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A cost-benefit analysis of child sex-offender treatment programs for male offenders in correctional services.

Child Protection Research Group
University of South Australia
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Preface

By Professor Freda Briggs

For over a year the Child Protection Research Group has investigated the project *A cost-benefit analysis of child sex offender treatment programs for male offenders in correctional services*. During that time we have had outstanding support from a wide range of people, including Correctional Services throughout Australia and New Zealand and around the world. The then head of South Australian Correctional Services, Ms Sue Vardon, provided crucial initial support. We would especially like to thank the Criminology Research Council for providing funds for this project.

This report represents a good example of the type of multi-disciplinary work that can be achieved when a range of people with different skills is brought together. Such interdisciplinary cooperation and research is important in many of the social sciences, and nowhere more so than in the field of child protection.

The conclusions reached by this study are based on conservative assumptions. Only substantiated cases of child abuse have been used. Low estimates of tangible expenditures have been made at all levels. Program costs have been estimated at the upper end of their range. Program effectiveness has been assumed to be at the lower end of published claims. Intangible costs have been estimated that span values from zero to ten times tangible costs. Such conservative assumptions make the report's findings all the more powerful. It is an important step towards providing a framework of analysis from which further research in the area of child sexual abuse can be undertaken.

The report concludes that on any reasonable interpretation, child sex offender treatment programs do pass a cost-benefit analysis. Policy makers should heed this result. When the comparatively modest cost of treatment programs are compared against the tangible expenditures incurred by the community and the full costs of the pain and suffering to victims, the value of such programs, in economic terms, is overwhelming.

In terms of the UN Convention on the Rights of the Child, quoted in Chapter 1 of this report, such programs are certainly an 'appropriate' element of the government's

> ... legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse.

We owe it to the children of this society to do all in our power to protect them from sexual abuse. As this report shows, child sex offender treatment programs in correctional services should be a part of our efforts.

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Abstract

This paper reports on a cost-benefit analysis of child sex offender treatment programs for male offenders in correctional services. This study provides an overview of child sex abuse issues and provides a description of cognitive therapy treatment programs in several countries and around Australia. It then discusses the methodological and practical issues involved with the economic analysis of offender treatment programs and child sexual abuse as well as presenting findings based on South Australian data. A comprehensive list of the effects of child sexual abuse is outlined and there is a discussion of the methodological difficulties in attributing values to these. Despite these difficulties, overall estimates of the costs of programs and the benefits derived from lowering recidivism are reported, together with a sensitivity analysis of the results. The magnitude of the problem of child sexual abuse generally and offences by recidivists in particular, suggest the range of potential economic costs from child sexual abuse are substantial and the economic benefits to be achieved from appropriate and effective treatment programs high. Given the application of recent economic techniques to measure the intangible costs of child sex abuse and the methodological and informational problems encountered, the study can be considered a major first step towards a comprehensive economic analysis of in-prison child sex offender treatment programs that also provides a framework for future research efforts.

Chapter 1 Overview of the Report

Introduction

In 1990, the Australian Government ratified the United Nations Convention on the Rights of the Child. Articles 19 and 34 state:

> Article 19.
>
> 1. State Parties shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse, while in the care of parent(s), legal guardian(s) or any other person who has the care of the child.
>
> 2. Such protective measures should, as appropriate, include effective procedures for the establishment of social programmes to provide necessary support for the child and for those who have the care of the child, as well as for other forms of prevention and for identification, reporting, referral, investigation, treatment and follow-up of instances of child maltreatment, described heretofore, and, as appropriate judicial involvement.
>
> Article 34
>
> State Parties undertake to protect the child from all forms of sexual exploitation and sexual abuse. For these purposes, States Parties shall in particular take all appropriate national, bilateral and multilateral measures to prevent:
>
> (a) the inducement or coercion of a child to engage in any unlawful sexual activity
>
> (b) the exploitative use of children in prostitution or other unlawful sexual practices;

(c) the exploitative use of children in pornographic performances and materials.

(Reprinted in Alston and Brennan (1991), 131).

This report examines, from a cost-benefit perspective, whether in-house child sex offender treatment programs for male offenders are an appropriate administrative measure to assist in the protection of children from sexual abuse. In order to conduct such an assessment, both the economic cost of such treatment programs and the benefits to be derived from avoiding child sexual abuse need to be measured. Such calculations involve combining available data from a wide variety of sources, applying recently developed economic techniques for measuring social costs of an intangible nature and dealing with considerable uncertainty in regard to the accuracy and weighting of particular information.

Chapter 2 discusses general issues surrounding child sexual abuse. Definitions of child sexual abuse are considered, as are the concepts of incidence and prevalence. In this report the definition, incidence and prevalence data supplied by the Australian Institute of Health and Welfare are adopted. The issue of under-reporting and the consequent reliability of statistics is also discussed. This chapter then reports on the literature that discusses the effects of child sexual abuse and the different effects that are correlated with familial, extra-familial and system abuse. Inter-generational transmission of sexual abuse is discussed. To estimate the costs of such sexual abuse, it is necessary, however, to move from a broad understanding of the multi-dimensional effects of such abuse to systematically identify and categorise as many of the effects as possible. This chapter provides a brief summary that attempts to capture and organise as many of these effects as possible.

Chapter 3 provides an overview of treatment programs aimed at people who sexually abuse children. There are a wide number of possible programs. For the purposes of this project, however, the critical issues are those that pertain to the recidivism rates that result after a program has been attended, and the costs of the program itself. The chapter discusses the literature on the characteristics of offenders, issues surrounding the paedophile and the subsequent opportunities for intervention in preventing child sexual abuse. A brief history of treatment programs is provided and the current trend toward cognitive behavioural

programs outlined. This report adopts, as a generic program, a cognitive therapy treatment program with relapse prevention. This chapter therefore discusses this type of program in some detail. The question of program efficacy is also discussed and a wide range of recidivism rates reported. Appendix A2 carries a more detailed discussion of programs categorised by geographical location.

Chapter 4 discusses the theoretical and methodological issues surrounding a cost-benefit analysis of social programs such as treatment programs for child sex offenders. The basic approach of cost-benefit analysis is briefly discussed. Detail is also provided of the approach taken in this report that identifies costs as either 'tangible' or 'intangible'. The superiority of this approach over previous studies is shown before the chapter turns to a detailed discussion of the possible estimation techniques of 'intangibles'. The economic techniques of 'revealed preference' and 'contingent valuation' are also reviewed. This report adopts both methods, drawn from widely different backgrounds, to provide a 'range' of values that reflect 'intangible' aspects of child sex abuse.

Chapter 5 reviews the actual sources of information used and the decisions taken to weight data of widely varying quality. In many cases no information was available and it was decided to either use proxy variables or to exclude certain categories. These issues are discussed in this chapter and the outcomes presented. Cost estimates of child sex offender treatment programs are presented, as are the sources on which these estimates are based. The sum total of tangible costs associated with child sexual abuse are calculated by summing expenditures from State and Federal Governments, non-government organisations and the out-of-pocket expenses of victims and their families. Intangible costs are estimated. The first approach (based on a contingent valuation method) involves the adaptation of a study by Scott (1996) and McGurk and Hazel (1998) that produces a 'lower bound' on the value of the intangible effects of child sexual abuse. The second approach, using revealed preferences, takes work done in the United States by Miller, Cohen and Wiersma (1996) to provide an 'upper bound' on the value of the intangible effects of child sexual abuse.

