

## Part Three

### Juvenile Crime Prevention Programs

#### Research on Juvenile Crime Prevention and Treatment: the Grounds for Hope

An extensive review of the world-wide juvenile prevention and treatment literature suggests some bad news and some good news. This is, in itself, good news as until recently there was only bad news. For example, the President's Commission in the United States, reporting in 1967, was extremely pessimistic: 'the great hopes originally held for the juvenile court have not been fulfilled. It has not succeeded significantly in rehabilitating delinquent youth, in reducing or even stemming the tide of delinquency or in bringing justice and compassion to the child offender' (1967, p.80).

Most later reviews during the 1970s and the earlier 1980s were equally pessimistic (Martinson 1974; Lipton, Martinson & Wilks 1975; McCord 1978). What then, is the good news? During the latter half of the 1980s there has been a distinct, if somewhat hesitant, retreat from this totally pessimistic viewpoint. While the evidence is still largely negative on what might be described as relatively 'conventional' treatment programs, there are some grounds for optimism in terms of juvenile delinquency identification and prevention, and in terms of less conventional treatments. Even in the area of conventional treatment there has been extremely cautious re-evaluation of results. While not necessarily concluding that a lot works, this recent research does suggest a retreat from the conclusion that nothing works.

The renewed hope springs from two closely-related lines of research. The first line of research has been concerned with looking again, and in more detail, at the question: 'does anything work?'. Thus, this literature is primarily concerned with *substantive* issues. The second line of research has been primarily involved in a re-evaluation of the evaluation criteria relevant to the definition of 'what works'. This literature, then, is primarily concerned with *methodological* questions.

At the substantive level, recent research has generated some hopeful findings in the following three areas: (1) less 'conventional' treatment programs, such as wilderness camps and job-training programs; (2) programs which primarily have a prevention focus - whether school, community or other based; and (3) prediction efforts, especially for those likely to be serious, persistent offenders. Research has also begun to more clearly identify what does not work.

The methodological re-evaluation has been equally important. Indeed, in several ways, it is the methodological focus which has fuelled the substantive re-evaluation. Some of the more important findings of this research are that previously utilised criteria for evaluating the success of juvenile criminal justice intervention have been: (1) unrealistic; they have sought to pick up 'strong' impacts when, all in all, only 'weak' impacts could be reasonably expected (Quay 1977; Sechrest & Redner 1979; Sechrest & Rosenblatt 1987); (2) too narrow; they have focused only on recidivism (and then over too short a time frame and too narrowly) while such a measure only imperfectly captures social costs and benefits; (3) too abstract; they have

failed to recognise that alternative preventative and treatment programs (relative to 'conventional' treatments) which show no difference on recidivism rates, but which *are less expensive than existing incarceration strategies* may be socially desirable; and (4) too premature; given that *most* juvenile justice interventions have not been evaluated at all (this speaks for itself), while others have been evaluated poorly (lack of controls etc.) (Garrett 1984; 1985), others too early, while others have been impossible to evaluate (too many components, not well documented, not implemented as designed) (Sechrest & Rosenbloom 1987).

The resurgence of interest in juvenile justice is illustrated by a vast outpouring of literature on the topic (*see*, for example Burchard & Burchard 1987; Hartman 1987; Quay 1987; Greenwood 1986; Wilson 1987).

What is remarkable about this 'surge' of literature is that it is broadly consistent, both in its interpretation of previous research findings and in its view of where future hope lies.

Perhaps the mood of much of this work is best summed up by James Q. Wilson, a noted policy analyst usually not considered to be someone who sees things through rose-coloured spectacles:

. . . It is our judgement that promising leads do exist that are worth further, carefully evaluated development and testing.

This conclusion differs both from what many of us would have decided 10 or 20 years ago and from what many experts on delinquency did decide in 1967, when the President's Commission on Law Enforcement and the Administration of Justice released the report of its Task Force on Juvenile Delinquency and Youth Crime . . .

In the last 5 to 10 years new findings have appeared that constitute promising leads - glimmers of hope - for the possibility of preventing, to some significant but hard-to-measure extent, the delinquent acts of high-rate offenders. We do not wish to overstate our optimism in this regard or to encourage public and private bodies to mount massive new programs. We believe that the promising leads are just that - leads that must be subjected to further testing and refinement (Wilson 1987, p.291).

This report will address 'the glimmers of hope' in the following manner. First, we will examine the evidence on who commits offences. This, briefly, documents the importance of high-rate offenders. Second, we review the recent research on identifying high-rate offenders and discuss the implications of this research. Third, we review the evidence on prevention programs that do not directly target high-risk individuals, but rather is focussed on relatively high-risk groups (primarily pre-school and school programs). Fourth, we review the evidence on prevention programs that are more oriented to high risk individual children (parent training and child abuse prevention). Fifth, the focus of the report shifts to treatment. Little emphasis is placed on traditional institutionalisation because the evidence has changed little in the last decade. Instead the emphasis is on such 'non-traditional' programs as job-training and wilderness programs. Sixth, we review the emerging evidence that some things don't work - namely various forms of psychotherapy and other community treatment programs. Seventh, we review the evidence on status offenders. Finally we present some conclusions.

## Who Commits Offences?

One clear piece of evidence emerges from analysis of juvenile crime - a small minority of juveniles commit a *large proportion of all juvenile crime*. While the likelihood of *some* contact with police is quite high for juvenile males the great majority of these youths have no further contact with the juvenile justice system. The primary evidence for this comes from two major United States cohort studies - the well-known Wolfgang et al. (1972) study in Philadelphia and a more recent California Youth Authority study (Griffiths & Jesness 1981), but there is considerable additional evidence confirming this finding (*see* Rojek & Erikson 1982; Hartstone, Jang & Fagan 1982). The available Australian evidence, while not extensive, is consistent with such a finding (Kraus 1982).

TABLE 14

### Law Enforcement Contact Among the Sacramento and Philadelphia Youth Cohorts

	Philadelphia Males (N = 9945)	Sacramento Males (N = 4208)	Sacramento Females (N = 4275)
% with at least one contact	35	23	13
Of those with one contact,			
% with two or more	54	56	32
% of total sample	19	13	4
Of those with two contacts,			
% with three or more	65	67	n.a.
% of total sample	12	9	n.a.

**Source:** Adapted by Lipsey (1984) from Griffiths & Jesness (1981).

The Philadelphia study examined approximately 10,000 male youths born during the same years between the ages of 10 and 18 years. The more recent California study examined approximately 8,500 male and female youths. Table 14, from Lipsey (1984) shows the pattern of police contact over time. It shows that while 35 per cent of juvenile males in Philadelphia and 23 per cent in Sacramento had some contact with police only 19 per cent of the Philadelphia cohort and 13 per cent of the Sacramento cohort had more than one contact with the police. As the California study shows the likelihood of females having multiple contacts is very small (4 per cent). It should be kept in mind, additionally, that both studies are centred on large urban areas which would probably overstate aggregate national rates.

Additionally it is clear that as youths age, if they avoid contact, the probability that they will continue to avoid contact increases. These age-

related probabilities have been calculated on the basis of the Philadelphia data by Lipsey (1984) and reproduced in Table 15.

The fact that a relatively small proportion of juveniles commit most offences, we will argue, has important policy implications. The first policy implication is that it is worth devoting considerable research effort on identifying the *specific* predictors of juvenile offending.

