempt to develop such a framework with the creation of facilities designed to hold repeated offenders who do not respond to other resources (Juvenile facilities slated, 1977).

Community programmes may be evaluated in more natural terms than institutions, and usually require less bureaucracy to administrate activities (Ray and Kilburn, 1970), plus they do not have to contend with a reintegration conflict since they need not significantly interrupt normal life schedules, and can provide alternate response choices in the presence of stimuli that previously elicited deviancy. This implies that the delinquent is more apt to appreciate the consequences of his own
actions by experiencing them in situations preselected to elicit certain behaviours without creating overdependencies on the corrections officers.

Warren's (1972) review of research comparing community with institutional programmes demonstrates the superiority of a community based approach, which includes a reduction in staff time commitments and increased post-treatment adjustment. In addition, much less financial resources are required to maintain these programmes, as several American states have noted in their conversion to community approaches (Phillips et al., 1975). The Kentfield's Rehabilitation Program (Davidson and Robinson, 1975; James, 1975), an example of this method, combined an educational approach with a behavioural emphasis on work performance and participation in programme activities, and resulted in improved work performance, reduced recidivism, and an increase in the number of youth returning to public school.

Another community programme, Achievement Place (Phillips et al., 1975) works with predelinquents and features extensive community participation in its family style residential treatment. Preliminary data from the built-in evaluation component reveals successful modification of target behaviours. However, not all community programmes report this much success. Empey and Lubeck (1971), while noting the advantages of their Silverlake community programme, were not able to demonstrate much outcome difference from institutional programmes. Furthermore, they encountered many of the obstacles facing community treatments that other researchers have reported (Lipsitz, 1977; Burdman, 1969). These centre primarily on a public preference for more secure institutions over less rigid kinds of programmes that keep offenders right in
the community. So, while community residential centres are demonstrating some positive effects, there are still several issues that must be resolved if they are to succeed.

A more recent innovation concerns an attempt to head off delinquency before it becomes a problem. Prevention programmes seek to determine where delinquency will occur, but unfortunately, as O'Leary and Wilson (1975) have stated, there is a lack of predelinquency programmes that are sufficiently structured to predict future delinquent acts. Many prevention programmes have developed faster than research on prediction of delinquency, so very little is available yet on the efficacy of these methods.

There is a very distinct philosophical overlap in working with delinquents focusing on prevention and treatment or control. According to Lipsitz (1977), the latter of the two can be viewed as

...an attempt to stop criminality or delinquency and also an attempt to forestall future offenses. If societal action is motivated by an offense that has already taken place, we are dealing with control; if the offense is only anticipated, we are dealing with prevention. (p. 183)

Another major distinction between control and prevention is a legal one in that, by virtue of committing and being apprehended for illegal activity, the adolescent must yield to a social restriction on his/her rights. The potential delinquent is not in such a position, so compulsory prevention programmes are less feasible. This has posed a problem for prevention programmes in maintaining participant involvement.

Preventive style programmes focus on youth who are displaying antisocial behaviour but who are not yet labelled as legally delinquent,
and are generally favoured for their lower administrative costs and the immediacy of their application to natural environments (Burchard and Harig, 1976). Lejins (1969) has outlined three forms of prevention:

1. **Punitive** programmes utilize the threat of punishment based on criminal law, either to prevent a repeated or a first offense.

2. **Corrective** programmes attempt to eliminate factors that cause, influence, or motivate delinquency using principles of the social sciences.

3. **Mechanical** programmes make the actual commission of delinquency more difficult by such means as increasing the visibility of the police.

Corrective programmes are encountering a current surge of popularity, and are of three types:

1. developing or modifying social policy affecting life styles, crime, and delinquency;

2. identifying symptoms of crime and delinquency and instituting preventive action; and

3. programming in high risk areas.

On the surface, prevention by inducing conformity to social norms should be far easier than reversing confirmed delinquent ideas, roles and associations, and strengthening nondelinquent roles and associations (Davidson and Robinson, 1975; Empey and Lubeck, 1970; Cavan, 1962). Empey and Lubeck (1970) see prevention as aimed primarily at improving the family's institutional ties with the community and reducing strain within the family system. Since only preliminary data is available that
indicates the potential success of preventive programmes (for example, Burchard, 1973), they have yet to be shown that they are significantly effective on a long term basis (Empey and Lubeck, 1970).

Empey and Lubeck (1970) developed a strategy of setting up preventive programmes that reflects an organized, logical method easily adaptable to a behavioural approach. The strategy consists of the following steps:

1. Defining a target population.
2. Developing procedures for identifying members of this population.
3. Setting precise objectives.
4. Establishing contractual agreements between all concerned parties including the programme administration, the financial backers, and the front line workers by outlining the goals, methods, and costs of each party's responsibilities.
5. Deriving intervention strategies appropriate to the target population.
6. Setting up an evaluation network.

The most difficult stage of the prevention process appears to concern the prediction of a future delinquent. Lipsitz (1977) and Shah (1975) are of the opinion that prediction is a risky process, especially since there does not exist any one profile of a delinquent. Although identifying a delinquent can be done with approximately 80% accuracy, the error rate of false positives, predicting delinquency that does not actually occur, and false negatives, not predicting delinquency that does occur, yields a population of significant size. It represents
offering expensive services to a subgroup not in need, and not providing these services to those who could benefit more from them. Youth who could benefit most are often excluded from preventive programmes for other reasons, such as their immaturity, irresponsibility, and so on (Report of the Joint Committee to Evaluate Programs Within the Department of Youth, 1972).

The change to a community oriented preventive style of dealing with delinquency requires that several social modifications occur in addition to those that centre around the school, and which were discussed previously. Van Dyke (1970) listed some of these:

1. the provision of additional recreational resources,
2. easier access to counselling and other social resources,
3. refocussing police training and providing law enforcement personnel with improved capabilities to handle minor problems such as family disputes at their source, and
4. providing adolescents with more involvement in local government to increase their pride in and decrease their alienation from the community.

Due to the resistance of the family, peer groups, the school, and other social agencies to such major social changes, initial attempts at prevention have often been abandoned in favour of strategies aimed at controlling delinquency within the justice system. However, one programme that does demonstrate a workable format is the California Youth Authority's James Marshall Treatment Programme (Amos, 1969). It is geared to people between the ages of fifteen and seventeen, emphasizes to adolescents the achievement of more positive acceptance of authority
and limits, the improvement of interpersonal effectiveness, dealing with conflicts of delinquent versus conventional systems, accepting responsibility for one's behaviour, developing good work habits, identifying specific adjustment problem areas, and learning how to handle stress adaptively. In addition to making social services more accessible to youth, it promotes the adaptiveness of prosocial behaviour, as well as dealing with individual problems.

Another programme emphasizing a community based approach to prevention is Project Contact in Richmond, British Columbia. This agency's administrative structure is strongly community based, with community front line resource people, parents of children who have been on the programme, and representatives of the community at large sitting on the board of directors. The agency is governed by a society composed of people who either reside or are employed in the community. Public membership in the society is encouraged, and strong operational ties have been developed between the agency, and provincial and local levels of government and social services, as well as the news media. This functional approach increases the community's awareness of the service and also stimulates community input into the structure of the programme. The project works with predelinquents in the ten to sixteen year age range from all socioeconomic classes referred primarily through school psychologists and counsellors, and who have been identified as being at risk for future delinquency due to problems with home and/or school behaviour. Project Contact emphasizes improving interpersonal effectiveness and social skills, community resource awareness and involvement, the importance of prosocial behaviour, and the establishment of
cooperation and positive communication between the adolescent and his home and school. Using a novel approach, it offers lay counselling to both parents and youth including behavioural approaches and various recreational and social activities on individual and group bases. Preliminary data indicate moderate to extensive success for most cases in both the home and school at modifying social ability, reducing acting out behaviour, increasing acceptance of responsibility, and raising self-esteem (Ramer and Best, 1976). Furthermore, parents of youth on the programme informally indicate considerable satisfaction with the personal involvement of project workers in the lives of the youth and their families (see Appendix D).

Contingency Contracting

Community treatment and preventive programmes have been turning to behaviour therapy with success because, as Liberman (1970) stated, it involves a learning experience that changes family members' styles of dealing and communicating with each other. Their motivation and response to treatment can be strongly affected by the balance of rewarding and aversive consequences of one's behaviour to other family members, and thus, behaviour therapy focuses on changing this balance so that rewards are given more often for desirable cooperative and communicative behaviour. One strategy that reflects this principle and is well-suited for control and preventive styles of handling delinquency is contingency contracting. In North Carolina, for example, one delinquency control programme used contracts and found that contract performance was over 60% for seventy-two of seventy-six referrals
(James, 1975). Empey and Lubeck (1971) felt contracting could produce through self-management, the cohesiveness and motivation required by community treatment populations more effectively than unilaterally imposed sanctions.