Chapter 6 presents the results of the report. Combining the various estimates outlined in Chapter 5, a range of results is presented that reveals the variability in cost-benefit

outcomes. As this chapter highlights, the question of whether child sex offender treatment programs for male offenders in correctional services should or should not be provided, from a cost-benefit perspective, turns on a number of underlying assumptions. Crucial to these is the efficacy of treatment programs and the overall monetary value of the intangible damage done as a result of child sexual abuse. Given the paucity of reliable data in either of these two areas (along with numerous other data gaps), the results are presented in a manner that reflects the range of possible outcomes. The results also reflect the sensitivity of the outcomes to changes in rates of recidivism and the assumed number of victims per recidivist. Despite these qualifications, however, the tables do reveal that if recidivism rates can be achieved of the order recently reported for the Kia Marama program in New Zealand, and at a comparable program cost, than from a cost-benefit perspective, the benefits of such a program outweigh the costs.

Chapter 7 interprets these findings and presents an agenda for future research. Crucial to any future work in this area is the need for more and better information. In almost every area, from government departments, hospitals, and non-government organisations to published high quality research, there is a dearth of information and analysis concerning child sexual abuse. Without such information, child sexual abuse will remain 'invisible', and its true cost unknown. This study can be considered a major first step towards assessing these issues and provides a comprehensive platform on which future research can build.

Chapter 2. Child Sexual Abuse: general issues.

2.1 Introduction

A principle benefit of implementing sex offender treatment programs is the consequent reduction in recidivism rates. The potential benefits of treatment programs can be seen as all the costs associated with child sex abuse that are consequently avoided. The purpose of this chapter therefore is to highlight the complexity of issues surrounding the costs of child sex abuse in order to provide an appropriate perspective from which the economic analysis, discussed in subsequent chapters, can be more fully understood.

2.2 Defining Child Sex Abuse

There is no universal definition for child sexual abuse, (sometimes referred to as child sexual assault). Even within Australia definitions vary, making the task of determining the prevalence rates of child sexual abuse difficult. Several alternatives are cited below.

Kempe and Kempe (1978:60) define child sexual abuse as

> the involvement of dependent, developmentally immature children and adolescents in sexual activities which they do not fully comprehend, are unable to give informed consent to, and that violate family taboos of family roles.

The Child Sexual Abuse Taskforce (James, 1994:81) defines child sexual abuse as

> the involvement of a dependent and developmentally immature child or adolescent in the sexual activities of an older person/adult, where the younger person is used for the gratification of sexual desires or needs of the older person or where social taboos or family roles are violated.

From a national perspective, the Australian Institute of Health and Welfare define child sexual abuse as 'any act which exposes a child to, or involves a child in any sexual processes beyond his or her understanding or contrary to accepted community standards' (Angus and Woodward 1995:46).

In South Australia social workers and those who undergo training programs in order to prevent and report child abuse are given clear guidelines as to what constitutes child sexual abuse. Sexual abuse involves an adult or a child in a greatly more developmentally advanced stage, using a child for sexual gratification.

> A wide range of sexual behaviour is involved, including sexual suggestion, showing pornographic videos, using children in the production of pornographic videos or films, exhibitionism, fondling, mutual masturbation, penile or digital penetration of the genital or anal region, oral sex, and child prostitution (South Australian Child Protection Council, 1994:24).

Critically, in each of these definitions, the child does not have the capacity to make an informed judgement concerning the decision to become involved in a sexual relationship.

This study adopts the definition, incidence and prevalence data on child sexual abuse used by the Australian Institute of Health and Welfare in its report series on Child Abuse and Neglect (Broadbent and Bentley 1997). This approach limits the analysis to include only child sexual abuse incidents identified by 'substantiated notifications', made to State and Territory community service departments.[1] By counting only those incidents which are officially acknowledged by community service departments the analysis significantly underestimates the number of actual incidents of child sexual abuse which do occur and thus the 'true' benefits to be derived from reducing recidivism. Issues of under-reporting are discussed later in this chapter.

2.3 Rates of Child Sex Abuse

Before considering quantitative measures of child sexual abuse it is important to distinguish the terms 'prevalence' and 'incidence'. The prevalence of child sexual abuse refers to the percentage of people in a particular population who have been sexually abused. The term incidence, however, refers to the number of new cases of child sexual abuse each year (Hopper, 1997).

In 1995/96 in Australia, sixteen percent of 29,833 substantiated cases of child abuse were labelled as child sexual abuse (Broadbent and Bentley, 1997). In the case of South Australia, Table 1 reveals there were 600 substantiated notifications of child sex abuse; or twenty five percent of the total state figure for child abuse and neglect.

Table 1

Substantiated Notifications of Child Abuse and Neglect by type of Abuse and Neglect, 1995-1996

Type of Abuse	NSW	Vic	Qld	WA	SA	TAS	ACT	NT	Total
Physical	3,422	1,847	1,620	383	852	103	129	111	8,467
Emotional	5,388	2,393	896	46	404	14	107	17	9,265
Sexual	2,776	644	301	328	600	70	49	34	4,802
Neglect	2,477	1,779	1,845	338	559	48	160	93	7,299
Total Substantiation	14,063	6,663	4,662	1,095	2,415	235	445	255	29,833
				Percentage					
Physical	24	28	35	35	35	44	29	44	28
Emotional	38	36	19	4	17	6	24	7	31
Sexual	20	10	6	30	25	30	11	13	16
Neglect	18	27	40	31	23	20	36	36	24
Total Substantiation	100	100	100	100	100	100	100	100	100

Source: Broadbent and Bentley (1997), *Child abuse and neglect Australia, 1995-96*. Table 3:20.

Estimates used in this report are based on the figures shown above. These are likely to underestimate the 'actual' incidence of child sex abuse in South Australia and produce a conservative estimate for the costs of child sexual abuse that can potentially be avoided through reduced recidivism rates.[2]

[1] Notifications to other organisations such as police and other non-government agencies are not included unless they were also referred to the community service department (Broadbent and Bentley, 1997).

[2] For example the National Crime Authority report estimated the number of children sexually abused in Australia at approximately 30,000 girls and 11,000 boys annually – a figure significantly higher than that indicated in Table 1 (Sunday Age, 14 September 1997).

Research in other countries indicates that child sexual abuse occurs to a significant percentage of the population. Marshall (1992) reports a Canadian survey that indicates that one out of four females and one out of eight males are sexually assaulted in their lifetime. Eighty per cent of victims claimed such assaults occurred when they were children. Another Canadian study (Rice, Harris and Quinsey, 1991) found that twenty percent of girls and ten per cent of boys were sexually assaulted before adulthood. In the United States, Krugman (1992) stated research findings that revealed fifteen percent of men and twenty seven percent of women had been sexually abused as children. Finkelhor found that in at least nineteen countries, in addition to the U.S. and Canada, females were abused at one-and-a-half to three times the rate for males (Finkelhor 1994).