**TABLE 15**

**Probability of at Least One Police Contact Before Age 18 of Juveniles Who Have Reached Given Age Without Contact**

Age Reached Without Contact	Probability of Contact
Age 18	Prior to
7	349
8	347
9	341
10	329
11	311
12	287
13	257
14	216
15	167
16	107
17	035

**Source:** Calculated by Lipsey (1984) from Wolfgang et al. (1972, Table 8.1).

The next section of this report, therefore, reviews the recent research on what we know about delinquency predictors. However, we can already present an important caveat. Juvenile justice policy at this time cannot be based primarily on identifying and treating these 'high-rate' offenders. As the evidence shows, high-rate offending is a low-rate occurrence. Improvements in prediction can reduce this problem, but they will never eliminate it. Thus, the evidence we present in the next section must be read in context.

**What Do We Know About Delinquency Predictors?**

As the previous section makes clear, it is extremely important to be able to identify which children have higher probabilities of being delinquent. There have been several recent reviews of the evidence. Loeber and Dishion (1983) is one review which attempts to identify those variables which are predictors. They conclude that inadequate parental supervision and discipline, parental criminality and anti-social behaviour are important factors as well as the child's poor academic performance and signs of early misconduct (see Hawkins & Lishner 1987; Kelly & Balch 1971; Phillips & Kelly 1978; Pink 1982; Elliot & Voss 1974; Kimbrough 1987; Wertleib 1982). Separately,

Loeber (1982) has noted that child misconduct is usually found in a wide variety of settings and encompasses a variety of types of anti-social behaviour.

Wilson's review of the evidence reaches essentially similar conclusions. He finds that delinquent's behavioural characteristics 'tend to be those who display a general pattern of anti-social conduct' and 'tend to be those who also act up at home, are truants from school, drive automobiles recklessly and abuse alcohol and drugs' (Wilson 1987, p.292). Their background characteristics include below average I.Q., one or both parents who have been convicted of a crime, discordant home environments, siblings who have committed crime, and low income family background.

Finally, these review findings are confirmed by Loeber and Stouthamer-Loeber (1987) in perhaps the most comprehensive of these reviews. Their findings (pp.370-1) are sufficiently detailed to be worth reporting in detail:

1. Early conduct problems - aggression, stealing, truancy, lying, drug use - are not only predictive many years later of delinquency in general, but especially of serious delinquency, and in certain cases, of recidivism. These results are virtually consistently replicated across studies on subject samples from different places and countries. The data, although less available for girls than for boys, indicate considerable consistency between the sexes.
2. Children who have not outgrown their aggressiveness by early adolescence appear to be at high risk for delinquency and aggressiveness later.
3. Although juvenile arrest or conviction is a predictor of arrest or conviction in adulthood, the seriousness of the juvenile offences appears to be a better predictor of the continued, serious delinquency in adulthood.
4. Individual family variables predicted moderately well subsequent delinquency in offspring. Particularly strong predictors were poor supervision and the parents' rejection of the child, while other child rearing variables such as lack of discipline and lack of involvement were slightly less powerful. In addition, parental criminality and aggressiveness, and marital discord were moderately strong predictors. Parent absence, parent health, and socio-economic status were weaker predictors of later delinquency. The strongest predictors were multiple family handicaps.
5. Poor educational performance predicted later delinquency to some extent, but available evidence suggests that the effect is mostly mediated through accompanying conduct problems.
6. A majority of eventual chronic offenders can be recognized in the elementary school years on the basis of their conduct problems and other handicaps.
7. A majority of the later violent delinquents appear to have been highly aggressive as children.

8. Similar offences-specific precursors were observed for other categories of crime: early theft predicting later theft and burglary, and early drug use predicting later drug use.

In other words research is essentially unanimous on delinquency predictors (*see also* Lorion et al. 1987).

Loeber and his colleagues (Loeber et al. 1984) have suggested one method by which this knowledge of predictors can be used to screen for youths at risk. Such screening is vital in avoiding what has been called the 'low-base rate' problem (that is false positives). Lipsey (1984) has pointed out that unless potential delinquents can be identified with a fair degree of accuracy most prevention programs are likely to be cost-ineffective because the costs of 'treating' those who would not have become delinquent must be attributed to those who do. For example, if average program costs are \$1,000, but only 50 per cent of the treated youth would have become delinquent the relevant cost per delinquent child is \$2,000 per capita.

Loeber et al. (1984) suggest that multiple gating is one way of rectifying juveniles who have high risks of delinquency. They suggest that independent identification by parents and teachers that a child has conduct problems plus interviews to assess the efficacy of family management practices (Morton & Ewald 1987). Their experimental findings suggest that multiple gating can be successfully used as a screening device. It is important to recognize that gating is a *sequential* process. They report their findings as follows:

- (a) Each successive gate provided an increment in the predictive accuracy and increased the percentage of valid positives in the risk group from 25.4 per cent to 56.3 per cent.
- (b) The three gates together produced an overall false positive error rate of 43.8 per cent and a false negative error rate of 35.7 per cent.
- (c) Almost all of the recidivist youths had been correctly identified.
- (d) The average level of self-reported delinquency of the youths in the false positive category was above that of youths in the valid negative category, suggesting that the youths currently without police contact are at a substantially high risk for becoming officially delinquent in the future.
- (e) The multiple gating procedure was as effective as a single-stage composite screening procedure. Moreover, its cost was 58 per cent lower than that of a single-stage screening procedure (Loeber et al. 1984, p.28).

The importance of a sequential approach in terms of reducing screening costs is illustrated by Table 16 (Loeber et al. 1984, Table 12). The multiple-gating procedure is 58 per cent cheaper than an equivalent composite procedure.

The Loeber et al. approach suggests that there are reasonably cost-effective methods of identifying at-risk individuals. This does not, of course, imply that it always makes sense to identify *individuals* at risk. We will

discuss, at length, programs that do not identify individuals (for example pre-school programs), but rather focus on at-risk communities. While these inevitably raise costs, for the reason already described, they potentially raise benefits more. However, interventions aimed at individuals and interventions based on groups are not necessarily mutually exclusive. For example, school-based prevention programs can be focused on groups, while home-based prevention programs can be focused on individuals.

**TABLE 16**  
**Costs of Screening for the Multiple-Gating Procedure**  
**Compared to a Single-Stage Approach**

Assessment	Professional Time per Subject (hours)	Single-Stage Assessment		Multiple-Gating Procedure	
		N	Cost(\$) <sup>1</sup>	N	Cost(\$) <sup>1</sup>
Teacher Ratings	.16	102	212.00	102	212.00
Parent Telephone Interview (six phone calls)	1.2	102	1,591.00	55	858.00
Structured Interview with Parent and Child	2	102	2,652.00	30	780.00
<b>Total</b>			4,455.00		1,850.00

<sup>1</sup>Cost of professional time is computed on a hourly wage of \$13.00 for a Research Assistant I.

**Source:** Loeber et al. 1984.

The next sections of this report first examine group-focused strategies that are centred on pre-schools and schools. Then we examine home-based parent-training (and potentially child abuse) prevention programs that focus on the individual child or juvenile.