As an interventive approach, contingency or behavioural contracting emphasizes:

1. helping the adolescent initiate specific actions,
2. establishing clear cut criteria for achievement, and
3. providing mechanisms for clarifying the consequences of engaging in a certain behaviour, thus increasing the predictability of reinforcement exchange.

Patterson et al. (1973) felt the general goals of a contract are to teach parents and children to be clear in specifying desirable and undesirable behaviours and consequences of each, and to teach children that parents can react predictably. From a therapist's viewpoint, the goal of contracting is to achieve a successful contract, while its method is a vehicle for reaching other therapeutic goals (DeRisi and Butz, 1975). Weiss et al. (1974) felt a contract has reached its goals if it has identified positive and negative reinforcing behaviours, established some value of the negative target behaviour, and set up rewards and penalties so they reliably follow compliance and noncompliance with the contract. A contract provides a written record of agreement and an opportunity to evaluate progress by comparison against the terms of the agreement. It also provides the client with a clear cut set of rules he has helped to establish. By making roles of each party clear, chances are increased that each will fulfill their responsibilities and at the same time, add
stability to the relationships of those concerned. As a therapeutic tool, records of past contracts are useful in deciding when to give up unsuccessful strategies, and in selecting strategies that may work in cases similar to past successes. Contracting shifts the focus of attention from fault finding and name calling to more constructive ways of problem solving.

Contingency contracts are of two basic forms, individual and group. Individual contracts are simple agreements made by an individual to himself to effect some behaviour change in exchange for some form of reinforcement. A group contract may be made between a client and a therapist, or between members of a family. Group contracts may be one of two types, unilateral, where only the obligations of one party are stipulated, or bilateral, where the mutual obligations of all parties are specified. Bilateral contracts are especially useful in working with families of delinquents who have an interactional problem focusing on what is not liked or not wanted. Behavioural contracting helps to reverse this cycle by emphasizing mutual positive experiences that can improve familial relationships, and concentrating on the present with an eye to the future, rather than getting caught up with past events, fault finding or accusations. Extended therapist involvement may not be required, although this will vary from case to case.

Contingency contracting can be done either verbally, or in a more formal written format. Written contracts, however, provide greater clarity and specificity (Gelfand and Hartmann, 1975), and encourage greater commitment on the adolescent's part to initiate behaviour change, as well as discouraging irregularity in parental demands and
distribution of reinforcements. Written contracts also provide a more effective strategy in shifting behaviour management from external control to self-management, which can be viewed as an ultimate goal of contingency contracting (Homme et al., 1970). Stuart and Lott (1972) felt contracting may be a good training source in conflict resolution. Kifer et al. (1974), developed a programme of conflict resolution which consists of self-management approaches to communication, identification of issues, generation of alternatives, and providing feedback, which they found successful. So contracting and negotiation training appear to be compatible strategies in conflict resolution. Kanfer et al. (1974) have found that explicit written contracts were much more likely to be fulfilled than implicit verbal agreements, even in the completion of discomforting actions such as the cold presser test. Klingner (1974) has also found that the use of explicit contracts improves performance in college students because of a clearer statement of goals and a greater subject commitment to fulfill achieved compromises. Gelfand and Hartmann (1975) advised that when contracting, a written script be followed which describes the setting, equipment, and procedures to be used to ensure consistent intratherapist intervention.

The contingencies of a contract can be drawn up in two ways (Weiss et al., 1974). The first way is on a quid pro quo basis, which outlines an explicitly controlled contingency that the targeted behaviour change of one party will be followed by the desired behaviour change of the other. This method is advantageous because it follows the operant paradigm of reinforcing one response with the emission of a related target behaviour. However, the responsibility for the initiation of
of change is put squarely on one partner, and if they fail, the family situation may regress to the initial conflictful atmosphere. Weiss et al. advised that the *quid pro quo* method not be used immediately unless there is a foundation of prior successful exchange. Stuart and Lott (1982) also found contracting to be most successful in families with some history of social facilitation now experiencing a conflict of immediate urgency, and who were seeing a therapist skilled in negotiating compromises. The second method of contingency arrangement is on an *implicit* level. Each partner agrees to change a behaviour separately without an explicit contingency, and the responsibility for initiating change is equally distributed. A system of rewards and penalties can be utilized to enhance the probability of success, but the system does not consist of reinforcers that are themselves problem behaviours. For example, the adolescent may agree to wash supper dishes three nights a week; the parents agree to respect their son's privacy in his room. If the adolescent fulfills his task, the parents will extend the weekend curfew one hour. If the parents fulfill their task of respecting the privacy of the teenager, he will turn the volume of his stereo down. In this way, one part of the contract could succeed even if another part fails. However, a failure in one part could still lead to feelings of bad faith which might doom the remainder of the contract. Penalties should only be used if there exists a means of providing rewards for the performance of desired behaviour. Also, contingencies should not be set up so that their failure leads to a worsening of the family situation.

Several sources have outlined specific rules in establishing contracts (DeRisi and Butz, 1975; Gelfand and Hartmann, 1975; Kanfer
and Goldstein, 1975; Weiss et al., 1974; Homme et al., 1970). They include the following issues:

1. target behaviour selection,
2. target behaviour assessment and monitoring,
3. reinforcement selection and schedules,
4. choice of reinforcement dispensers,
5. contract ingredients,
6. contract monitoring,
7. contract negotiation, and
8. contract extension.

There are five clearly identifiable assumptions subsumed under prerequisites for effective interpersonal exchanges (Kanfer and Goldstein, 1975; Stuart, 1971; Homme, 1970) that comprise the theoretical underpinnings of contingency contracting:

1. Positive reinforcement is a privilege to be earned, not an unquestionable right in interpersonal exchanges.
2. Setting reasonable standards for obtaining reinforcement is not punishing or restrictive.
3. Effective interpersonal agreements are mutually inclusive, that is, receiving rewards is a function of dispensing them.
4. The value of an interpersonal exchange is a direct function of the range, rate, and magnitude of the positive reinforcement present in this exchange.
5. Rules create freedom in interpersonal exchanges, since predictable reinforcement contingencies permit an opportunity to choose among behaviour options.
Cantrell et al. (1969) introduced a cautionary note that, when using contracting, the adolescent must be capable of performing the identified behaviour, and is not exhibiting any problematic behaviour for which a different form of intervention is required. They noted that the strongest motivation occurred in parents who had exhausted all alternative forms of problem remediation. Parental motivation should be ascertained before contract initiation to avoid inconsistency in fulfilling contractual obligations, and to prevent any increase in deviant behaviour if the contract is abandoned when the adolescent is testing it most severely. Wahler et al. (1977), noted that therapeutic gains with children were lost within one year of therapy when cases were referred by court and school officials, presumably due to low parental motivation to change the child's behaviour.

There are three conceptual models of behavioural contracting as reviewed by Weathers and Liberman (1975b). The first one, called the exchange model, is essentially involving the principles of effective social interaction described above. The second, or triadic model, involves a hierarchy of roles for intervention with a family. It may be conceptualized as follows:

\[
\begin{align*}
\text{CONSULTANT} & \rightarrow \text{MEDIATOR} \rightarrow \text{TARGET} \\
\downarrow & \downarrow & \downarrow \\
\text{THERAPIST} & \rightarrow \text{PARENT} \rightarrow \text{ADOLESCENT}
\end{align*}
\]

Tharp and Wetzel (1969) viewed the therapist as a consultant to a person having control over natural, powerful, and immediate reinforcers in the life of the target person. This model seems logically related to a unilateral approach to group contracting. The third and final model, which may be labelled as negotiation and interpersonal skill training,
involves replacing these deficient skills in troubled families. Negotiating, bargaining, and empathy are modelled and reinforced by the therapist during contract formulation. How effective this approach is will depend on the degree to which these skills are generalized after contract expiration and to noncontractual problem solving.

Explicit structured methods of contracting have been developed. Weathers and Liberman's (1975b) Family Contracting Exercise, based upon the third conceptual model, minimizes the therapists' role and places the initiative for change on the family. Blechman's (1974) Family Contract Game is especially useful for families with weak problem solving skills because it deals with only one issue per session, and all family members are given equal opportunity to present issues for discussion. The utility of the Family Contracting Exercise by itself has not been clearly established over a variety of goals (Weathers and Liberman, 1975a) but it may be effective in producing an interpersonally facilitating environment for problem resolution. Blechman (1976) has successfully improved on task problem solving behaviour using a single subject reversal design, and noted generalization of this ability to other family members.

Kanfer and Cox (1974) view the contingency contract as manipulating the operating contingencies so that incentives to write them, that is the rewards and punishments to complete the contract, become internalized and that the completion of the contract is a fulfillment of a self-established criterion. Establishing positive precedents of honouring mutual obligations in the family increases the likelihood of future contract fulfillment. Kanfer and Cox outline the variables that tend to
influence contract fulfillment:

1. clear specification of procedures and goals,
2. reinforcing activity rather than statements of intent,
3. having low probabilities of performing unpleasant tasks,
4. having had experience with prior contract success, and
5. establishing a written contract as opposed to a verbal agreement.