There are incongruities between the 'official' statistics and research studies outlining the extent of child sex abuse in the community. The difference between the 'actual' incidence and prevalence rates of child sex abuse, and the officially acknowledged rates is partially explained by the extent of under-reporting that occurs and the methodological issues surrounding statistical data gathering. Both these issues are discussed below.

Under-reporting

Many child abuse professionals now accept that most cases of sexual abuse go undetected (Prentky, Knight and Lee, 1997). For instance Chappell (1988) argues that possibly as few as one in eleven incidents are reported. A child may be too afraid or embarrassed to disclose. Commonly threats are made by the perpetrator that if the 'secret' is revealed, harm will come to the mother, the child, pets of the child, or even the perpetrator himself. In cases where there has been disclosure and the matter proceeds to court, proving an allegation of child sexual abuse beyond a reasonable doubt is extremely difficult within the present legal framework. There is rarely any corroborative evidence and in some jurisdictions a warning is given by the judge against convicting on the child's evidence. A young child does not easily produce the type of evidence which lawyers and judges regard as probative (Redman 1997:16). In addition, many non-offending parents of sexually abused children are unwilling to expose their children to the rigours of the criminal justice system. This may involve confronting the perpetrator and being subject to cross-examination that can be deliberately confusing, stressful and intimidating.

Under-reporting also appears to be age dependent. Fergusson and Mullen (1998:57) note that differences in estimated child sexual abuse between children of pre-school years and adolescents is likely to be due to under-reporting of sexual abuse in young children.

It is extremely difficult to gauge the true extent of child sexual abuse in the community. The increase in public awareness coupled with the introduction of mandatory reporting by professionals who have contact with children, has resulted in increased reporting. This, along with differences in official definitions, may in part explain the high relatively high proportion of sex abuse detected in South Australia compared with other states. Unfortunately, social welfare organisations lack the human and financial resources to deal with the increase in reports. The necessary prioritisation of these, results in some cases not being followed up, or investigations being initiated long after all evidence has disappeared. 'Substantiated cases', by definition only counts those cases followed up and confirmed by social welfare agencies.

Evidence that one perpetrator may be responsible for multiple acts of child sexual abuse has emerged from the self-reported behaviour of some offenders. In 1987 Abel and colleagues (in Prentky, Knight and Lee 1997) obtained data from self-reports of criminal sexual activity from a group of 561 subjects. These results which have been supported by further studies are indicative of the prevalence of undetected criminal sexual activity.

Figure 1

Adult Reports of Child-Focused Sexual Behavior

Perhaps the most dramatic offender self-report data on victimization rates come from research in which investigators recruited 561 subjects through a variety of means (eg., health care workers, media advertising, and presentations at meetings).a The offenders were given a lengthy structured clinical interview covering standard demographic information as well as history of deviant sexual behavior.

The 561 subjects reported a total of 291,737 "paraphilic acts" committed against 195,407 victims under the age of 18. The five most frequently reported paraphilic acts involved criminal conduct:

- Nonincestuous child molestation with a female victim (224 of the 561 subjects reported 5,197 acts against 4,435 victims).
- Nonincestuous child molestation with a male victim (153 of the 561 subjects reported 43,100 acts against 22,981 victims).
- Incest with a female victim (159 of the 561 subjects reported 12,927 acts against 286 victims).
- Incest with a male victim (44 of the 561 subjects reported 2,741 acts against 75 victims).
- Rape (126 of the 561 subjects reported 907 acts against 882 victims).

The remaining sixteen categories included a wide range of paraphilias, which may or may not have involved coercion. The first five categories included a total of 64,872 acts. The total number of subjects and victims cannot be determined since the categories are overlapping (ie., many subjects reported multiple paraphilias and hence were recorded in multiple categories).

Abel, G.G., J.V. Becker, M.S. Mittelman, J. Cunningham-Rathner, J.L. Rouleau, and W.D. Murphy, "Self-Reported Sex Crimes of Nonincarcerated Paraphilics," Journal of Interpersonal Violence 2 (1987):3–25.

Source: Prentky, Knight and Lee, 1997:2.

Lockhart, Saunders, and Cleveland (1989) in a study of child molesters who target non-familial male children, found they committed an average of 282 assaults against approximately 150 victims. Abel et.al. (1987) found that child molesters who offended against boys outside the home committed a disproportionately high number of offences and they felt that effective treatment of that group would dramatically reduce the number of present and future offences. Weinrott and Saylor (1991) have supported the finding that many perpetrators have multiple victims. While conducting their evaluation of sex offender programs in the U.K., Beckett, et.al. (1994) found that in a sample of 52 men, the 42 percent who were extra-familial abusers had an average of eight known victims. In the same study, intra-familial abusers (45 percent) had an average of two known victims, whilst men who abused both within and without the family (thirteen percent) had an average of fifteen known victims.

Methodological Issues: Reliability of Statistics

The under-reporting of child sexual abuse is a major reason for the true cost of such abuse being 'invisible'. In addition to the fact that for many reasons child abuse is not reported at the time, differing methodologies used by researchers when questioning adult survivors of child sexual abuse can produce widely varying prevalence rates (Hopper, 1997). Survey results may be affected by a number of factors.

- The population from which the research sample is drawn.

A general community survey will yield different results from a survey conducted within a population receiving treatment for mental health problems. A higher prevalence rate would be anticipated amongst the group receiving psychological care simply because sexual abuse is so commonly a precursor to psychological dysfunction. Other groups may also provide higher or lower prevalence rates.

- Whether or not 'gate' questions are used.

The initial or 'gate' question may be worded in such a way the respondent will reply negatively. The rest of the questionnaire then becomes irrelevant if the 'gate' question receives a negative response. However, questioning about more specific matters may receive a positive response.

- Wording of questions or items, especially whether or not the word 'abuse' is used.

Use of the word 'abuse' in research questionnaires seeking to determine prevalence rates can greatly affect the results of the research. This can occur due to differences in understanding of the term between the author of the research and the respondent. As an alternative, behavioural descriptions may ensure the respondent has a clearer understanding of the acts that are labelled as abusive. This sort of questioning has the added benefit of transcending state and national boundaries where different legal definitions are employed. Two random studies (Murphy, 1987,1989, in Hopper 1997:9) illustrate the different results that might be expected using and not using the word 'abuse'. Where the descriptive 'unwanted sexual experiences' was employed, the prevalence rate was found to be approximately twice as high as when the word 'abuse' was used.

- Number of questions or items.

Because of the many ways in which a child can be abused, clearly a greater number of questions that explore these descriptions will increase the likelihood of the respondents recognising the abusive act.

- Definitions of abuse used to categorise research data.