### **Pre-School Based Prevention Strategies**

Prevention has obvious benefits and advantages. But equally obvious, given the above discussion, only if it: (1) concentrates on child populations with a reasonable probability of actually becoming delinquent (that is a population that has low false positives), and (2) is non-coercive and does not involve negative labelling, in short programs that are perceived by the parents of participants to be a 'benefit' (this eliminates most dimensions of the 'false negative' problem - although not the economic dimension).

One type of program that falls into this category is pre-school education. Indeed there has been increasing interest in these programs over the last decade. By far the most sophisticated evaluation of the impact of pre-school education on a proto-delinquent population (low income families, low

education families, minority etc.) is the Perry Pre-School program begun in Michigan in 1962. Children were randomly assigned either to pre-school or the control group. The program consisted of either one year or two years of pre-school education plus weekly home visits. Ongoing research has reported extensively on Perry (*see*, for example, Berrueta-Clement, Schweinhart & Weikart 1983; Schweinhart & Weikart 1980; Weber, Foster & Weikart 1978).

A survey of the Perry evidence has recently been completed by Berrueta-Clement, Schweinhart, Barnett and Weikart (1987). Overall they conclude: 'Pre-school can reduce levels of delinquent behaviour, and has other important lifetime outcomes, for individuals from low-income families viewed early in life as being at risk of educational failure' (p.237). One striking feature of the study is that the social benefits of pre-school are much broader than reduced recidivism, including increased employment and earnings, reduced teenage pregnancy and higher rates of high school graduation and tertiary education. However it is worth detailing the recidivism findings (through mid-1982). Table 17 reproduces the pertinent recidivism data (Berrueta-Clement et al. 1987, Table 9.3, p.230) which show reduced crime according to a wide variety of measures. As the researchers point out 'Taken together, the data present a remarkable picture' (p.232). There is also some evidence (although only minimally reported) on the costs and benefits of the Perry program. Total benefits were approximately \$28,000 (U.S.) per participant, approximately six times the cost of the one-year program and three times the two-year program (1981 dollars) (Schweinhart 1987, p.145). However Perry is not the only pre-school evidence.

The Perry pre-school findings are broadly consistent with other recent pre-school findings (Schweinhart 1987). Table 18, reproduced from Schweinhart, summarises these results. As the table shows, 'a respectable number of studies provide evidence that good pre-school programs help prevent school failure' (Schweinhart 1987, p.143).

What are the factors that characterise 'successful pre-school programs'? Not surprisingly they appear to share many of the characteristics of good school-based programs (to be discussed below). These characteristics are: (1) Staff who have adequate early childhood training and maintain a curriculum focus through in-service training; (2) Use of a validated curriculum model, derived from principles of child development that permits children to plan or choose their own activities; (3) Support systems to maintain the curriculum model - daily team planning and evaluation and curriculum leadership by the administration; (4) A ratio of teaching staff to children of about 1:8 and a classroom group size of about 16; (5) Collaboration between teaching staff and parents as partners, with teachers as child development experts and parents as experts on their own children (Schweinhart 1987, p.149).

While the *overall* result of all pre-school programs is clearly positive there are worrying differences among programs in the 'strength' of the program impact. Besharov (1987), among others, believes that pre-school programs may involve significant threshold effects. He notes, for example, that in the United States Headstart spends 60 per cent less per pupil than Perry and that Headstart 'is also a loosely monitored program which provides little incentive for individual grantees to maintain high levels of program design and management' (Besharov 1987, p.212). Additionally, although it is not mentioned by these reviews, we suspect that leadership is a crucial threshold element (cf. school-based programs and wilderness programs below).

TABLE 17

**Effects of Pre-School on Crime and Delinquency:  
Official Records Data**

Category	Pre-School (N=58)	No Pre-School (N=63)	p
Percentage ever arrested or charged <sup>a</sup> (as juveniles or adults)	31	51	.022
Percentage ever detained as juveniles	16	25	ns
Percentage ever arrested as adults	25	40	.078
Total number of arrests	73	145	.0001
Percentage with no arrests	69	50	
Percentage with one or two arrests	19	25	.068
Percentage with three or more arrests	12	25	
<b>Seriousness Scores<sup>b</sup></b>			
Percentage arrested for property or violent offences	24	38	.078
Number of property/violence arrests	47	74	.005
Mean person total seriousness score	6.7	5.8	ns
Percentage with scores over 3	19	22	ns
<b>Juvenile Records</b>			
Total number of arrests	30	44	ns
Total petitions requested	11	25	.037
Percentage with petitions requested	7	13	ns
Total petitions adjudicated	2	5	ns
Percentage with adjudications	3	3	ns
<b>Adult Records<sup>c,d</sup></b>			
Total minor arrests or charges	1	21	.0001
Percentage with minor arrests/charges	2	16	.007
Total non-minor arrests	42	80	.028
Total convictions	20	24	ns
Percentage convicted at least once	16	21	ns
Case dispositions:			
Percentage receiving probation	7	6	ns
Mean months probation received	12	33	.093
Percentage receiving fines	3	14	.037
Mean fine amounts	\$168	\$209	ns
Percentage confined	10	13	ns

**Source:** Berrenta-Clement et al. (1987). (For a fuller explanation of this table refer to pp.230-331)

In summary, pre-school education is one of the most hopeful areas for new programs. Programs are likely to be perceived as beneficial by parents, they can be targeted to low income neighbourhoods and it is almost certain that they can do no harm.

**TABLE 18**

**Documented Effects of Good Pre-School Programs for Poor Children**

Finding Per Study	Pre-School	No Pre-School	p
Intellectual ability (IQ) at school entry			
Early Training	96	86	.0001
Perry Pre-school	94	83	.0001
Harlem	96	91	.01
Mother Child Home	107	103	
Special education placements			
Rome Head Start	11	25	.02
Early Training	3	29	.004
Perry Pre-school	16	28	.039
New York Pre-kindergarten (age 9)	2	5	.006
Mother Child Home (age 9)	14	39	.005
Retentions in grade			
Rome Head Start	51	63	
Early Training	53	69	
Perry Pre-school	35	40	
Harlem	24	45	.006
New York Pre-kindergarten	16	21	.02
Mother-Child Home	13	19	
High school dropouts			
Rome Head Start	50	67	.04
Early Training	22	43	.08
Perry Pre-school	33	51	.03
Additional Perry Pre-school findings			
Functional competence (average or better score)			
Postsecondary enrollments	38	21	.03
19-year-olds employed	50	32	.03
19-year-olds on welfare	18	32	.04
Teenage pregnancies (per 100 girls)	64	117	.08
Arrests (per 100 people)	126	230	.0001

**Source:** Schweinhart (1987)

## School-Based Prevention Strategies

While we believe that the most convincing evidence relating to prevention can be found at the pre-school level, the emerging evidence at the school level should not be ignored. School-based strategies have disadvantages compared to pre-school based strategies. A major disadvantage is that any intervention is necessarily at a later stage of the child's cognitive, behavioural and social development. A second, *potential* disadvantage is that there is a tendency for school-based programs to concentrate on students who have been 'flagged' as being delinquency-prone (that is with low academic achievement, poor discipline etc.). As we have seen this is based on a growing body of convincing research which demonstrates that likely delinquents can be identified relatively early in the school career by a set of predictors that are themselves partly based on school performance and behaviour (for very recent UK evidence on this, *see* Graham 1988; *see also* Greenwood & Zimring 1985; Farrington 1983; Monahan, Brodsky & Shah 1981; Chaiken & Chaiken 1982; Loeber & Stouthamer-Loeber 1987). As Greenwood (1986, p.207) puts it 'Those who are most likely to persist on this delinquent path can be identified at around age 13 with about 50 per cent accuracy, using predictor variables that reflect their criminal record to date; their behaviour and achievement in school; the child-rearing practices to which they are exposed; and other characteristics of their family environment'. The disadvantage of this finding is that programs that focus on such youth inevitably raise labelling problems given that such children are 'flagged' by misconduct. This kind of labelling raises false positive problems. The potential advantage of this approach is the economic benefit - it concentrates on juveniles who have a relatively high probability of becoming delinquent (*see* our discussion of this above/below). Another perceived advantage was that there did not appear to be any viable alternative. This is because a viable alternative (that is one that does not risk labelling) must be implementable at the school level rather than the individual level. (We discuss such school-based treatment programs in a separate section of this report).