One very distinct advantage of contracting is the deemphasizing of extended therapist client contact (O'Leary and Wilson, 1975). In one study, Stuart and Tripodi (1973) used contracts of fifteen, forty-five, and ninety days duration, and actual total therapist involvement was only ten, sixteen, and twenty-eight hours respectively. The authors suggested that short term treatment tended to be more effective with incarcerated youth than long term, and contracting provided an effective short term approach. Cantrell et al. (1969) viewed contracting as a beneficial method of utilizing teachers and parents as contingency controllers and monitors where professional intervention was not possible. Blechman's (1974) contracting format does not even require the presence of a therapist once the instructions on its use are given to the family and understood.

Critics of contracting, as with other behavioural methods, point to bribing a person to perform some behaviour they should be normally doing. Weathers and Liberman (1975b) and Weiss et al. (1974) have dealt with this issue in the following manner. Bribery involves paying a person to do something illegal or immoral while a reward is a reinforcement for doing something socially acceptable. All behaviour is governed by its consequences, and the family system is one where some behaviour is done
because of its desirable consequences and other behaviour is not done because of its negative consequences. The problematic family has lost some or all of this organization so that the relationships of behaviours to consequences have become obscured. Behavioural methods such as contracting attempt to realign the organization so that behaviours once again lead to predictable consequences. Working with reinforcers is a method of skill training in using familial gratification at a basic level that has been lost over the course of the conflict development.

The literature on the success of contingency contracting is generally not methodologically consistent and the data do not appear concordant, so as a result, the utility of the approach is not yet fully realized. A review of some of this literature does indicate a positive trend for the method's potential usefulness.

Contingency contracting has been used successfully in marital therapy (Miller and Hersen, in press) and in modifying drug related behaviour (Polakow and Doctor, 1975). A twelve month follow-up in the latter study indicated continued consistent response performances. Eyberg and Johnson (1974) were able to produce greater parental cooperation in attending therapy sessions and completing therapeutic assignments using therapeutic contracts with the parents of acting out children than in a no-contract group. Although the parents of both groups reported dramatic changes following therapy, external observation procedures did not really assess directly the problem behaviour in question.

Weathers and Liberman (1975a) found that the support for contracting with juveniles is scarce, but a trend is emerging that indicates the
approach is at least no worse than other currently used strategies, and may quite possible be more efficient. Although they found that, of verbal abusiveness, poor compliance in performing home tasks, poor respect of curfews, and low school attendance, only verbal abusiveness was successfully modified using contracting, their methodology did not permit a complete analysis of all the categories. They concluded that the effectiveness of contracting would be increased in families with some communication skill training, and if therapy took into account peer influence on the adolescents. With families of less delinquent adolescents, contracting could be more effective if used with other strategies.

Patterson and Reid (1970) found contracting therapy had a lower recidivism rate among delinquents than either client-centered or psychodynamically oriented groups. They attributed this success to an increased dialogue and quality of interaction between the juveniles and their families. Stuart's et al. (1976), data indicates a higher success rate in a contract therapy group over a placebo control group, and a greater preference by parents for a contracting approach, but they admitted that success may be enhanced further by using a multiple intervention package. They also acknowledged that the conservative nature of their data raised some doubt about the finality of their conclusions.

Burchard and Harig (1976) found contracting coupled with another therapy, in this case transactional analysis, resulted in shorter institutional placements, better rapport between staff and youth, and a greater liking of the programme by the adolescents than a programme using contracting alone. They suggested that contracting would be more beneficial for youth unable to develop insight or responsibility under
other forms of therapy. They concluded that reinforcing the nonoccurrence of deviant behaviour has the advantage of conditioning competing responses as opposed to the use of aversive control of disruptive behaviour which has the danger of negative side effects. Weiss et al. (1974) stated that the contract should be formulated in positive terms of rewarding the acceleration of behaviour, not in the negative terms of deceleration of behaviour, which they felt has been the failure of institutions. Schwitzgebel and Kolb (1964) found that delinquency was best counterconditioned by reinforcing competing behaviours, not reinforcing the decrease of problem behaviour. Empey and Lubeck (1971) reported that, although providing rewards for the nonoccurrence of delinquent behaviour was not logical socially, one way of encouraging adolescent identification with nondelinquent groups was to provide rewards for the deceleration of delinquent behaviour to counteract the salient reinforcement of delinquent group members for asocial behaviour. They advocated a two stage sequential process: reward nondelinquent behaviour first, and then, once delinquent youth are introduced into legitimate institutional activity such as school and work, to reward positive achievement. These recommendations were made because their residential population tended to perceive punishment more readily than rewards, and expressed a desire for more positive reinforcement. Burchard and Harig (1976), in reviewing several other projects that used contracting, concluded that contracting was useful but not ideal when used in isolation.

Stuart and Lott (1972) evaluated contracting in three groups varying in duration, and found that outcome was not related to duration,
and only three of ten characteristics of the contracts were accurate predictors of outcome: inclusion of school attendance and performance standards tended to increase school attendance, parental attitudinal agreement increased as contracts were longer and included school performance, and school attendance increased if the number of privileges and bonuses exceeded the number of responsibilities and sanctions. They also found that the presence of certain therapists influenced the type of contract made, so this may be a source of variance that needs to be controlled when evaluating contracting using different therapists.

DeRisi (1971) used contracting in conjunction with a token economy with juvenile offenders and was successful in modifying living routines, rule compliance, and staff cooperation. He also found a lower recidivism rate in the contracting group over a control group. Cantrell et al. (1969) found in two cases, that school performance and attendance could be increased following contracting, but that parents should be reinforced to continue with the contracts until a consistent behaviour pattern emerged. Their study used self-reports, and they urged that the contracting technique be subjected to additional experimental analysis.

Stuart's research as cited by Weathers and Liberman (1975a), did not find contracting any more efficient than other approaches, but his methods were criticized and could have produced suprious results. Tharp and Wetzel (1969) also did not find contracting very effective, but their data were also uncontrolled. Wahler et al. (1977), used formal contracting with families referred to their programme by parents or school officials. Limiting contracts to only those behaviours occurring in the presence of the family, they found significant improvement among
low risk families for oppositional and work deficiency problems that were maintained over a one year follow-up. These gains were not evidenced by a higher risk population. Only minimal short term gains were found in this group for work deficiencies, and the only variable to show significant change was the improvement of parental attitudes toward the children during treatment. No generalizations to nontargeted behaviour problems were observed.

Thus, it is evident that the therapy and methodology of contingency contracting is evolving to a relatively sophisticated level, but unfortunately, the evaluative literature has not kept pace with this progress. The most frequent indication to date is that contracting's utility is greatest when supplemented with other interventive methods, but any advantages of its use by itself are questionable (Weathers and Liberman, 1975a). Little evidence exists, however, on the efficacy of contracting with preadolescents and adolescents especially when the contracting is coupled with ongoing preventive treatment programmes.

In reviewing the research on the causes and treatment of delinquency, several empirical questions emerge. Can family dynamics and the influence of school environments on preadolescents and adolescents be modified as precursors to the onset of delinquent behaviour? In particular, can this modification occur at a community level, preferably as a preventive strategy, with a minimum of life disruption? Can this modification be efficiently and successfully performed using specific principles of operant psychology, in particular contracting, and, if so, how should these principles be best applied?

The present investigation attempted to answer some of these issues
by assessing the relative effectiveness of two forms of contingency contracting that were part of a service package provided by a community based nonresidential agency. It was hypothesized that formal contracts would facilitate greater success in achieving treatment goals than implicit contracts, and would require less staff time commitment for direct counselling. Those clients that would participate in formal contracting were expected to show more positive change in communication and interaction with members of their families as a result of the more structured concentration on negotiation, reciprocity, and consistency in behavioural management techniques. It was anticipated that subsequent to these changes, these families would reflect a greater convergence in their perceptions of the family unit than families participating in implicit contracting. Furthermore, it was expected that the youths of families engaging in formal contracting would show more positive behavioural changes in school. These hypotheses were made with the conviction that formal contracts inspire greater commitment on the part of the family to initiate change, and to shoulder more responsibility for the successful management of their environment. As problematic behaviours were successfully modified and the exchange of reinforcers became more mutually satisfying, it was anticipated that the home environment would become less coercive, and family relationships would become more harmonious. Implicit verbal contracts were not expected to generate the same degree of commitment, hence generalized improvement was not anticipated to occur to an equivalent degree as in the formal contracting group. With the greater change in the formal contract families, it was felt that they would indicate more personal satisfaction with their intervention programme.
Subjects.

Over the course of an eight month period, twenty-seven referred families of youths between nine and 16 years of age were selected for observation as they were accepted by Project Contact of Richmond, British Columbia. Referral problems to the lay agency include behavioural difficulties in school such as truancy, acting out, and peer relational difficulties, or for behavioural problems at home such as defying parental limits, acting out, and not fulfilling responsibilities, or in some cases, for legal complaints such as loitering, or first offenses in shoplifting, vandalism, and so on.