> There will always be disagreements about what constitutes 'sexual abuse' even among experts in this area. Some will ground their definitions in the exploitive intention of the person having the sexual experience with the child, no matter how the child or remembering adult feels about the experience. Others will believe this dilutes the meaning of the words and trivialises the suffering of people who, for example, have been raped by a parent repeatedly for years. These people will advocate for very conservative definitions. (Hopper 1997:6)

In the case of research questionnaires directed at males, results may vary depending on whether or not the questionnaire is anonymous. Frequently men are unwilling to acknowledge sexual abuse in the presence of another person and therefore a higher prevalence rate would result from an anonymous questionnaire. Other studies (Briggs et.al. 1994; Finkelhor, 1986; Woods Commission Report 1997:1159) add weight to this theory. On the other hand, particularly in the situation where an offender has been detained, it may be to the offender's advantage to declare himself as having had an abusive childhood with a view to eliciting leniency from the court.

The issue of recovered memories is a controversial area and the tales of sexual abuse only remembered after many years are viewed by some with scepticism. Some evidence exists that many episodes of sexual abuse are not remembered. Elliott (1997) found that among 724 randomly chosen respondents, 72 percent of whom had experienced trauma, 32 percent experienced delayed recall of the event. The study found the more severe the trauma, the more likely that it would be repressed. Herman and Schatzaw (1987) support these findings. Any such repression may depend on the age of the child at the time of the abuse and the closeness of the relationship to the abuser. One prospective study (Williams, 1995) found that of the sample of women who had reported an abusive incident and had it

documented seventeen years earlier, sixteen percent reported that they had at some time in the past forgotten about the abuse.

Clearly, it is important that researchers pay close attention to methodological issues if they wish to produce an accurate incidence and prevalence rate. Past studies have not always done this, something that has played a large part in the resulting inaccuracies and differing results in this area. The importance of these issues for an economic analysis is that where official rates are used, and these are below the 'true' rates, the full cost of child sexual abuse will be under-estimated.

Effects of Child Sexual Abuse

Effects on the child

As individuals, children who have been sexually abused are affected in many different ways and to different degrees. Clearly there are difficulties in trying to assess the impact of single or multiple acts of child abuse. The extent of family dysfunction, victim resilience, type and severity of abuse, co-existence of physical and emotional abuse, the stage of development of the child at which the abuse occurred, the relationship to the abuser and the presence or lack of other support mechanisms all play a part in determining the degree of subsequent distress and long- term damage experienced by the victim. There are, however, a number of more common effects that have been recorded.

Depression is the most common effect of child sexual abuse (Finkelhor 1990; Koverola, Pound, Heger and Lytle 1993; Browne and Finkelhor 1986). Some sexual abuse may result in psychiatric illnesses and can be a factor in youth suicide (Kosky, 1987; Burdekin 1993). The child may experience difficulties at school and with friendships (Finkelhor 1990; Friedrich 1990). These experiences at school are likely to affect the future academic progress of the child and reduce the likelihood of the child becoming equipped to participate in further study therefore limiting the child's future employment prospects.

Many abused children will bear the psychological scars of their experience throughout their lifetime. (Beitchman, Zucker, Hood, Da Costa, Akman, and Cassavia 1992). Adult females who were abused as children are more prone to depression, fear and anxiety and sexual disturbance and may contemplate suicide more frequently (Nash Zivney and

Hulsey, 1993). This work also supports the finding that women who had suffered physical and sexual abuse in childhood became more isolated (Moeller, Bachmann and Moeller 1993).

Mullen, Martin et.al., (1994) found a decline in socioeconomic status in women who had experienced the more severe types of sexual abuse. Romans Martin and Mullen (1996) showed a clear relationship between child sexual abuse and lowered self-esteem in those who had experienced intrusive sexual abuse. These victims of sexual abuse saw themselves as less able to influence life events and had a greater expectation of unpleasant events.

Some studies indicate the range of post-traumatic stress disorders which the child may suffer can be many and varied and may include sleep problems, crying, flashbacks and nightmares (Baum, O'Keefe and Davidson 1990; Winefield et.al. 1990; Romans et.al. 1995; Fergusson et.al. 1996a,b). In extreme cases dissociative disorders such as amnesia and multiple personality may ensue (Williams 1993). Finkelhor (1987) proposed a 'traumatogenic model' which differed from the Post-Traumatic Stress Disorder model in that it proposed the act of sexual abuse caused a wide range of psychological effects and changes in behaviour. Einbender and Friedrich (1989) found that sexually abused children suffered higher degrees of social cognitive and emotional impairment.

The outcome depends, among other things, upon the individual child and their resilience, the duration of abuse and the availability of support mechanisms (Nash, et.al. 1993). Marital dysfunction and domestic violence are associated with higher risks of child sexual abuse (Mullen et.al. 1996; Fleming et.al. 1996; Fergusson et.al. 1996 a,b). Family dysfunction was also found to be a significant factor in a five year follow-up study on the impact of child abuse on a child's depression, self-esteem and behaviour problems (Tebbutt, Swanston, Oates, and O'Toole 1997).

Mullen et.al., (1996) in a study on New Zealand women found positive correlations between a history of child sexual abuse and mental health problems. The overlap between the possible effects of child sexual abuse and the effects of disadvantage was so considerable, however, as to raise doubts about the significance of child sexual abuse as an independent causal element (Mullen and Fleming 1998). None-the-less, those women who

had suffered significant abuse in the form of chronic incestuous penetrative abuse had significant increases in psychopathology, even when disrupted backgrounds were taken into account.

Children who have experienced child sex abuse are also more likely have experienced some other type of abuse (Mullen et.al.. 1996; Fergusson et.al.. 1997).

Clearly child sexual abuse is a complex phenomenon. As the Woods Commission noted:

> Child sexual abuse is not usually an isolated trauma, and should be regarded in most cases as one element in a matrix of adverse family, social and interpersonal experiences which increase the individual's vulnerability to psychiatric disorders. They suggested treatment of the whole clinical picture. Current thinking is that child sexual abuse should be viewed and managed as part of a much wider problem involving physical abuse and neglect of children, and possibly social disadvantage (Mullen, 1993 in Woods Commission Report 1997:1165).

A more detailed summary of some of the effects of child sexual abuse was outlined in the Woods Commission Report; it is worth quoting at length. The effect of child sexual abuse can include:

- physical injury and illness (genital or anal damage, HIV, AIDS, urinary infections) psychosomatic responses (eczema, asthma, anorexia nervosa), and inhibited physiological responses to the environment;
- emotional and psychological pain and trauma, fear both generalised and specifically of disbelief or rejection, and anxiety. Other emotional responses include insomnia, nightmares, mood swings, anxiety depression, phobias, sadness, anger, and feelings of helplessness, hopelessness, isolation and self-blame;
- behavioural symptoms- abusive language, aggressive or inappropriate sexual activity, substance abuse, and suicide;

- social symptoms-difficulty in verbal contact, withdrawal, avoidance, running away, fighting and aggression;
- isolation-arising out of the secrecy surrounding the abuse, efforts of the abuser to maintain that isolation, and fear, confusion, shame and self-blame on the part of the child;
- general and specific learning difficulties, memory loss, attention deficit disorder, and delayed cognitive development, each of which can lead to a dramatic change in academic performance; and
- other impacts- low self-esteem, lack of empathy, sense of emptiness, lack of basic trust, resentment against authority and propensity for aggression which can lead to delinquent and criminal behaviour; desire for justice and retribution, particularly once the abuse has been disclosed; and altered concepts of justice and morality, personal beliefs and view of the world.