The difficulty with such an approach is that, until recently, we have known little about *policy-relevant* variables that effect school performance and behaviour. The evidence suggested that poor academic performance is highly correlated with (low) parental income and status. Yet research indicated that this 'strong' relationship could not be appreciably mediated by higher school expenditures (Coleman et al. 1966; Jencks et al. 1972). These findings have generated considerable pessimism that school-based strategies focused on schools in areas with low income families could effectively reduce juvenile delinquency. However, it is clear that these studies placed almost no emphasis on the organisational characteristics of schools. This is not surprising. Such characteristics are difficult to measure using the aggregate data available.

However, recent evidence from the United States, does suggest that there are organisational policy-relevant variables that can be used to improve some outcomes (most notably academic performance) of schools in low income neighbourhoods as measured by comparisons to other such schools. Obviously given the differences between Australia and the United States (for example, the percentage of single parent families) such findings should be interpreted with great caution although in some dimensions these differences are lesser with respect to schools in low income neighbourhoods than in other areas; Australia has an increasingly diverse immigrant population for many of whom English is a second language.

What are some of the strategies that schools can engage in that might reduce delinquency and what is the evidence on their effectiveness? The evidence has been recently reviewed by Kimbrough (1987). She concludes that until the last few years 'The literature generated by school-based delinquency prevention programs has not been very enlightening. Evaluation of these programs has been hampered by flaws in program design that make it difficult to interpret program results' (p.195). She finds preliminary evidence that some things make a difference (Gottfredson 1982; Hawkins & Lam 1983; Grant & Cappell 1983; Wayson & Lipsey 1984, Armor et al. 1976; Brookover et al. 1979; Weber 1971; Austin 1978; Spartz et al. 1977; Purkey & Smith 1983; Ayllon, Garbers & Pisor 1975; Madsen, Becker & Thomas 1967; Boelgi & Wasik 1978). Her overall conclusion is worth repeating: '[the literature] has produced remarkable consistency in specifying school-based strategies for preventing delinquency and delinquency-related behaviours' (p.203).

Greenwood (1986, p.211) has summarised the research relating to the characteristics of 'instructional effective' schools. These factors are: (1) Continuing instructional leadership and support for teachers from principals; (2) High expectations for student performance; (3) The development of an integrated curriculum that focuses on academic skills; (4) Frequent monitoring of student progress; (5) An orderly and quiet atmosphere without being oppressive; (6) Maximisation of time spent on academic activities; (7) Collaborative planning and collegiate relationships among teachers; (8) School-wide staff development and recognition of academic success; (9) Techniques for minimising turnover among the most competent staff.

While these findings may seem obvious, all the evidence suggests that implementation of such programs on a wide scale would be difficult. At the very least, training, the development of new materials, incentives and monitoring would all have to be addressed. There is a strong suspicion that the quality of personnel is a crucial factor and there is one further caveat. We know of no study that has yet convincingly demonstrated that recidivism reductions would flow from such programs. While clearly such programs can have other important social benefits, it is vital to effectively evaluate such programs over a sufficiently long time-frame to estimate their impact on recidivism.

### **Parent-Training Prevention Programs and Child Abuse Prevention**

Previous sections of this report have established that: (1) there is strong emerging evidence that potential delinquents can be identified with reasonable probabilities; (2) the primary loci of pre-criminal identification is the school and the home; (3) there is tentative evidence that pre-school and school-based programs can reduce juvenile crime and generate other social benefits; (4) pre-school and school-based programs can usefully focus on 'proxies' for delinquency potential that will avoid certain kinds of false positive problems.

We now turn to the home. Can the home be a focus for prevention or treatment? This section addresses this issue.

A preliminary important point to make about parent-training is that it has a distinctly different orientation from the therapy approaches that will be described below. Gordon and Arbuthnot (1987, p.307) have succinctly described the differences:

Parent training, as it is generally described, differs from family therapy in that the focus of most of the sessions is on teaching parents specific child management skills [parental monitoring and control skills] in a relatively structured, didactic fashion. In family therapy, the focus is on assessing the interrelationships among all family members and the target child's behaviours, and overcoming family members' resistance to change. Skill training, if it occurs, comes later in the treatment and generally consumes a minor portion of the total contact time.

A preliminary important caveat is that parent-training, in the sense that it is defined here, is unlikely to deal with one important source of home problem that is linked to later delinquency (Alfaro 1981), namely serious child abuse. We will discuss this question later in this section.

A majority of the research on parent-training has been conducted by the Oregon Social Learning Center in Eugene, Oregon and the Center has provided excellent evaluative research. A disadvantage is that there is some doubt concerning the generalisability of their findings (to large urban areas, for example). While there has been some research of earlier parent-training programs they involved short, 'weak' and small interventions (Stuart & Lott 1972; Weathers & Liberman 1975; Csapo & Friesen 1981).

The findings of the Oregon Social Learning Centre have been published in an extensive series of studies (Patterson & Reid 1973; Patterson, Reid, Jones & Conger 1975; Patterson & Fleishman 1979; Wiltz & Patterson 1974; Patterson, Chamberlain & Reid 1982; Bernal, Klinnert & Schultz 1980; Marlowe, Reid, Patterson & Weinrott 1986).

The Oregon Learning Center approach trains parents in how to reverse child disruptive behaviour which has allowed the child to manipulate the parents. The programs are typically open-ended and resource-intensive (for example five sets of parents and up to four therapists). The evidence suggests that trained staff are essential. The research results show significant reductions in delinquency and other behavioural improvements.

A closely related approach 'Behavioural-Systems Family Therapy' also appears to have reduced recidivism (Gordon, Arbuthnot, Gustafson & McGreen 1986; Gordon, McGreen & Arbuthnot 1984; Barton, Alexander, Waldron, Turner & Warburton 1985). A review of this later literature concludes: 'The general results are similar to the Oregon Social Learning Center results with highly aggressive boys, in that independent replications of the effectiveness of a moderately well-articulated treatment model occurred in different sites with different populations' (Gordon & Arbuthnot 1987, p.312).