Project Contact (see Introduction) is a community based agency staffed by paraprofessionals offering a nonresidential service to the population of Richmond. Referrals come primarily from public schools, as well as the local health department, and unified family court, and are accepted only upon parental consent. When a referral is made, the family is seen by agency staff initially on an assessment basis. During this one month period, the programme techniques are explained to the family, and the circumstances surrounding the referral problem are observed. When this period is complete, the family is usually accepted into the programme for a six month period. If acceptance is not made, the family is referred immediately to a more appropriate resource. One of two female family counsellors is assigned to the referral based upon location of the family residence, and one of six youth counsellors of the same sex as the youth is assigned as an available slot in their case.
load opens up. In most cases, the youth workers develop a close working rapport with the youth, discussing various problems affecting the youth, aiding in the formation of peer bonds, and orienting the youth to community resources. Both family and youth workers serve as role models to the family for such skills as listening and communicating, negotiating solutions to problems, setting guidelines on behaviour, and following through on identified and accepted behavioural limits. Accompanying all referrals is a regular profile intake form describing the family demographically, outlining the referral circumstances, listing family strengths and problematic areas, and identifying any other resources concurrently involved with the family. Project Contact had been using for the eighteen months prior to the current investigation, informal contracting methods accompanied by goal attainment monitoring, and achieving consistently positive results with them (Ramer and Best, 1976).

The fifteen male and seven female subjects were assigned using a blocking method (Campbell and Stanley, 1963) to one of two groups, a formal contract group (FC), and an informal contract control group (IC) by matching them on age and sex of the youth, the presence of one or two parents in the family, and the estimated socioeconomic status (SES) of the family based upon income, education, and vocation. For each matched pair, the first subject was randomly assigned to one of the groups, and the second subject was assigned to the other group. The mean ages of the FC and IC groups were 12.9 and 12.7 years respectively. A breakdown of the referral problems for each group indicates equivalence between the two groups (see Table 1). Seven of the eleven pairs were equivalent on all four of the matching criteria, two pairs were
Table 1

Incidence of Referral Problems by Group

<table>
<thead>
<tr>
<th>Referral Problem</th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour problems at home</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Behaviour problems at school</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Low self-esteem</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Peer relations</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Running away</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
equivalent on three criteria (age, SES, and number of resident parents), and two were equivalent on two criteria (sex/number of parents, and age/SES). Statistical comparison of the two groups revealed no significant differences between the groups prior to the commencement of contracting (see Results). A no-treatment control group was not used in this study because the agency is committed to a policy of immediate intervention, and the staff felt it was not ethically possible to delay or prevent a family's participation in the programme when immediate intervention is indicated.

Materials.

In addition to the regular agency information gathering methods, two parallel structured behavioural questionnaires were developed to assess the family environment (see Appendix C). The parental form consisted of thirty-three items, of which twenty-three were presented using a five point Likert scale response format. These items were drawn from a larger pool of items previously sorted by eleven impartial raters into subjective categories. Only those items receiving 75% or more interrater agreement as belonging to the same category were retained for the questionnaire to preserve construct validity. Four categories emerged from the sorting and were identified as subscales labelled communication and cooperation in the home (CC), frequency of presenting problems (PP), school performance of the youth as perceived by the parents (SP), and home ratings of family atmosphere (HR). The remaining ten items on the parental form were selected from Nowicki's internal-external locus of control scale (Nowicki and Duke, 1974), and constituted the internal-
external scale (IE). The youth form of the questionnaire consisted of parallel versions of the CC and HR scales of the parental form. The addition of the SP and PP scales in the parental form was intended to measure the extent of the parents' awareness of problems pertaining to their children. These methods of assessment were found to be useful because they served to document any negative attitudes among family members that researchers have found to pose obstacles to family therapy (Wahler et al., 1977), as well as aiding in the understanding of programme processes which have been considered important in field experimental models (Empey and Lubeck, 1971).

A progress monitoring format using goal attainment methods (see Appendix C) was adapted from the agency's methods, and was used by the youth workers to document the family's progress towards identified treatment goals, their current levels of communication, cooperation, and tension in the home. This instrument was also designed using a five point Likert response format, and was to be completed weekly on the basis of the workers' contact with the family. Appended to the form was a client satisfaction with treatment rating to be completed using another five point scale.

To measure the youths' performance changes in school, a modified version of the Hahnemann High School Behaviour (HHSB) rating scale (Spivack and Swift, 1973) was completed by the teachers of the referred youth. (See Appendix C). The modifications consisted of requesting the teachers to rate the youths' changes in behaviour over the time interval corresponding to the treatment period.

Finally, youth counsellors kept logs consisting of descriptions of
of each client contact, location, and duration. Total times spent with each youth plus time devoted exclusively to counselling with the parents and/or youth were noted for comparative purposes.

Procedures.

The contracting techniques and assessment devices used in this study were piloted with the first five subject families and then modified as necessary for observation of the remainder of the sample. These families, although they do not appear in the final analysis, were not denied any service normally provided by the agency. As is a regular policy of the agency, all families were preinformed of the planned techniques that would be used, and though they were not told of the exact empirical nature of the investigation to prevent any reactive effects, none objected to the use of any of these methods.

Upon acceptance into the programme and after the assignment of case workers, the parents of the referrals were interviewed privately by the family workers using the questionnaires, and responses were recorded immediately. At the same time, the youth workers interviewed the youth using the youth form of the questionnaire. All family members were informed that their answers would not be divulged to the rest of the family, and would be kept confidential by the staff. In order to measure the degree to which the parents' and youths' perceptions coincided, pre-treatment difference scores were computed by calculating arithmetic differences between the CC scores for the parents and for the youth \((D^{CC})\) and between the HR scores \((D^{HR})\). The agency reported that the interviews and questionnaires were extremely useful in identifying in
the families many issues of concern that would have gone unnoticed, as well as providing an opportunity and a vehicle to discuss them with the family.

Within an average of two weeks after completing the interviews, the families participated in their respective contracting sessions. Utilizing principles derived from the approaches of Weathers and Liberman (1975b) and Blechman (1974), formal contracts of a group, bilateral *quid pro quo* type were negotiated and written up with the FC families. The family/youth worker team assisted the family members in identifying target goals, desired reinforcers, bonuses, and sanctions. A copy of the dated and signed contract was left with the family and they were requested to post it in a conspicuous place in the house. The counsellors followed up with the family to assure they complied with this request, and no exceptions were noted. The FC contracts were designed to expire after one month's duration, and upon any family member's request or on the basis of very poor progress as monitored by agency staff, the contract would be renegotiated. This occurred in only one case. Upon expiration of the contract, each family was informed of their options to continue with the contract, negotiate a new one, or discontinue its use altogether. However, only the initial month was monitored for this investigation.

With the IC group, implicit verbal contracts were discussed in a manner parallel to formal contracts, but no formal contracts were drawn up, nor was there any provision made to switch to a formal contract during the observation period. This period was also of one month's duration, and upon its completion, these families were also informed of
options open to them for continued treatment. The investigator par-
ticipated as an impartial negotiator in approximately equal amounts of
contracting session discussions with agency staff for both groups to
ascertain that the recommended strategies were used appropriately, as
well as participating equally with both family counsellors to assure
consistent application of the methods. Regular case conferences twice
weekly were held to review the potential contract for each family, and
changes were made when necessary before the contracts were negotiated.
All youth were seen by agency staff at least once a week, and regardless
of the type of contracting used, none were excluded from any of the
agency's peer or recreational activities.

At regular intervals of six to eight days, the youth workers
completed a progress form for each family, and following the fourth
report corresponding to the end of the observation period, the family
rated their satisfaction with the intervention procedures to that point.
Subsequently, a second set of interviews were conducted in the same way
as the pretreatment set, and post-treatment difference scores were cal-
culated using the arithmetic differences between the adult CC and youth
CC scores (D'CC) and adult and youth HR scores (D'HR). A difference
score coefficient was obtained by computing the absolute difference
between DCC and D'CC (DDCC) and DHR and D'HR (DDHR).

Concomitant with the second set of interviews, the teachers of the
youth were asked to complete the HNSB scales. For those students in
high school, two teachers completed a form for each student, and a mean
of the ratings was calculated for each scale. For elementary school
students, only the home room teachers completed a form. All the teachers
were preinformed that the youths in question were with Project Contact, but no details of the cases, treatments, or goals were discussed to prevent prejudicial ratings by the teachers.
Results

To test the adequacy of the subject matching, a Hotelling's multivariate $T^2$ (Winer, 1971) was conducted on the pretreatment administrations of the adult CC, SP, PP, HR, and IE scales and the youth HR and CC scale scores for both groups. It failed to achieve statistical significance confirming a lack of differences due to matching prior to the onset of contracting.