  In some cases it is suggested that the child may resort to disassociation, a protective mechanism allowing detachment from the abuse through fantasy, deliberately thinking about something else, rationalisation, or re-interpretation. Various possibilities for accommodation in fact exist, ranging from: acceptance without apparent complaint or negotiation with the abuser of 'rules' for the relationship which might reduce the incidence of abuse, or render it less troublesome; to attempts to be an unusually high popular achiever, eager to please both teachers and peers.

- The abused child may go on to develop sexually inappropriate behaviour. Some become abusers in adult life, although the possibility of self-justification, or appeal for sympathy on the part of an offender recounting an untrue history of this kind cannot be discounted;
- other difficulties the victim can experience in adulthood include psychiatric disorders, marital and sexual difficulties, abuse and neglect of their own or other children, depressive and eating disorders, low self-esteem, suicidal behaviour, and substance abuse;

- a parent who has been abused can also be re-traumatised if they find or suspect that their own child has been abused. This can result in inability to cope with the demands of being a parent, going into profound depression, or denying the abuse of the child. In some cases the dysfunctional childhood of the adult is recreated when they have their own children. In other cases the parent who has been abuse may be over-protective and unduly fearful of the same happening to their child (Woods Commission Report 1997: s17.45-9).

Familial Abuse

Fergusson and Mullen (1998) in examining research related to the relationship of perpetrators and victims concluded that family members committed between five and 32 percent of reported sexual abuse cases. More broadly, between 20 and 50 percent of all perpetrators in the studies were acquainted in some way to the victim (including family). While most incidences of abuse were found to be extra-familial, intra-familial abuse tended to occur over longer periods of time and was more likely to involve recurrent or severe abuse incidents (Fergusson and Mullen 1998:71).

There are a number of particular consequences that relate to the trauma of familial abuse. For example: the betrayal of trust; confusion; the threat of loss of love, or loss of family security; fear of the consequences of prosecution could lead to disintegration of the family; loss of parental support; anger against non-offending family members for their failure to provide protection and so on. It is likely the abuse escalated over a long period of time and in secret, with the wordless action or gesture of a parent an absolutely compelling force for a dependent child that is more frightening to the child than any threat of violence. Running away and homelessness are not uncommon.

In these circumstances, compliance in the absence of force or threat can never be equated with consent. Dr Boots, in evidence given to the Woods Commission observed that as a group, incest victims may be particularly vulnerable to re-victimisation including rape, masochistic behaviour, prostitution, substance abuse and becoming 'psychiatric patients' (Woods Commission 1997: s17.51-17.52).

Extra-familial abuse

The effect of extra-familial abuse is also characterised by several distinct consequences, particularly where it is more than an isolated incident with a stranger. There is a likelihood of the child being involved in damaging activities (eg substance abuse, watching pornographic videos or used to recruit new victims); at some stage 'relationships' are 'discarded', resulting in a sense of betrayal and loss, and long-term destructive consequences; and for those who are victims of persons in authority (eg churches and schools), there is likely to be a significant loss of confidence and respect for the organisation involved, as well as individual bitterness, and long-term loss of self-esteem. The subsequent history of self-destructive behaviour, suicide, substance abuse, descent into prostitution and law-breaking for these victims was well exposed in the hearings of the Royal Commission. This has been identified as a particular problem for those children who are abused while in care, who are then at considerable risk of progressing to career criminality (Woods Commission 1997: s17.53).

Foster Care

Runaways and homeless children present a special problem. They are frequently driven into gangs for their own protection and are easy prey for paedophiles, pimps and drug dealers. Adolescents are particularly vulnerable, as it was that younger children received more care felt (Woods Commission 1997: s17.59). This would include the provision of foster care.

Abused children may experience emergency, short-term or temporary foster care. This is a traumatic experience for the child who will often require counselling. Long-term foster care placements may be made for these children where families are unable to be re-unified. It is not uncommon for foster children to experience multiple placements that can be very destructive to the child's emotional stability and self-esteem. Foster parents and their families must learn to cope with provocative and highly sexualised behaviour while the foster child may sometimes run the risk of further abuse at the hands of the foster family. (Fitzpatrick and Briggs in Briggs et.al. 1994).

Homeless children often seek help through non-government agencies such as the Salvation Army, St Vincent de Paul, Westcare, Anglicare, the Central Mission and other religious

and social welfare agencies. (See Appendix A3). While most receive some government funding many of these agencies' services are privately funded. As one example, 'St Vinnies farms are taking children as young as 12 year olds and it is being pushed to house 9-10 year olds'(Woods Commission 1997: s17.62).

Abuse by the System

Powers, Mooney and Nunno (1990: 82) define 'system abuse' as that 'perpetuated not by a single person or agency, but by the entire child care system stretched beyond its limits'. It has also been referred to as the 'psychological maltreatment of children by the procedures, institutions and professionals whose role is to protect them' (Fitzpatrick and Briggs 1994:97). Others define system abuse as 'harm done to children in the context of policies or programs that are designed to provide care and protection including harm to children's welfare development or security.' (Cashmore et.al. in Woods Commission, 1997: s17.34). This means that children, on entering the system designed to assist them and give them justice are placed in situations which can cause more emotional turmoil, perpetrate injustices and inequities, and often place them in conditions that are psychologically damaging.

Numerous deficiencies contribute to system abuse. These include inter-agency communication problems and difficulties arising amongst professionals, most of which result from the lack of a child-focused system. This includes the process of stringent examinations by legal representatives and repeated interviews and physical examinations (Woods Commission, 1997; Winefield 1992). Whether young children's evidence is considered reliable will depend on whether they are able to satisfy a judge they understand the concept of 'truth' (Carmichael and Sarre 1994:115). For criminal cases, the charge must be proven beyond any reasonable doubt, something extremely difficult to achieve where there is rarely any corroborative evidence. Children may have difficulty in specifying times and dates, or appear to give confused accounts of proceedings (Winefield 1992:27). This is more likely due to emotional stress than to their inherent unreliability as witnesses (Davies 1991; Dent 1992).

In the case of intra-familial abuse, matters of access may need to be addressed. If the abuse is not proven in the criminal court the issue of access may be taken to a court with

jurisdiction over custody and access. Children will then have to run the gauntlet of psychologists, lawyers and other professionals. Although the court will not allow access if there is an unacceptable risk of abuse, in the absence of a criminal conviction and a lack of 'legally acceptable' reliable evidence, children may be returned to abusive situations. Article 12 of the United Nations Convention on the Rights of the Child promises that in judicial or administrative proceedings affecting children, the child's voice should be heard. Systems abuse means that the child's voice is effectively silenced. Although legal reform is possible (Human Rights and Equal Opportunity Commission and the Australian Law Reform Commission 1997) it may be some time before the justice system can be regarded as anything near satisfactory for abused children. This issue is discussed more fully in Woods Commission (1997: s17.11).