The other context where parent intervention is a central issue is child abuse. This obviously raises very different, and more complex, issues. Yet there seems little doubt that child abuse is linked to juvenile delinquency: 'the cumulative weight of these research studies establishes, beyond doubt, a fundamental association between child maltreatment and later delinquency' (Besharov 1987, p.214, *see also* Standing Senate Committee, Canada 1980; Wolfe 1986). Clearly in Australia, as elsewhere, there have been major changes in both attitude and government policy on the question of child abuse. While it would take this report too far afield to discuss the issue at length, there do appear to be programs that can assist such parents (Besharov 1987). But the problems of these parents are such that most of them are unlikely to be 'volunteers' for treatment (Polansky, Chalmers, Buittenwieser & Williams 1981).

## Non-Traditional Treatment Programs

This rather cumbersome title encompasses several types of program, basically falling into two categories: adventure, wilderness and camp programs; job-training programs.

A study from the Australian Institute of Criminology by Mason and Wilson (1988) has recently reviewed the literature and evidence on wilderness and adventure programs. Before reporting their findings, it is worth briefly dwelling on three problems that inevitably mitigate drawing any very strong policy conclusions from this literature. The first is the (almost bewildering) variety and type of programs. As Mason and Wilson point out:

Programs range from anywhere between one week and three months duration. Some involve severe physical challenges (often of a dangerous nature), while others are of a more sedate camping and bushwalking nature. The majority of outdoor programs combine a full spectrum of activities, including, hiking, cooking, fishing, camping, rock-climbing, solo survival, canoeing, manoeuvre water rapids et cetera. Most programs for delinquent youth also include informal group discussion and interaction, problem solving sessions and the establishment of goals and responsibilities (p.77).

This variety inevitably reduces the generalisability of any research findings.

The second problem is the quality of evaluation (once again!): 'It is unfortunate, but the standard of program evaluation in this field has been quite poor' (Mason & Wilson 1988, p.79). The third problem is the atheoretical foundation of these programs; in other words there is little clear explanation of why these programs might work (but *see* Hunter 1987).

In spite of these caveats, Mason and Wilson conclude:

In summary, it appears that great results have been claimed to emerge from wilderness and survival programs for delinquents. To a lesser extent, program evaluation has revealed that some of these claims are valid and reliable; namely, that wilderness/survival programs do lead to improvements in self-concept and reductions in recidivism rates for participants. To date these results have only been clearly evidenced within a short time span. Long-term results (over a number of years) are not sufficiently conclusive, but there are indications that the impact of outdoor programs upon juvenile offenders decreases over time (p.84).

Greenwood (1987) has also recently reviewed the same literature, although concentrating on those programs which are oriented to chronic offenders. Greenwood delineates the following critical features of the programs that he looked at: (1) Almost all the programs have been delivered by private sector contractors; (2) Staff to juveniles ratios are high, approaching 1 to 1; senior staff have exceptional characteristics, they are 'cheerful, positive, hardworking, friendly, affectionate and slow to anger' (Greenwood, 1986, p.219); (3) The programs typically involve increasingly severe physical challenges; (4) The programs place a high premium on specific skill development; (5) Peer group co-operation is constantly stressed and reinforced; (6) Charismatic leadership is central to continued success.

Greenwood also found that there were common problems, most notably staff continuity. Although Greenwood addresses these programs in terms of offenders, it is clear that if there are demonstrated benefits these

programs do not necessarily have to be limited to offenders, but can be extended to relatively high risk populations or juveniles in general: 'There is also no obvious method or rationale for singling out particular children, based on their delinquent behaviour and perceived risk, for participation in these programs without a large number of false positives ... there is no justification for excluding those who do not exhibit behavioural problems but suffer from the same social economic or physical disadvantages' (p.225).

Finally, Bleich (1987) has also reviewed the effectiveness of wilderness programs for serious and violent offenders. His conclusions are basically similar. Bleich also argues that the evidence is positive (McKenzie & Roos 1982; Greenwood & Zimring 1985) although he argues that the evidence suggests that such programs will not be easily replicable on a broad scale: 'the key ingredients of success seemed to be the superman charisma of the program's leaders and the quality of the program's staff' (Bleich 1987, p.163).

There is only anecdotal evidence on the effectiveness of wilderness programs in Australia. However, based on visits to several programs, Windschuttle (1986, p.21) concludes 'I am convinced that well-conducted wilderness projects can be valuable components of community training programs for youth'.

The other major category of non-traditional program is job-skills training.

Job-training is of especial interest because it is an area where there has been some experimentation outside of North America, including Australia. The focus of this review will be upon relatively strong interventions, as not surprisingly, make-work, short-term job programs (which definitionally do little training) have no discernible impact (Borus 1980; Bendick 1985; Windschuttle 1986).

The following review of Australian programs draws heavily on Windschuttle (1986). Australian labour and training programs, with a somewhat more substantial focus, include the Special Youth Employment Training Program (wage subsidies to long-term unemployed youth), the Education Program for Unemployed Youth (short-term basic education and job seeking skills), the Wage Pause Program and the Community Employment Program. However, all of these programs could be said to have weak, or non-existent training components. More recently the Australian Traineeship Scheme offers a minimum of one year part-time work and technical training to 16 and 17-year-olds who have dropped out of school.

Unfortunately, there has been no systematic evaluation of these programs. Windschuttle (1986) has reported his conclusions based on on-site interviews from visits to over 30 programs. His interviews and observations suggest that relatively intensive programs that teach a combination of basic and specialised skills are most successful (for example, Compuskill at Matraville, Sydney).

The evidence that job training is successful at reducing recidivism and in generating other social benefits comes primarily from the Job Corps program in the United States. The Job Corps provides a comprehensive set of skills and services to 'disadvantaged', unemployed youth. In other words an 'at risk' population, but not a population where *individuals* were selected on the basis of their particular delinquency predictors (although approximately 70 per cent had come to the attention of the police at least once). The provided services are 'primarily vocational skills training, basic education, and health care' (Long, Mallar & Thornton 1981). The program consists of six to 12 months in residence.

The Job Corp is of especial interest because it has received the most sophisticated analysis of cost and benefits that we know of. It is a model which generates both optimism and caution. Optimism because it clearly demonstrates that sophisticated analysis is achievable and that job-training programs can have positive net benefits. Cautionary in showing the high level of analytic commitment that is required to do a convincing evaluation of such a program.

The Job Corps evaluation is also of interest because it breaks down benefits (avoided costs) between budgetary (governmental) impacts and other social impacts. It also shows that there are important social benefits of such a program in addition to the crime reduction benefits.

The costs and benefits of Job Corp are presented in Table 19 (Long, Mallar & Thornton 1981, Table 6). The 'bottom line' is that the net present value of the program per entrant is \$2,271 (in 1977 US dollars) or a benefit-cost ratio of 1.45, that is for every \$1 invested in the Job Corp program (the cost) there is a return of \$1.45 (the benefit). This is likely to underestimate actual net benefits because the analysts did not include other benefits which were difficult to quantify.

Related to, but different from, the Job Corp program is the French Crime Community Prevention Scheme. This scheme has received considerable publicity in this country and the Victorian Good Neighbour program is partly based on the French model.

In France, over 500 city and regional crime prevention councils brought together elected officials from all levels of government as well as official and voluntary welfare agencies.

Well co-ordinated programs target local problems leading to or attracting crime. Employment, and social and summer camp activities are carefully planned and co-ordinated by those involved in the crime prevention councils.