A repeated measures multivariate analysis of variance (Finn, 1972) was performed on the interview scales data (see Table 2). It revealed significance on the within subjects factor confirming hypothesized positive change over time, but for both groups. The subject by treatment interaction was not significant, indicating that no major differences in reported changes existed between the FC and IC families. Table 2 shows the results of follow-up univariate repeated measures analyses of variance on each individual scale. Three of the five adult scales (CC, HR, and PP) changed significantly over time for both groups in a positive direction. A fourth scale (IE) had a significant subject by treatment interaction, with the IC parents reporting a higher internal locus of control score on the post contracting interview than on the pretreatment assessment, and the FC parents indicating a slight decrease in the internal locus score (see Table 3). None of the scales were significant on the between groups treatment factors. For the youth scales, the only statistically significant change was in the HR scale on the within subjects factor. However, the youth of both groups did report some improvement on both measures, with the IC group indicating
Table 2
Summary Table Multivariate/Univariate Repeated Measures
ANOVA on Interview Data

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\* \( p < .05 \)  
\** \( p < .01 \)  
\*** \( p < .001 \)
Table 3
Group Means on Interview Data

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a slightly greater change. There were no significant differences on the convergent scores, but a trend was present showing that, with the exception of the HR scales in the IC group, there was slightly more incongruity following treatment between the perceptions of the parents and of their children. This was likely attributable to the tendency of the parents to report more change than the youth following therapy.

On the progress report measures completed by the agency staff, univariate repeated measures analyses of variance indicated that both groups progress significantly towards their first two treatment goals, approached significance ($p < .06$) on the third goal, and improved significantly on the family communication measure (see Table 4). They also tended to improve on the tension and cooperation scales. There were no significant differences between group factors or subject by treatment interactions. Table 5 shows that the FC group tended to improve more quickly, but by the end of the fourth week of contracting, the IC families had caught up and were actually slightly ahead of the FC group in their rates of progress.

Multivariate repeated measures analysis of variance on the HHSB scales as completed by the teachers revealed that there was statistical significance on the within subjects factor, indicating positive change in the behaviour of the youth in school over the time corresponding to treatment (see Table 6). The lack of significant subject by treatment interaction showed that once again, there were no differential improvements between the two groups. Follow up univariate analyses of variance confirmed that on nine of the thirteen scales, both groups changed significantly in a positive direction. Significant change was present on
Table 4
Summary Table Repeated Measures ANOVAS on Progress Report Data

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*p < .05
**p < .01
***p < .001
Table 5

Group Means on Progress Report Data

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Table 6a
Summary Table Multivariate/Univariate Repeated Measures ANOVAS on HHSB Scales

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<td>9.11</td>
<td>1/18</td>
<td>7.01</td>
</tr>
<tr>
<td></td>
<td>Ss X Treatment</td>
<td>1.73</td>
<td>1/18</td>
<td>1.33</td>
</tr>
<tr>
<td>12. Disturbance Restless</td>
<td>Treatment</td>
<td>263.64</td>
<td>1/18</td>
<td>1.93*</td>
</tr>
<tr>
<td></td>
<td>Within Ss</td>
<td>25.31</td>
<td>1/18</td>
<td>6.08</td>
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<tr>
<td></td>
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<td>3.03</td>
<td>1/18</td>
<td>.73</td>
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</tbody>
</table>

*p < .05  **p < .01  ***p < .006
Table 6b
Summary Table Multivariate/Univariate Repeated Measures ANOVAS on HHSB Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Source</th>
<th>Mean Square</th>
<th>df</th>
<th>f-ratio</th>
</tr>
</thead>
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<tr>
<td></td>
<td><strong>Within Ss</strong></td>
<td>6/13</td>
<td></td>
<td>3.12***</td>
</tr>
<tr>
<td></td>
<td><strong>Ss X Treatment</strong></td>
<td>6/13</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>Treatment</strong></td>
<td>111.09</td>
<td>1/18</td>
<td>1.40***</td>
</tr>
<tr>
<td></td>
<td><strong>Within Ss</strong></td>
<td>24.20</td>
<td>1/18</td>
<td>13.65</td>
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<tr>
<td></td>
<td><strong>Ss X Treatment</strong></td>
<td>.40</td>
<td>1/18</td>
<td>.22</td>
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<tr>
<td></td>
<td><strong>Reasoning</strong></td>
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<td>Univariate</td>
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<tr>
<td>1. Reasoning</td>
<td><strong>Treatment</strong></td>
<td>15.73</td>
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<td>.69</td>
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<tr>
<td></td>
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<td>1/18</td>
<td>2.05</td>
</tr>
<tr>
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<td>1/18</td>
<td>1.04</td>
</tr>
<tr>
<td>2. Originality</td>
<td><strong>Treatment</strong></td>
<td>30.31</td>
<td>1/18</td>
<td>1.52</td>
</tr>
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<td><strong>Within Ss</strong></td>
<td>2.45</td>
<td>1/18</td>
<td>2.58</td>
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<td><strong>Ss X Treatment</strong></td>
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<td><strong>Anxious</strong></td>
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<td></td>
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<tr>
<td></td>
<td><strong>Treatment</strong></td>
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<td>1/18</td>
<td>.02</td>
</tr>
<tr>
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<td>1/18</td>
<td>1.66</td>
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<td>2.36</td>
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<tr>
<td>5. Anxious</td>
<td><strong>Producer</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Treatment</strong></td>
<td>194.14</td>
<td>1/18</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td><strong>Within Ss</strong></td>
<td>20.00</td>
<td>1/18</td>
<td>2.06</td>
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<td></td>
<td><strong>Ss X Treatment</strong></td>
<td>36.82</td>
<td>1/18</td>
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</tr>
<tr>
<td></td>
<td><strong>General</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Quiet</td>
<td><strong>Withdrawn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Treatment</strong></td>
<td>2.83</td>
<td>1/18</td>
<td>.06***</td>
</tr>
<tr>
<td></td>
<td><strong>Within Ss</strong></td>
<td>36.45</td>
<td>1/18</td>
<td>13.36</td>
</tr>
<tr>
<td></td>
<td><strong>Ss X Treatment</strong></td>
<td>.93</td>
<td>1/18</td>
<td>.34</td>
</tr>
</tbody>
</table>

* \( p < .05 \)

*** \( p < .006 \)
all scales that reflected interactional behaviour (scales 3, 4, 8, 9, 10, 11, and 12), and on two of the five independent behaviour scales (1, 2, 3, 6, 7, and 13). Significant subject by treatment interactions were present in scales four and ten and on these measures, the IC subjects tended to improve more than the FC group (see Table 7).

There were no significant differences found between the two groups on the client satisfaction with treatment and the staff time commitment measures as assessed by t-tests of the differences between means.
Table 7
Group Means on HHSB Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>FC</th>
<th>IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Verbal Interaction</td>
<td>1.39</td>
<td>.95</td>
</tr>
<tr>
<td>4. Teacher Rapport</td>
<td>.11</td>
<td>1.86</td>
</tr>
<tr>
<td>8. Poor Work Habits *</td>
<td>-2.11</td>
<td>-1.45</td>
</tr>
<tr>
<td>9. Lack Intellectual Independence *</td>
<td>-.72</td>
<td>-2.36</td>
</tr>
<tr>
<td>10. Dogmatic Inflexible *</td>
<td>.17</td>
<td>-1.14</td>
</tr>
<tr>
<td>11. Verbal Negativism *</td>
<td>-1.00</td>
<td>-.41</td>
</tr>
<tr>
<td>12. Disturbance Restless *</td>
<td>-1.56</td>
<td>-.73</td>
</tr>
<tr>
<td>1. Reasoning</td>
<td>.94</td>
<td>1.23</td>
</tr>
<tr>
<td>2. Originality</td>
<td>.11</td>
<td>.86</td>
</tr>
<tr>
<td>5. Anxious Producer *</td>
<td>.11</td>
<td>.54</td>
</tr>
<tr>
<td>6. General Anxiety *</td>
<td>.11</td>
<td>-.73</td>
</tr>
<tr>
<td>7. Quiet Withdrawn *</td>
<td>.50</td>
<td>-2.23</td>
</tr>
<tr>
<td>13. Expressed Inability *</td>
<td>-1.11</td>
<td>-1.54</td>
</tr>
</tbody>
</table>

* denotes a scale where a negative number indicates positive change.
Discussion

The results of this investigation did not confirm the hypotheses that the treatment package containing formal contracting would lead to greater observed progress to treatment goals, more improved communication and interaction in the home, and greater behavioural change at school than the package containing implicit contracting. Nor did they support the findings of Jayaratne, Stuart, and Tripodi (1974) that less staff time commitments would be required when using formal contracting. However, it must be noted that the contracting therapies did achieve success for most clients. This conclusion was strongly supported by the statistical findings of all three multivariate analyses, seventeen of twenty-seven univariate analyses, and a positive albeit not statistically significant trend in a further five univariate tests which consistently pointed to positive change for both groups. Furthermore, of the ten univariate tests not attaining significance, four were conducted on school behaviours that were not targeted for change. A fifth dealt with the parents' evaluation of their children's performance in school, and over a six week period, it is very likely that the parents would not have yet become aware of any changes. These findings were in consistent agreement with the previous evaluative results done in the agency (Ramer and Best, 1976). One trend which did emerge in support of the hypothesized superiority of formal contracts was the more rapid initial progress made by the youth of the FC group towards their therapeutic goals. This trend points to the methodological emphasis of formal contracting on a more structured management of environmental
contingencies, and implied that the technique is useful when a quick change in reciprocity is desired prior to shifting the emphasis of family therapy to other issues. Nevertheless, the use of several different assessment instruments led to consistent results that, despite any inherent bias in each, clearly point to the efficacy of the treatment packages offered to the families. The need for the staff to focus on other issues not necessarily targeted for contracting plus the programme commitment to a limited treatment duration may obscure many of the findings that other researchers have found using contracting.