Inter-generational Transmission: The abuse Cycle

Sexual abuse has devastating short and long term effects and may result in a sexual abuse cycle. Briggs, Hawkins and Williams (1994) found that 82 out of 84 child molesters imprisoned in NSW, Western Australian, and South Australian prisons had been abused by multiple offenders during childhood. Most had coped with the trauma by accepting it as normal and identifying with the offender. The study also revealed that most of the prisoners interviewed thought that sexual assault was abuse if it involved violence or rape that they had resisted. 'Some prisoners who declared that they were not abused had in fact, had several abusive experiences but because they were compliant or enjoyed some aspect of the relationship, they did not regard themselves as victims' (Briggs, Hawkins and Williams 1994:227). A 1990 study of convicted sex offenders at a Massachusetts Treatment Centre found that 57 per cent of male inmates had been sexually abused as children (Carter and Prentky 1990). Similar studies in Australia reveal that a considerable number of women prisoners were victims of child abuse.[3] There are many reasons given for the continuation of the sexual abuse cycle. The cycle could be a result of:

> ...the impulse to overcome the victimisation experience by identifying with the offender; fixated sexual arousal patterns; development of addictive sexual behaviours; cognitive distortions that prevent the development of empathy; inter-generational transmission of deviant behaviours; a pattern of

violent offending in which rape and sexual offences are but a part; social learning of certain sexual behaviours; and various psycho-dynamic theories including emotional attachment to the offender (Bagley, Wood and Young 1994: 683).

Other studies, however, have found the proportion of perpetrators who report earlier sexual abuse in childhood is closer to 20 to 30 percent. (Hanson and Slater 1990; Watson and Dickey 1990 and Murphy and Smith, 1996 both in Fergusson and Mullen 1998:74). Beckett, et.al. (1994) while conducting their evaluation of sex offender programs in the UK found that in a sample of 59 men who had committed sexual crimes predominantly against children, 77 percent claimed to have been sexually abused themselves. It is difficult to verify the accuracy of these claims, as there may be other motivations for these admissions. As the rate of reported childhood sexual abuse reported in these offenders is greater than in the general population, however, it could be argued that prior sexual abuse may be a contributing factor leading to later sexual offending, especially when combined with other psychological or social factors.

The cycle can also reproduce itself in other forms. For example, Krugman (1992) reported that 42 per cent of the mothers of infants who had non-organic 'failure to thrive', a category which identifies babies with significant health problems, were themselves victims of childhood incest.

The 'second generation' effects of child abuse makes the exercise of measuring the potential benefits associated with treatment programs more difficult; the problems include issues of causation, the magnitude of the effect and the extent of the impact.

2.5 Costs of Child Sexual Abuse.

The previous section outlined the significance and extent of the damage that may be experienced by victims of child sex abuse. In economic parlance, this type of damage can be categorised as the intangible costs associated with child sex abuse. This is because the health consequences of pain and suffering (and possible loss of life) is qualitative or non-

[3]Private correspondence with Professor Freda Briggs – June 1998.

monetary in nature. Whilst the deleterious impact of child sex abuse is mostly in the form of adverse health outcomes they are not the only formal costs incurred by society.

In addition to the non-monetary costs, child sex abuse may also result in a range of tangible costs – where dollar expenditures are incurred (or income forgone) either directly to the victim or to society at large. Obvious tangible costs include expenditures on police and social welfare services, possibly foster-care, a broad range of medical costs including specialist care by child protection units, doctors, psychologists, psychiatrists and counsellors (Prentky and Burgess 1990). Legal costs include the costs of criminal investigation and prosecution. Further to these are the costs of the legal process in civil jurisdictions and the Family Court as a result of child sexual abuse. Long term tangible costs may include foregone income, lifelong medical care for psychiatric conditions arising from the abuse, health care and social service costs of dealing with sexually transmitted diseases, teenage homelessness, prostitution, drug addiction, crime, and in extreme cases, suicide.

Tangible costs associated directly with the offender include loss of employment, shifting residence, incarceration, sexual offender programs, counselling and consequent costs associated with specialised staffing of penal institutions (Miller et.al., 1996).

In addition to the tangible costs surrounding the victim and offender, other people also 'pay a price'. Winefield, Harvey and Bradley (1993: 255) list the most common changes facing the family during the first six months following substantiated notifications of intra-familial child abuse. These include change of address, relocation of abuser, removal of child, change of schools, marital breakdown and involvement of helping agencies (Mulligan 1986). In some cases the abusive partner may refuse to pay maintenance, and the non-offending partner, usually the mother may be forced to resign from work in order to attend all the court actions. Pursuing justice may itself be a lengthy and costly procedure, particularly when government legal aid has been exhausted. If the offender has been living with and financially supporting the family, changes in living arrangements will usually result in increased financial hardship for the family.

Figure 2 on the following page details a reasonably comprehensive list of costs associated with child sex abuse. Ideally any study analysing costs of child sex abuse should incorporate as many of these costs as possible although both methodological and practical limitations will usually prevent this from happening. Restricting costs to a subset of those outlined would mean that a conservative measure of cost estimates have been adopted and hence the potential benefits associated with sex offender treatment programs understated.

It is important to distinguish the tangible costs from intangible costs. It will be argued later that it is intangible costs which are the most significant, but also the most difficult to value, when determining the costs of child sex abuse and thus the potential benefits to be realised from implementing treatment programs. Chapter 5 will explore this issue as well as other related issues pertinent to the cost-benefit analysis of treatment programs.

Figure 2

A List of the Potential Costs of Child Sex Abuse.[Ψ]

Cost category (victim related)
Tangible Costs

(A) Medical and mental health care
(i) costs not reimbursed by insurance
(ii) costs reimbursed by insurance
(iii) administrative overhead of insurance coverage

(B) Victim Services
(i) expenses charged to victim
(ii) expenses paid by agency

(C) Lost School Days
(i) foregone wages due to lack of education
(ii) foregone nonpecuniary benefits of education
(iii) foregone social benefits due to lack of education

(D) Lost Workdays (victim and family)
(i) lost wages for unpaid workday
(ii) lost tax revenue and productivity
(iii) lost career opportunity
(iv) lost housework/non paid work

Intangible Costs

(E) Subsequent dysfunctional victim behaviour to lost productivity - ie crime/divorce)

(F) Pain and suffering/quality of life (victim and family)
(fear; depression; shame; guilt; personality disorders; suicidal tendencies; conduct disorders)

(G) Loss of affection/enjoyment (victim and family)
(sexual dysfunction; repulsion; relationship difficulties; lack of trust; loneliness and physical complaints)