Unique features of the French scheme include the bipartisan support given to the councils by all politicians, the involvement of local councils in the planning of the crime prevention activities and the diverse and planned nature of the programs provided for young people.

Though no formal evaluation has yet been conducted of the French Scheme, it has been noted that the national rate of crime per capita in France declined in 1985 and 1986. These two years saw a decrease in those offences commonly committed by young people. In addition, the number of petty crimes fell over the summer months in those cities which have introduced crime prevention activities (*LIAISON* December 1988, pp.10-14).

Programs introduced as part of the scheme include those that attempt to improve social integration, job acquisition, individual self-confidence and self-image. There can be no doubt that these programs, regardless of their crime prevention potential, improve the quality of life of communities in France and are generally welcome by all sections of the population.

TABLE 19

**Estimated Net Present Value Per Corps member  
Under the Benchmark Assumptions (1977 dollars)**

	Society	Corpsmembers	Rest of Society
<b>Benefits</b>			
A. Output produced by Corpsmembers			
In-program output	\$757	\$83	\$673
Increased postprogram output	3,896	3,896	0
Increased tax payments on postprogram income	0	-582	582
Increased utility due to preferences for work over welfare	+	+	+
B. Reduced dependence on transfer programs			
Reduced transfer payments	0	-1,357	1,357
Reduced administrative costs	158	0	158
C. Reduced criminal activity			
Reduced criminal justice systems costs	1,152	0	1,152
Reduced personal injury and property damage	645	0	645
Reduced value of stolen property	315	-169	484
Reduced psychological costs	+	+	+
D. Reduced drug/alcohol use			
Reduced treatment costs	30	0	30
Increased utility from reduced drug/alcohol dependence	+	+	+
E. Utilisation of alternative services			
Reduced costs of training, educational and PSE programs	390	0	390
Reduced training allowances	0	-49	49
F. Other benefits			
Increased utility from redistribution			
Increased utility from improved well-being of Corpsmembers	+	+	+
<b>Total Benefits</b>	<b>\$7,343</b>	<b>\$1,823</b>	<b>\$5,520</b>

**TABLE 19 (cont'd)**

	Society	Corpsmembers	Rest of Society
<b>Costs</b>			
A. Program operating expenditures			
Center operating expenditures, excluding transfers to Corpsmembers	\$2,796	\$ 0	\$2,796
Transfers to Corpsmembers	0	-1,208	1,208
Central administrative costs	-1,347	0	1,347
B. Opportunity cost of Corps member labor			
Foregone output	881	881	0
Foregone tax payments	0	-153	153
C. Unbudgeted expenditures other than Corps member labor			
Resource costs	46	0	46
Transfers to Corpsmembers	0	-185	185
<b>Total Costs</b>	<b>\$5,070</b>	<b>-\$665</b>	<b>\$5,736</b>
<i>Net present value</i> (benefits less costs)	\$2,271	\$2,485	-\$214
<i>Benefit-cost ratio</i>	1.45	1.82	0.96

**Note:**

Details may not sum to totals because of rounding.

See the original text for a review of the assumptions, estimation procedures, and their implications relevant to this table.

The numerators for the benefit-cost ratios include all of the benefits listed in this table as either positive benefits or negative costs, and the denominator includes all of the costs listed in this table as either positive or negative benefits.

However, the lack of any effective evaluation of the Scheme makes it difficult to pin-point the relevance of the French model for Australia. What can be said, though, is that the scheme looks very promising and should be considered carefully in any planning of community initiatives in crime prevention.

We should mention at this stage an alternative approach to juvenile crime prevention known as the 'situational' approach. As applied in the area of juvenile delinquency, this approach rests on two assumptions. The first is that juvenile offenders are rational decision makers who only go ahead with a crime where the benefits outweigh the costs or risks; the second assumption is that the 'opportunity' to commit a crime must be there.

Essentially, situational crime prevention aims to remove the opportunity and make the costs of a crime greater than the benefits. In order to do this a range of measures, directed at highly specific forms of crime, are introduced into the environment.

The measures introduced can operate at different levels, affecting the individual, the community or the physical environment. In the case of crimes

directed at households, for example, initiatives that can be employed at the individual level include encouraging people to make their homes more secure (sometimes called target hardening) by good security measures and property identification programs (Geason & Wilson 1988). At the community level, the most common situational crime prevention strategy is Neighbourhood Watch; while at the level of the physical environment there are design innovations focusing on improved street lighting, controlling access to buildings, restricting pedestrian and traffic flow and dividing residential spaces into identifiable areas (Geason & Wilson 1989).

Though there are problems with using situational measures - not the least being displacement or offenders carrying out offences in other areas or engaging in different offences - there are also some remarkable successes. For example, Telecom Australia, by implementing a number of 'target hardening' and other situational measures have been able to reduce vandalism and theft in public telephones from \$18 million per year to \$9 million (Telecom Australia). As much of this vandalism and theft was committed by juveniles, it is apparent that situational measures have an important part to play in juvenile crime prevention strategies.

There are many other areas where a situational crime prevention approach could be used in juvenile crime prevention. These areas include vandalism on private and public property (housing, council parks, public transportation), car-theft and household burglary. Provided the situational initiatives are directed at specific crime problems and a proper methodology is employed, it is reasonably apparent that a situational approach to much juvenile crime may be cost-effective. Though no Australian studies have yet been carried out on the cost-effectiveness of such measures the area appears to be extremely promising (*see* Geason & Wilson 1989).

### **The Evidence on Psychotherapy Treatment and Other 'Community' Programs**

Counselling and other forms of individual therapy generally do not appear to be successful. 'When casework as the primary intervention has been investigated with appropriate comparison groups, literature reviews have been conclusively negative' (Gordon & Arbutnot 1987, p.291). However, the same authors conclude:

When the treatment goals are global and vague (such as self-awareness) and when the treatment description is similarly non-specific and extremely brief (such as providing a warm relationship with the therapist and helping the delinquent achieving insight into his/her behaviour), reductions in subsequent delinquent behaviour are rarely achieved. On the other hand, success in behavioural improvement is associated with specific behavioural treatment goals, a treatment plan specific to these goals, and goals that are not complex and that are potentially teachable to the client (Gordon & Arbutnot 1987, p.294).

Some of the evidence on group 'cognitive-behavioural' interventions is somewhat more positive; especially in developing problem-solving skills, the reduction of impulsiveness and socio-moral reasoning. Gordon and Arbutnot conclude on problem-solving skills: 'this would appear to be a very promising approach for both preventative and treatment programs' (1987, p.299). On

impulsiveness they conclude: 'The technology involved is highly developed, and appears to be effective over a wide range of populations' (1987, p.300). On socio-moral reasoning: 'developmental interventions of a cognitive nature appear to be quite successful both internally (in terms of acquisition of cognitive skills) and externally (in terms of behavioural improvement)' (1987, p.303).

However, a recent meta-analysis of 'community-based' interventions (this includes 'behavioural', individual psychotherapy, group psychotherapy and casework/probation) essentially concludes that all forms of such intervention whether with a group or behavioural orientation have demonstrated little evidence of success: 'we are unable to reject the null hypothesis of no treatment effect' (Gottschalk et al. 1987). Clearly the researchers had a great deal of difficulty in working out exactly what the majority of the programs actually did. They conclude that psychologists ran most programs and that 'a picture of not particularly intense interventions seemed to emerge' (p.277). Their only positive conclusion is that there is some evidence that there are threshold effects, both in terms of strength of treatment and length of treatment.