Campbell and Stanley (1963) have discussed the possibility of regression contributing to the observed differences in designs of the type used here. While such a possibility cannot be fully discounted in this investigation, subject assignment to groups was not made on the basis of a dichotomy in pretest measures which could tend to increase a regression effect. In addition, other researchers (Jayaratne, Stuart, and Tripodi, 1974; Bergin, 1971) have noted that subjects scoring more extremely on pretest measures in behavioural experimentation tend to show the least amount of change, thus minimizing a regression effect. Since most of the within subject treatment effects were highly significant, it seems unlikely that the observed changes were solely attributable to a regression effect. Campbell and Stanley have also stated that the interaction of testing and treatment poses a threat to the external validity of experimental designs of the type used here, since some pretest measures may sensitize subjects to the form of intervention used. However, in behaviour therapy, it has been well documented (for example, Kanfer and Goldstein, 1975) that assessment procedures such as self-
monitoring often have a reactive therapeutic effect on clients, and if so, this can be taken to mean an enhancement of any intervention that uses these methods. The assessment instruments of this investigation to which the families were exposed were designed to pinpoint specific problem areas, for example, communication, and it is unlikely that families with deficient or unorganized communication skills would effectively alter them to the degree noted without some form of intervention procedure. Since a contracting package makes use of such methods of outcome evaluation, any sensitization caused by the assessment tools could be considered as an enhancement of the therapeutic effects, but not likely of significant therapeutic value in themselves. Thus, such a threat to the validity of this study does not appear to have had a profound effect.

The absence of a no-treatment control group unfortunately did not permit a conclusive answer to the issue of whether the clients would have reported similar changes without the intervention programme. However, it has been stated (Jayaratne, Stuart, and Tripodi, 1974; Bergin, 1971) that a no-treatment control group is difficult to establish in a noninstitutional setting since these people often seek some form of intervention elsewhere, and not necessarily unlike the therapy received by the experimental group, and thus, any change in the control group could hardly be described as spontaneous. Bergin's (1972) review of research on spontaneous recovery concluded that approximately thirty percent of untreated subjects show some improvement, a rate far lower than the treatment effects of either group in this study. Prior evaluative research on contracting cited earlier has generally found it to be
superior than control or placebo groups, and when contracting has been used conjointly with other treatment regimes, it has resulted in higher rates of improvement than contracting alone.

What has emerged somewhat unexpectedly from this study is the finding that it does not seem to matter which form of behavioural contracting is added to a community treatment package. Both apparently can produce a desirable therapeutic outcome. It is possible that within an institutional setting, a formal contract may be superior to an implicit one because the environmental contingencies may be more easily controlled and enforced by staff. In a community nonresidential approach, staff can only negotiate contingencies, and must then rely on family members to follow through. The consistency of the family's behaviour in many cases may be insufficient to guarantee the differential success of one method over another. Heavy emphasis on negotiation skill and behaviour consistency training may augment the success of contracting, but additional research is required to determine the efficacy of this.

Consultations with the agency staff following completion of this investigation have highlighted several advantages of a contract plus treatment package. The addition of negotiation sessions and monitoring devices such as goal attainment scaling necessary to the evaluation of contracts have provided a more orderly and practical method of record keeping than anecdotal accounts alone, and provide an excellent and non-confronting vehicle for identifying and exploring many issues of concern to the family that are sometimes overlooked or under-emphasized during the course of therapy because they are too sensitive, or because the
procedures that are used do not ferret these issues out. The availability of additional and stylistically different methods of therapy expand the range of alternatives open to staff in tailoring programmes to individual clients' needs and also permit an extension and smooth transition of the programme from one issue to the next, commencing with an easily accessible solution, and then moving to increasingly harder goals. The generation of improved reciprocity among family members following successfully completed contracts facilitates this transition and leaves the family with a mechanism of self-management which can be used long after therapy is concluded. Additional follow-up research is needed to confirm this and to determine if there are any longer term differences in the outcomes of the two groups studied in this experiment.

Wahler et al. (1977, Note 1) have determined that the outcomes of behaviour therapy are maintained for longer periods of time in lower risk families. This conclusion cannot be dealt with here since the two groups were not dichotomized on this variable. Only further research can answer this issue, as well as investigating the effects of age differences, motivational differences, and prior negotiation ability. However, the findings of this study do suggest that contracting can be used effectively in tandem with other methods, and with preadolescent and adolescent clients at a community level and on a short term basis.
Reference Notes


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Konopka, G. *The adolescent girl in conflict*. Englewood Cliffs, N.J.


Calgary, Alberta.


Report of the Joint Committee on State Administration to Evaluate the Programs and Facilities within the Department of Youth Services. Commonwealth of Massachusetts, March, 1972.


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APPENDIX A

Young Offenders Act

In response to the growing findings of the inadequacies of the federal Juvenile Delinquents Act of 1908, current treatments of juvenile offenders, and the rights of the public, the Canadian government drew up a report in 1975 entitled Young Persons in Conflict with the Law. This document was the culmination of two years of research conducted by the Ministry of the Solicitor-General, and the Departments of Justice and National Health and Welfare. This report has formed the basis of proposed legislation, the Young Offenders Act, which will replace the 1908 Act, and will be introduced to parliament this year or next year.

The new legislation is designed to fulfill the following aims:
1. to recognize novel and successful treatments of juvenile delinquents;
2. to consider only specific criminal offences a juvenile is arrested for, not status offences;
3. to guarantee minors those rights within the justice system currently enjoyed by adults, e.g., bail, right to counsel and appeal, maximum sentences, etc.;
4. place responsibility of offences on juveniles;
5. guarantee the protection of the juvenile and society through formal legal proceedings;
6. deter future first and repeat offences.

The new act would set the age range of criminal responsibility at 12-18 years, instead of the current 7-16 year period. Individual provinces would have jurisdiction at setting a maximum age of responsibility
at 16-17 instead of the current 17-18 level. Court proceedings would be utilized only as a last resort when other procedures have failed. Provinces would be encouraged to screen all offenders in order to divert as many as possible from the justice system. Decisions would be made based upon severity of offence, prior record of offences, past successes of alternative social/legal methods and extent to which the youth would cooperate with a diversion programme. The new act sets limits on the sentencing of youth: payment of maximum fine of $1,000.00, probation/detention for a period no longer than 3 years, with regular reviews, and in facilities separate from adults, community service, and compensation limits of $1,000.00. A youth could not be transferred to adult court without the Attorney General's approval nor would a conviction be recorded in the adult criminal record system. In support of the legislation, the federal government will extend its financial support to cover diversion programmes, pre-disposition assessments, and post-dispositional supervision.
APPENDIX B

NIMH Research on Delinquency

Although public financial support in the U.S. for all health and welfare programmes including delinquency increased by over 300% in 1975, only 2.8% of all adolescent applied research projects were in the delinquency areas. While there was a 100% increase over 1974, only 0.1% of all basic research activity on adolescence dealt with delinquency (Lipsitz, 1977). In 1974, only 4.3% of funding on adolescent projects was given to delinquency research, and 9.3% to research on family influence on the adolescent. Of NIMH adolescent research projects in 1975, there were 5 projects studying causes and correlates of delinquency, and no projects concentrated on early adolescents in the 12-15 age group. There were 7 projects studying innovative prevention and treatment programmes for delinquent behaviour, and 4 concentrating on early adolescence. The following table shows the number of NIMH projects on adolescents that dealt with causes, treatment, and prevention of delinquency.