(H) Premature death/suicide
(i) lost quality of life
(ii) loss of affection/enjoyment
(iii) funeral and burial expenses
(iv)psychological injury/treatment

(I) Second generation costs
(i) future victims of crime committed by earlier victims
(ii) future social costs associated with (i)
Costs to family of offender
(disruption; guilt; dysfunction)

Cost category (society in general)
Tangible Costs

(J) Precautionary expenditures/efforts
(i) school programs/teacher education
(ii) hospital alert/recording programs
(iii) social workers' education programs
(iv) child protection services
(v) family court programs
(vi) national surveillance unit (NCA)
(vii) state police units (NSW Child Prot)

(K) Legal system
(i) police and investigative costs
(ii) prosecutors
(iii) courts (all levels)
(iv) legal fees - public defenders
private
(v) incarceration costs
child sexual abuse rehab. programs
(vi) non incarceration sanctions (comm. work)
child sexual abuse rehab. programs
(vii) victim time
(viii) jury and witness time
(ix) Civil justice system
Family court/legal costs where family splits

(L) Increased social security payments (additional **where family splits**

(M) Other service programs
(i) victims of crime compensation program
(ii) public education programs
(iii) hotlines

(N) Incarcerated offender costs
(i) lost wages
(ii) lost tax revenue and productivity
(iii) value of lost freedom
(iv) psychological cost to family/loss of consortium

Intangible Costs

(O) Fear in community

(P) Over-deterrence costs
(i) innocent individuals accused of offence
(ii) restriction of legitimate activity
(iii) actions taken by offenders to avoid detection

[Ψ]Adapted from Miller, Cohen and Wiersma (1996: 11).

2.6. Conclusion

This chapter has highlighted the complexity of the issues surrounding the extent of child sex abuse in the community and the traumatic damage inflicted upon the victims. It is now generally recognised that official statistics of child sex abuse are likely to underestimate substantially the extent of child sex abuse in society. A disturbing element is that perpetrators are likely to have committed more than one offence per (re) conviction. Furthermore the deleterious consequences of child sex abuse predisposes itself to being long term and psychological in nature leading, in the extreme, to a repetitive inter-generational cycle.

An economic analysis of sex offender treatment programs necessarily involves determining the potential costs of child sex abuse that are avoided as a result of reduced recidivism rates. Consequently the dilemmas described in this chapter in determining the full extent of the costs of child sex abuse have to be addressed. In the case of this report, the procedure is to adopt a conservative approach to the various parameters that must be estimated. None-the-less it is important to appreciate the complexity and breadth of issues involved before proceeding with a conservative approach that reduces these complexities to the single parameter measure. Appendix A1 attempts to illustrate more fully the human dimension of the factors that in this study are reduced to dollar values, with examples of the testimony of some mothers whose children have been sexually abused.

Chapter 3. Sex Offender Treatment Programs

3.1 Introduction

This chapter presents an overview of the literature describing the major type of sex offender treatment programs currently accepted by professionals as the most effective in reducing sexual abuse among convicted offenders. Empirical literature discussing the efficacy of treatment programs is also presented. From an economic perspective these issues are important as the reduction in recidivism rates determines the extent of the costs of child abuse avoided and thereby defines the level of benefits to be derived.

3.2 Sex Offenders: Characteristics

Perpetrators of child sexual abuse are a heterogeneous group although attempts have been made to categorise offenders (Wurtele and Miller-Perrin 1993; Friedman 1991). The vast majority are male (Leventhal 1990). Whilst some offenders fall into multiple categories, researchers have devised complex models and assessment processes that classify offenders into distinct types and categories (Knight and Prentky 1990; Barbaree, et.al. 1994).

There are benefits in being able to classify offenders accurately. Within a criminal justice system it is important to allocate resources efficiently, according to the danger posed by an offender and the risk of offence. In the clinical setting, accurate identification is able to lead to the most appropriate treatment and the design of 'more effective primary prevention strategies'. In addition, 'a classification model may also help in deciphering critical antecedent factors that contribute to different outcomes (ie., different "types" of child molesters)', (Prentky, Knight and Lee, 1997:4).

Child molesters are classified initially according to their degree of fixation with children, then into high or low competence categories, and then into further sub-groups (Blanchette 1996:5). Rapists are classified as opportunistic, pervasively angry, vindictive or sexual (Blanchette 1996:6). Classifications such as these are deemed fundamental in determining the most appropriate method of intervention. For example, the rapist who is driven by sadism and aggression has differing treatment needs than a rapist whose motivation is

primarily one of exercising dominance over the victim, or the opportunistic rapist who acts on impulse.

The Paedophile: Sexuality and Gender Identity Disorders

From the United States, where most of the comprehensive research on paedophilia has been conducted, the Diagnostic and Statistics Manual of Mental Disorders (1997), in describing paedophilia states that it 'usually begins in adolescence,' and its course is 'usually chronic.' According to the manual, specific behaviours of paedophiles include;

> The subject has experienced, for at least 6 months, recurrent intense sexual urges or fantasies involving sexual activity with a prepubescent child (aged 13 or younger).
> The subject has acted on these urges or is markedly distressed by them.
> The subject is at least 16 years old and at least 5 years older than the victim. (Late adolescent subjects who are involved in ongoing relationships with 12 or 13-year old youngsters are excluded.)
>
> (In Prentky, Knight and Lee, 1997:4).

In addition, there are three other specifications that bear on categorisation. Whether the client is sexually attracted to males, females, or both; (ii) whether the offences are limited to incest; and (iii) whether the client is an 'exclusive' (attracted only to children) or 'non-exclusive' type. As Prentky and his colleagues point out, extra-familial and incest offenders not having a known six month history of sexual interest in children will not fall into this category. It therefore excludes a large number of child molesters.

Past research has shown support for classifying child molesters according to their sexual preference, although this view is not universally accepted. It was held that same sex child molesters (extra-familial) were at highest risk to re-offend, while opposite sex child molesters had the lowest re-offence risk. In addition offenders have been sub-typed into 'fixated' or 'regressed', depending on their level of social competence. 'Fixated' offenders were deemed to have a higher level of sexual interest in children, few experiences of dating and peer interaction and a poor marital relationship if it existed. 'Regressed' offenders were deemed more capable of having experienced these types of relationships, however

further studies have proved this distinction to be unreliable. (Finkelhor and Araji (1986) and in Prentky, Knight and Lee 1997) The Massachusetts Treatment Centre has produced a model in order to define more clearly classes of child molesters.

Figure 3

Classes of Child Molesters

	Interpersonal (Type 1)	Narcissistic (Type 2)	Exploitative Type 3)	Muted Sadistic (Type 4)	Nonsadistic Aggressive (Type 5)	Sadistic (Type 6)
Amount of Contact With Children	High	High	Low	Low	Low	Low
Sexual Acts	Fondling, Caressing, Frottage, (Non-phallic sex)	Phallic Non-sadistic sex	Phallic Non-sadistic sex	Sodomy "Sham" sadism[a]	Phallic Non-sadistic sex	Sadism
Relationship of Offender to Victim	Known	Known or Stranger	Stranger	Stranger	Stranger	Stranger
Amount of Physical Injury to Victim	Low	Low	Instru-Mental[b]	Instru-mental[b]	High	High
Amount of Planning in Offences	High[c]	Moderate	Low	Moderate	Low	High

[a] "Sham" sadism implies behaviors or reported fantasies that reflect sadism without the high victim injury present in Type 6.