Bleich (1987) has reviewed the evidence on individual and group therapy and 'behaviour modification' for a particular sub-set of juveniles: serious (usually violent) offenders. 'The literature concludes that psychotherapy does not have any significant impact on most youths in secure care facilities and that the impact of confined behaviour modification is fleeting' (Bleich 1987, p.161). He further finds that these kinds of programs tend to be more expensive than other kinds of programs. This is not surprising as the particular treatment costs are on top of custodial costs.

It would be foolish, we believe, to implement expensive programs based on individual or group psychotherapy approaches to serious juvenile offenders without a careful analysis of the literature. For example, in Australia at the moment there is real concern about juvenile sex offenders. We have discovered that some agencies are considering elaborate treatment programs for incarcerated juvenile offenders based on psychotherapy models.

The problem here is that evaluations of current treatment methods of dealing with both adult and juvenile sexual offenders are not promising. In the most recent review of this area the writers conclude that 'there is as yet no evidence that clinical treatment reduces rates of sex offences in general and no appropriate data for assessing whether it may be differentially effective for different types of offenders' (Furby et al. 1989, p.27).

Given this rather pessimistic finding it may well be more appropriate to place scant resources into programs that appear to be effective in reducing delinquency as a whole - as outlined earlier - than into specific programs for incarcerated juvenile sex offenders.

At the very least, a thorough review of the literature on the effectiveness of programs for juvenile sex offenders should be undertaken before such programs are devised, let alone implemented.

Gottschalk et al. did not include family interventions in their analysis. Gordon and Arbuthnot do include them but note that family intervention evaluation has been hindered by 'the appalling lack of detail in the description of the interventions' (1987, p.305). On 'systems' and non-behavioural family therapies Gordon and Arbuthnot conclude: 'there is cause for optimism since three of the five studies did reduce recidivism relative to a comparison group not receiving family treatment, but the experimental designs were contaminated' (1987, p.307). In fact, these studies appear to be various

versions of parent-training and could be included in the evidence already discussed on parent-training.

In general, the conclusion on various forms of psychotherapy and 'weak' counselling must be extremely negative. There is no current evidence that these kinds of well-intentioned programs will have any impact on delinquency. They may generate other social benefits, although there is little evidence to support such a view. Probably the worst thing that could happen to juvenile justice is a whole panoply of these kinds of programs that masquerade as juvenile delinquency 'prevention' programs. Leitenberg (1987) puts this view bluntly:

There is not statistical or experimental evidence that I know of that suggests that lack of organised recreation opportunities causes delinquency. There is also no statistical evidence that I know of to support the belief that the provision of such opportunities reduces the incidence of delinquency (Wright & Dixon 1977). Yet this is almost always the first program introduced in a community in the name of delinquency prevention. The second is a drop-in centre. We have to stop kidding ourselves that relatively easily implemented programs prevent delinquency when the evidence indicates they do not (Leitenberg 1987, p.317).

## Conclusions

What can Australia learn from this review? We believe that there are both process (methodological) conclusions as well as substantive conclusions. It may seem unusual that we have chosen to report the process conclusions first. In this case we believe that their process conclusions are probably more important than any substantive findings.

Our process conclusions may not be surprising given the fact that few Australian programs or experiments have been reported on in this study. Australian governments, either at the Commonwealth or state level, have developed few of the innovative programs that might reduce juvenile delinquency. Equally importantly, indeed given uncertainty, perhaps more importantly, governments have devoted almost no effort to *learning* what might work. As this report has documented the costs of the current system are enormous, and by no means limited to government budgets.

Why should Australian governments learn? We think it appropriate to make a strong statement here. If governments are not prepared to insist on programs that: (i) involve simple and 'strong' treatments; (ii) are implemented as designed and maintained over time, and (iii) to systematically evaluate these experiments, *they are not worth doing*. This may seem obvious. The evidence is that it is anything but. In the cyclical rush of good intentions these points are likely to be lost.

Figure 10 presents a simple framework for understanding the different levels at which the juvenile delinquency issue can be addressed.

As the figure shows, the different levels can be thought of as a funnel. At the broadest level programs can be addressed at the total juvenile population. Next at-risk populations can be addressed (obviously there is a considerable range, here, depending on the socio-economic or demographic variables that are used to identify such populations. At the next (narrower) level we focus on at-risk *individuals*, in other words particular juveniles are identified and treated on the basis of individual behaviour whether manifested

in school, at home or in the community (or a combination, as in 'multiple-gating'). At a still narrower level, the criminal justice system can focus on status and crime offenders. At the next level it can focus only on crime offenders. Finally, the system can concentrate on chronic, or high repeat, offenders. The approaches can be approximately divided into prevention approaches (before an individual has been either identified or adjudicated as being a juvenile delinquent) or treatment approaches (after such a finding, including diversion).

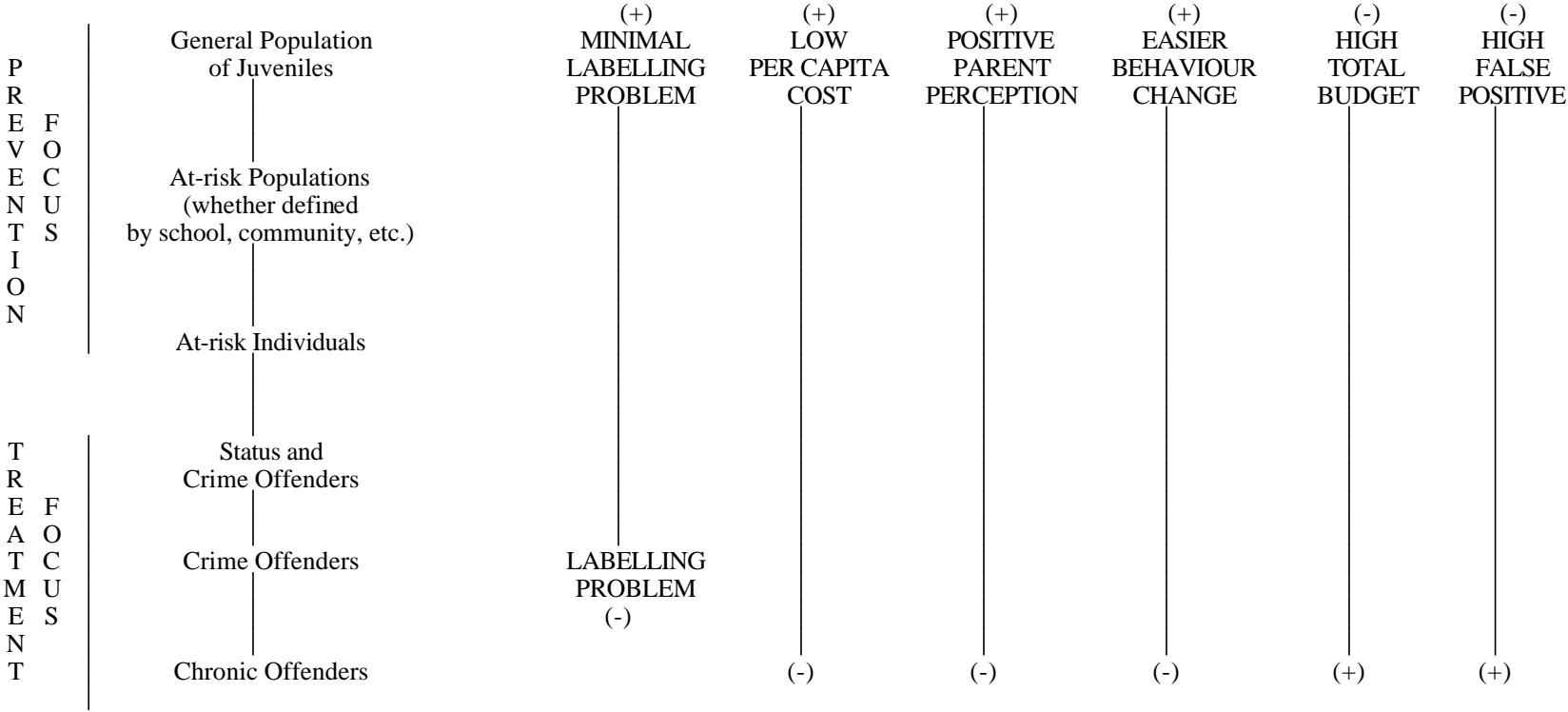
Of course, juvenile justice strategies do not have to be exclusively addressed at only one level. For example, some policy analysts appear to favour strategies that concentrate on at-risk juveniles and chronic offenders (see Greenwood 1987). However, choices do have to be made both because of costs and because, as we have seen, solutions based on each level have advantages and disadvantages. Figure 10 attempts to summarise these advantages and disadvantages. Not surprisingly there are some advantages associated with attacking the juvenile justice problem at the broadest level (that is, at the top of the funnel: (i) *per capita* budget costs are likely to be relatively low; conversely however, absolute, or total, budgetary costs will tend to be extremely high and perhaps importantly will be associated with different agencies (for example schools) than treatment budgets (that is corrections); (ii) *potentially* parents and juveniles need be less concerned with labelling problems at this level if interventions are perceived to be advantageous to juveniles, but especially to their parents; (iii) behaviour *may* be somewhat easier to alter if these population programs are addressed at children and younger juveniles.