<table>
<thead>
<tr>
<th>Year of Project Termination</th>
<th>Total No. Projects</th>
<th>Delinquency Projects</th>
<th>% of Total Projects on Delinquency</th>
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<tbody>
<tr>
<td>1975</td>
<td>20</td>
<td>7</td>
<td>35%</td>
</tr>
<tr>
<td>1974</td>
<td>12</td>
<td>5</td>
<td>42%</td>
</tr>
<tr>
<td>1973</td>
<td>24</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td>1972</td>
<td>18</td>
<td>3</td>
<td>17%</td>
</tr>
<tr>
<td>1971</td>
<td>14</td>
<td>4</td>
<td>29%</td>
</tr>
<tr>
<td>1970</td>
<td>27</td>
<td>9</td>
<td>33%</td>
</tr>
</tbody>
</table>

Source: Lipsitz
While funding for delinquency research appears to be increasing, this increase has been quite inconsistent with the apparent demand for more efficient programmes and research on dealing with delinquents.
APPENDIX C
Measurement Instruments

Parental Interviewing Scales

1. Do you look forward to coming home after work or after going out?
   - don't look
   - sometimes
   - can't wait
   - forward to
   - don't look
   - to get home
   - coming home

2. Do you grab any opportunity to get out of the house?
   - don't look
   - take some
   - every chance
   - for excuses
   - opportunities
   - I get
   - to go out

3. Right now, your son/daughter is ______________________.
   - worse than
   - about
   - better than
   - ever
   - the same
   - ever

4. Are you often blamed for things that just aren't your fault?
   - Yes
   - No

5. How well do you feel you communicate with your son/daughter?
   - very well
   - not too bad
   - fair
   - not too good
   - very poorly

6. How often is there a misunderstanding between you and your child?
   - frequently
   - fairly
   - not very
   - the odd
   - rarely
   - often
   - often
   - the odd
   - time

7. How consistently is your son/daughter ______________________?
   - very
   - fairly
   - consistent
   - very
   - inconsistent
   - consistent
8. Do you feel that most of the time, parents listen to what their children have to say?  Yes  No

9. Do you believe that parents should allow children to make most of their own decisions?  Yes  No

10. How often does your child?  
    - most of the time
    - quite frequently
    - about half the time
    - occasionally
    - rarely

11. How often does your child talk about important matters during meal time?  
    - at very few meals
    - at only a few meals
    - at some meals
    - at several meals per week
    - at most meals

12. Do you feel that when you do something wrong, there's very little you can do to make it right?  Yes  No

13. How does your son/daughter feel about talking to you about their problems?
    - my child seems to want to talk about most of their problems
    - my child seems to want to talk about many of their problems
    - my child seems to want to talk about some of their problems
    - my child seems to never want to talk about any of their problems

14. Are you able to work at home without distraction?  e.g., use the phone, do business matters, etc.  
    - my home is too noisy
    - my home is noisy
    - my home is quiet

15. Do you feel that one of the best ways to handle most problems is just not to think about them?  Yes  No

16. How much tension is there in your home?  
    - very tense
    - more tense than relaxed
    - about equal levels of tension and relaxation
    - more relaxed than tense
    - very much of the time
    - much of the time
    - very relaxed
17. How often does your child do assigned homework now?

-much more  a bit more  about the  a bit less  much less
-than before  than before  same as before  than before  than before

18. Have you felt that when people were angry with you it was usually for no reason at all? Yes No

19. If you could change your relationships with your family, what would you do?

-leave things  change  change  change  change
-as they are  only a  some things  many things  almost
couple of  things  everything

20. In your opinion, does your child like school?

-I think  I think  I think  I think  I think
-they dislike  they  their feelings  they like  they like
-it strongly dislike it  are neutral  it somewhat  it very
-somewhat  much

21. Do you think that people can get their own way if they just keep trying? Yes No

22. How often is there an argument in your home?

-constantly  often  some of  occasionally  rarely
-the time

23. How mild are the arguments in your family?

-very  somewhat  sometimes  severe  very
-mild  mild  severe  severe

24. Do you feel that when good things happen, they happen because of hard work? Yes No

25. How well do you think you listen to your son/daughter?

-poorly  fairly poorly  fair  fairly well  very well

26. Are you the kind of person who believes that planning ahead makes things turn out better? Yes No
27. Do you think you should pay attention to your child any more than you are now?

| should pay | should pay | I'm paying |
| a lot more | some more  | as much    |
| attention  | attention  | attention as |
|            |            | I can      |

28. Would your child continue to go to school if given a choice?

| don't know | definitely think they would probably think they would continue |
|           | think they would quit continue would continue |

29. Does your family live up to your expectations?

| live up to few of my expectations | live up to some of my expectations | live up to most of my expectations |

30. How well is your child doing in school?

| excellent | average | poor |

31. Most of the time, do you feel that you have little to say about what your family decides to do? Yes No

32. Do you and your child confide in each other?

| we can't express most of our feelings to each other | we can express some of our feeling to each other | we can express most of our feelings to each other |

33. How well do you think your son/daughter listens to what you have to say?

| very well | quite well | fair | quite poorly | very poorly |
1. Do you look forward to coming home after school or after going out?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>don't look</td>
<td>sometimes</td>
<td>can't wait</td>
</tr>
<tr>
<td>forward to coming home</td>
<td>don't look forward to coming home</td>
<td>to get home</td>
</tr>
</tbody>
</table>

2. Do you grab any opportunity to get out of the house?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>don't look for excuses to go out</td>
<td>take some opportunities every chance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I get</td>
</tr>
</tbody>
</table>

3. How well do you feel you communicate with your parent(s)?

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>very well</td>
<td>not too bad</td>
<td>fair</td>
<td>not too good</td>
<td>very poorly</td>
</tr>
</tbody>
</table>

4. How often is there a misunderstanding between you and your parent(s)?

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>frequently</td>
<td>fairly often</td>
<td>not very often</td>
<td>the odd time</td>
<td>rarely</td>
</tr>
</tbody>
</table>

5. How often do you talk about important matters with your parent(s) during meal time?

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>at very few meals</td>
<td>at only a few meals</td>
<td>at some meals</td>
<td>at several meals per week</td>
<td>at most meals</td>
</tr>
</tbody>
</table>

6. How do you feel about talking with your parent(s) about your problems?

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I can't talk to my parents about most of my problems</td>
<td>I can talk to my parents about a few of my problems</td>
<td>I can talk to my parents about some of my problems</td>
<td>I can talk to my parents about many of my problems</td>
<td>I can talk to my parents about most of my problems</td>
</tr>
</tbody>
</table>

7. Are you able to work at home without distraction? e.g. homework, talk on the phone, etc.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>my home is too noisy</td>
<td>my home is noisy</td>
<td>my home is quiet</td>
<td>my home is very quiet</td>
<td>my home is quiet much of the time</td>
</tr>
</tbody>
</table>

my home is my home is my home is my home is very quiet
8. Is there a lot of tension at home?

<table>
<thead>
<tr>
<th>very tense</th>
<th>more tense</th>
<th>about equal</th>
<th>more relaxed</th>
<th>very relaxed</th>
</tr>
</thead>
<tbody>
<tr>
<td>most of the time</td>
<td>than relaxed</td>
<td>levels of tension and</td>
<td>than tense</td>
<td>much of the time</td>
</tr>
<tr>
<td>much of the time</td>
<td>tension and relaxation</td>
<td></td>
<td>much of the time</td>
<td></td>
</tr>
</tbody>
</table>

9. If you could change your relationships with your family, what would you do?

<table>
<thead>
<tr>
<th>leave things</th>
<th>change only</th>
<th>change many</th>
<th>change almost</th>
</tr>
</thead>
<tbody>
<tr>
<td>as they are</td>
<td>a couple of things</td>
<td>some things</td>
<td>everything</td>
</tr>
</tbody>
</table>

10. How often is there an argument in your home?

<table>
<thead>
<tr>
<th>constantly</th>
<th>often</th>
<th>some of the time</th>
<th>occasionally</th>
<th>rarely</th>
</tr>
</thead>
</table>

11. How bad are the arguments in your family?

<table>
<thead>
<tr>
<th>very mild</th>
<th>somewhat mild</th>
<th>sometimes</th>
<th>severe</th>
<th>very severe</th>
</tr>
</thead>
</table>

12. How well do you think you listen to your parent(s)?

<table>
<thead>
<tr>
<th>poorly</th>
<th>fairly poorly</th>
<th>fair</th>
<th>fairly well</th>
<th>very well</th>
</tr>
</thead>
</table>

13. Do you think you should pay more attention to your parent(s) than you are now?

<table>
<thead>
<tr>
<th>should pay a lot more attention</th>
<th>should pay some more attention</th>
<th>I'm paying as much attention as I can</th>
</tr>
</thead>
</table>

14. Does your family live up to your hopes?

<table>
<thead>
<tr>
<th>live up to hardly any of my hopes</th>
<th>live up to some of my hopes</th>
<th>live up to most of my hopes</th>
</tr>
</thead>
</table>

15. Do you and your parents confide in each other?

<table>
<thead>
<tr>
<th>we can't express most of our feelings to each other</th>
<th>we can express some of our feelings to each other</th>
<th>we can express most of our feelings to each other</th>
</tr>
</thead>
</table>
16. How well do you think your parent(s) listen to what you have to say?

very well   quite well   fair   quite poorly   very poorly
Weekly Progress Form

Adolescent's name:  
Family worker: 
Date:  
Youth worker: 
Week number: 

Principle identified problems:  
ratings: 

1.  
2.  
3.  