As we have already discussed, the disadvantages tend to be the mirror image of these advantages: high aggregate costs and high false positives (this later phenomenon is only a problem if there is some negative labelling). The major problem of the false positive phenomenon, in the absence of labelling, is that overall cost-benefits ratios are depressed by the costs of 'treating' the false positives.

In our view, approaches which address both at-risk populations and at-risk individuals with programs that are viewed positively by their parents (and which, therefore, do not label) probably offer the best combination of advantages: they are likely to provide the best benefit-cost outcomes. Clearly, the two categories will overlap considerably (for example, the United States Job Corps programs was designed for at-risk populations, but most of the clients would probably have been defined as high-risk juveniles.

**FIGURE 10**

**A Framework for Understanding  
Juvenile Justice Interventions**





The first major substantive conclusion is that there is hope for *prevention* strategies, mainly those that are pre-school and school-focused. But these prevention strategies raise several potential problems. The most serious is that because of the inevitable problem of a very large number of 'false positives' in a universal, un-screened population (for example, all 13-year-olds in Australia) it will usually never make sense to 'treat' all children. It might make sense if we had no reliable predictors of the likelihood of becoming delinquent. It does not make sense given that many of these characteristics are known by 12 or 13 years of age. But as soon as false positives are reduced in *number* there is a danger that the *costs* for remaining false positives increase. The reason is that in universal programs false positives are purely an economic problem (money is being spent on juveniles who will not, in fact, become delinquent). But universal programs virtually guarantee that there will be no social stigmatisation or net widening. However, once prevention programs become *non-universal* they potentially become treatment programs with attendant labelling and stigmatisation problems.

Non-universal programs reduce the *budgetary* implications of the false positive problem (if the predictors actually have some predictive power) because resources are no longer wasted on youth who will not become delinquent. However it should be recognised that non-universal programs will tend to raise the private (and perhaps the longer-run budgetary) costs of the remaining false positives because of labelling, stigma etc. In other words, although there are short-run budgetary savings there may be long-run social costs. Additionally, of course, non-universal programs (especially those that attempt prediction at the individual level) also generate false negative problems.

How can these problems be avoided when designing prevention programs? One meta-strategy is to ensure that any such program is perceived as potentially beneficial by parents. In practice, this is synonymous with programs that are non-coercive. We should stress '*perceived* to be beneficial'. It is not enough that such programs be beneficial according to some set of objective criteria, clients (children's parents) must perceive this to be so. Pre-school programs have a major advantage, in that they are likely to fall into this category.

Non-coerciveness is absolutely vital to any program that attempts to select *individuals* for prevention treatment. Indeed, programs that rely on parents to identify potential problem children could not effectively function unless the parents see benefits.

Another strategy is to focus on schools in low income communities (low income is probably the most practical proxy for delinquency for policy purposes, but there may be others). As this report has documented, the most promise can be found in programs that focus on school organisation and culture. One disadvantage is that such programs cannot truly be said to be voluntary. (School culture is a 'public good' which must be consumed by all pupils attending a given school). There are several advantages. Concentrating on low income communities decreases the budgetary false positive problem (because there is a higher underlying degree of delinquency), but if truly school-wide is not likely to generate significant labelling problems. Additionally, although not voluntary in the purest sense of the word, many parents are likely to perceive benefits, especially if home behaviour is improved.

A second conclusion is that another major focus can be upon at-risk individuals (*see* Figure 10). However, the evidence of positive effects is

limited to specific kinds of parent-training programs. We believe that this area should be the focus of well-designed Australian experiments.

A third conclusion is that there is fairly good evidence that some things do not work. For example, it has been shown that individual therapy and group therapy of children identified as pre-delinquent have been shown to be worthless time after time (Leitenberg 1987, p.320).

However, our fourth conclusion is that certain types of 'non-traditional' treatment programs do appear to be effective. We must caution, however, that these findings are tentative and appear to be dependent on hard-to-replicate conditions. Again, this suggests well-controlled experiments at this stage rather than wholesale adoption. The two major programs here are camp and wilderness sentences and 'Job-Corps' style training programs (we have already noted that these programs are also appropriate for at-risk populations, that is prevention, as well as a treatment mode). These programs appear especially valuable for chronic offenders.

We should also mention here the potential of situational crime prevention measures for specific forms of juvenile anti-social behaviour. Telecom Australia has already demonstrated the enormous savings that can be obtained by using such measures in the case of theft and vandalism in relation to public telephones. We consider that in regard to other forms of delinquent behaviour - vandalism, graffiti, car-theft, household burglary and so on - situational measures could also be very effective.

Finally, regardless of whether situational or social crime-prevention strategies are employed in the juvenile field, we consider it essential that funding be withheld for such programs unless proper evaluation paradigms are built into policy or research proposals. For too long government and private bodies have funded prevention schemes in the juvenile field without demanding any accountability in terms of the outcome of such schemes. The consequent duplication of programs in the absence of critical assessment or the implementation of programs that have failed elsewhere (or for which there is no real evidence of success) is unacceptable in these times of limited budgets for social innovations. Researchers and policy implementators must ensure that proper evaluation strategies are part of the research or policy proposal.