Rate each of the above problems as they are this week using the following scale:

-2 considerably worse  
-1 somewhat worse  
0 no change  
+1 some improvement  
+2 considerable improvement  

Parent-child communication:  
Parent-child cooperation:  
Perceived tension level:  

Termination date:  

Client satisfaction with programme:  

-2 very dissatisfied  
-1 somewhat dissatisfied  
0 no opinions  
+1 somewhat satisfied  
+2 very satisfied
HHSB RATING SCALE

STUDENT: NAME ____________________________ SEX M F AGE ______

GRADE______ SCHOOL ____________________________

TEACHER: NAME ____________________________

DATE: ____________________________

RATING GUIDE

1. Base rating on student's recent and current behavior. Consider only the behavior of the student over the past six weeks.

2. Compare the student with normal youngsters his age. The standard for comparison should be the average youngster in the normal classroom situation.

3. Base rating on your own experience with the student. Consider only your own impressions. As much as possible, ignore what others have said about the student and their impressions.

4. Consider each question independently. Make no effort to describe a consistent behavioral picture or personality. It is known that youngsters may manifest seemingly contradictory behavior.

5. Avoid interpretations of "unconscious" motives and feelings. As much as possible, base ratings on outward behavior you actually observe; do not try to interpret what might be going on in the student's mind.

6. Use extreme ratings whenever warranted. Avoid tending to rate near the middle of the scales. Make use of the full range offered by the scales.

7. Rate each item quickly. If you are unable to reach a decision, go on to the next item and come back later to those you skipped.

8. Rate every question. Attempt to rate each item. If you are unable to rate a particular item due to lack of information, circle the item number.

9. In the first circle, rate the item as you recall the student behaving approximately six weeks ago; in the second circle, rate the item as the student is behaving now.
For items 1 - 22, use the rating scale below. Write your rating (number) of the student six weeks ago in the left space, and the rating of the student now in the right space.

<table>
<thead>
<tr>
<th>VERY FREQUENTLY</th>
<th>OFTEN</th>
<th>OCCASIONALLY</th>
<th>RARELY</th>
<th>NEVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Compared with the average student in the normal classroom situation, how often does the student . . .

1. Tell the teacher he is not capable of doing the work expected (i.e. underestimates his ability?)

2. Bring up other points of view in class so that they may be explored or discussed?

3. Ask questions in order to get more information about a subject?

4. Complain that the work is too hard?

5. Raise his hand to answer a question, or volunteer information?

6. Act physically restless in class or unable to sit still?

7. Seem critical (in a negative way) of the peers' opinions, questions or work in class?

8. Bring things to class that related to a current topic?

9. Come in late to class?

10. Do more work than he is assigned (i.e. carries assignments beyond the minimal requirement)?

11. Express the feeling that too much work has been assigned?

12. Annoy or interfere with the work of his peers in class?

13. Speak disrespectfully to the teacher in class?

14. Participate actively in classroom discussions?

15. Have his work poorly organized (e.g. class notes, written assignments, etc.)?
16. Criticize, belittle or make derogatory remarks concerning the importance of the subject matter of the course?

17. Come to class having lost, forgotten or misplaced his books, pencil or other necessary class material?

18. Seem overly concerned that he has the correct directions (e.g. will check an assignment with a teacher after class, will ask that a direction be repeated or clarified, etc.)?

19. Fail to turn in assignments on time?

20. Engage the teacher in conversation just before or after class (e.g. about subject matter of courses, or mutual interests)?

21. Come up with original or unique thoughts in class which are unusual, but relevant?

22. Have to be reprimanded or controlled by the teacher because of his behavior in class?

For items 23 - 42, use the rating scale below:

<table>
<thead>
<tr>
<th>Extremely</th>
<th>Distinctly</th>
<th>Quite a Bit</th>
<th>Moderately</th>
<th>A Little</th>
<th>Very Slightly</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Not at all

COMPARED WITH THE AVERAGE STUDENT IN THE NORMAL CLASSROOM SITUATION, TO WHAT DEGREE IS THE STUDENT . . .

23. Liked by you as a person?

24. Outwardly nervous about taking tests?

25. Effective in applying a new principle he has learned to a new or unfamiliar problem?

26. Likely to quit or give up when someone is difficult or demands more than usual effort on his part?

27. Reliant upon the teacher for directions and to be told how to do things or proceed in class?

28. Responsive or friendly in his relationship with the teacher in class (vs. being cool, detached, or distant)?
29. A compulsive talker (i.e. can't refrain from talking to classmates)?

30. Quick to grasp a new concept that you present in class?

31. Prone to want the teacher to do all the work for him, or make things easy for him?

32. Swayed by the opinions of his peers in his class?

33. Very quiet, uncommunicative (e.g. responds to questions with monosyllables or a gesture)?

34. Effective in making inferences and working out answers for himself, when given the facts?

35. Oblivious to what is going on in class -- is not "with it" -- seems to be in his own "private," closed world?

36. Inconspicuous in class (i.e. you could easily forget he is there)?

37. Prone to feel he must master all of the details before he is satisfied he knows it?

38. Dogmatic or opinionated in the way he thinks?

39. Prone to want quick, "black" or "white" answers to questions?

40. Openly nervous during class (e.g. is physically tense, voice quivers, or fearful of teachers or classmates, etc.)?

41. Not receptive to others' opinions (e.g. doesn't "listen," interrupts others, etc.)?

42. Able to sift out the essential from the unessential in what he reads or hears in a lecture?

For items 43 - 45, use the rating scale below:

<table>
<thead>
<tr>
<th>EXTREMELY</th>
<th>DISTINCTLY</th>
<th>QUITE A BIT</th>
<th>MODERATELY</th>
<th>A LITTLE</th>
<th>VERY SLIGHTLY</th>
<th>NOT AT ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
COMPARED WITH THE AVERAGE STUDENT IN THE NORMAL CLASSROOM SITUATION, TO WHAT DEGREE DOES THE STUDENT . . .

43. Fluster, block, or become ill at ease when expressing himself verbally?

44. Lack social interaction with peers in class?

45. Prepare homework or project assignments in an interesting and original fashion?
TELEPHONE INTERVIEW FOLLOW-UP

NAME____________________________ AGE____

WORKER_________________________ TYPE OF THERAPY_____________________

DATES OF INVOLVEMENT____________________________

For items 1 - 2 use following scale:

CONSIDERABLE SLIGHT DETERIORATION NO CHANGE SLIGHT IMPROVEMENT CONSIDERABLE
DETERIORATION SINCE INVOLVEMENT SINCE MENT SINCE IMPROVEMENT SINCE
SINCE INVOLVE-
MENT SINCE INVOLVEMENT SINCE INVOLVEMENT SINCE INVOLVEMENT
-2 -1 0 1 2

1. In your opinion, how have the major areas of concern which prompted involvement with Project Contact been resolved?
   1.
   2.
   3.

2. Have there been any other changes in personality or behaviour since this time? How are they now?
   1.
   2.
   3.

3. Which of the changes were due to the involvement of Project Contact? How do you feel about Project Contact's involvement?
   VERY SATISFIED DISAPPOINTED SOMEWHAT NO FEELINGS PLEASED VERY SATISFIED
   -2 -1 0 1 2
   1.
   2.
   3.

4. Do you feel you have changed during this period? What things are you doing differently in your relationship with your son/daughter?

   MUCH LESS SOMEWHAT LESS NO CHANGE SOMEWHAT MORE MUCH MORE
   -2 -1 0 1 2

5. What did you like best/least about Project Contact? Would you like to see any changes in the way the project is operated?
APPENDIX D

Informal Follow-Up of Previous Clients

Parents of ten former participants of Project Contact were contacted by telephone following termination of treatment three to nine months previously ($\bar{X} = 7$ months). The mean age of the five male and five female youth was 12.7 years. Half had received some informal contracting techniques in addition to the regular agency programming. Frequency of referral problems were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Contract</th>
<th>No Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Interaction</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Peer Problems</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>School Problems</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Mean client satisfaction with the intervention was approximately equivalent in both groups, 1.8 and 2.0 for the contract and no-contract groups respectively.

Reported changes by the parents are listed below: (see next page)
<table>
<thead>
<tr>
<th></th>
<th>Contract</th>
<th>No-Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Reported Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Interaction</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Target Peer Problems</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>School Problems</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Target Increased Maturity</td>
<td>1.67 (N=3)</td>
<td>1.67 (N=3)</td>
</tr>
<tr>
<td>Other School Behaviour</td>
<td>2 (N=1)</td>
<td>N/A (N=0)</td>
</tr>
<tr>
<td>Increased Confidence</td>
<td>N/A (N=0)</td>
<td>2 (N=1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attribution to Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>50-100%</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>0-50%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Reported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behaviour Change in Parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Parenting</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>