[b] Instrumental aggression implies only enough force to gain victim compliance.

[c] Interpersonal types know their victims and may spend a considerable amount of time "grooming" them (setting them up), but the offences often appear to be unplanned or spontaneous.

Source: Prentky, Knight and Lee (1997:7)

A more detailed exposition of these categories, but including the intellectually disadvantaged and the juvenile offender is given below.

- The intellectually disadvantaged or brain damaged offender, whose lack of awareness of moral standards or lack of communication skills has prevented him or her from establishing appropriate relationships, and who by default, has offended against children;
- the offender whose primary orientation is towards an adult partner and who for various reasons, usually as a result of stress or crisis offends against children,

often his or her own and for whom the risk of recidivism is generally considered to be less;

- the offender whose primary and compulsory sexual fixation is towards children but who possesses emotional or moral problems with that orientation, and who would wish professional help to modify or control his or her behaviour, and to avoid imprisonment;
- the offender who has no problems with his or her conscience, who sees sexual relationships with children, as simply a variant of normal sexuality, and who regards the prohibition of that conduct and the punishment of it, as a wrong against himself or herself, and who has not the slightest interest in changing the behaviour. This offender is considered the hardest to treat and the most likely to re-offend;
- the psychopathic offender, who when driven by a frank psychiatric disorder, is capable of sadistic psychosexual crime, but for whom the age or sex of the victim may be a matter of convenience or opportunity, than any primary sexual orientation; and
- the adolescent offender who may fit into one of the above categories, but whose offending is harder to define or detect and for whom there is thought to be a compelling case for therapeutic intervention (Woods Commission 1997: s19.3).

According to the Woods Commission (1997: s19.4) there are three possible stages of intervention for the offender. These are:

1. treatment of an offender outside the corrections system, either in response to a voluntary request for assistance or as part of a pre-trial diversion program;
2. assistance and counselling while serving a sentence; and
3. supervision and treatment during, or as a condition of probation and parole.

The outcomes from such programs are not uniform, but depend on a number of factors including the age of the offender, the type of offences, the length of time such behaviour has occurred etc. Thus treated child molesters differ in their prognosis.

> For example, onset ranges from early adolescence to middle adulthood (as in the case of some exclusive incest offenders), and the prognosis ranges

> from cases of lifelong, intractable paedophilic interest that is resistant to treatment to isolated instances of incest in adults with a sexual preference for peers, ample remorse and victim empathy, and a high likelihood of recovery (Prentky, Knight and Lee 1997: 7).

In this study, our focus on evaluating the costs and benefits associated with child sex offender treatment programs is in line with points two 'assistance and counselling while serving a sentence' and three, 'supervision and treatment during, or as a condition of probation and parole'.

3.3 Overview of Sex Offender Treatment Programs

Over the past two decades there has been widespread implementation of sex offender treatment programs (SOTP) – both in-prison and community-based – particularly in Canada, the United States and the United Kingdom. The move towards greater implementation of SOTP can be readily explained by certain contributing factors. The cumulative effect of high prevalence rates of sexual victimisation in the community, the high levels of recidivism rates for untreated child sex offenders, the potentially devastating consequences for victims, together with research suggesting that some offenders may be treatable, have led to strong support by researchers and practitioners for the expansion of SOTP services (Allam and Browne, 1997).

As a heterogeneous group with a diversity of criminogenic needs, sex offenders vary in their risk for re-offending. Accordingly, sex offender treatment programs are varied, although cognitive-behaviour with relapse prevention is the most prevalent (Freeman-Longo and Knopp 1992; Marshall and Barbaree 1990). Although the many programs of this genre vary in content and length the object is to target the specific needs of the individual offender, and to offer post-release support. The cognitive-behaviour treatment program with relapse prevention is the basic model assumed for the purposes of program cost estimation in this study.

3.4 A brief history of Sex Offender Programs

Early behavioural approaches to the treatment of sex offenders assumed the motive for sexual offending was sexual. Emotional problems or difficulties in relating to women were

believed to be the principle motivators behind sexual offending. Little attempt was made to deal with other contributory issues such as cognitive distortions, inability to handle anger, and deficits in social skills. Programs that attempted to address these problems could not be proved to be effective (Furby, Weinrott and Blackshaw 1989), although the failure to sub-categorise offenders prior to their entry into programs has thrown doubt on the validity of this sweeping judgement (Marshall, et.al. 1991).

Throughout the 1970s Marshall and colleagues (Marshall 1973; Marshall and Knight 1975; Marshall and Williams 1975) expanded treatment programs to include 'modifying deviant and appropriate arousal, providing sex education, enhancing self-esteem and social skills, reducing hostility and anger, training in controlling drinking, and teaching offenders to use their leisure time more constructively' (Marshall 1996:163). Concurrently, other researchers were investigating the distorted thinking of offenders and offered means by which distortions could be modified (Abel et.al., 1984; Abel and Rouleau 1986). This included modelling appropriate interaction between men and women and between men and children through role-playing and videotapes (Maletzky 1991). In addition medical interventions included surgical and chemical castration and psychosurgery.

Abel et.al. (1989) devised a 'Cognition Scale' that was used to assess the distortions concerning adult-child sex which researchers believed were evident amongst child molesters. This revealed a number of cognitive distortions held by child molesters such as that sex between children and adults was not harmful to children, and that children deliberately sought out sexual contact with adults. Still other researchers found that child molesters reported more distortions on the 'Cognition Scale' than rapists and non-sex offenders (Stermac and Segal 1987 in Marshall 1996). A major problem with measurement using this scale, however, was that some offenders were able to discern advantageous or 'better' responses.

Cognitive factors and empathy training became very important in treatment programs. It was felt that offending could be reduced if the offenders could empathise with their victims. The treatment goal is to make the offender understand the extent of the damage that he has caused to his victim in an effort to at least constrain further activity (Marshall 1996:183). Empathy training may be approached by getting the offender to describe the

emotionally distressing event as experienced by the victim and the consequences for that victim. In some, treatments letters are written from the victims to the offender to whom the offender replies.

> This incorporation into treatment of cognitive factors, such as distortions, attitudes, and beliefs, encouraged researchers and clinicians to consider the influence of other cognitive and affective factors. It was out of these considerations that therapists began to include components aimed at enhancing offenders' empathy for their victims (Marshall 1996:180).

Many sexual offenders are unable to empathise with their victims (Maletzky 1991). As the realisation of the importance of cognitive and affective factors grew, more treatment programs contained empathy training as a component (Abel et.al. 1984; Marshall, Earls, Segal and Darke 1983). In addition Pithers and colleagues were developing strategies for managing sex offenders as they graduated from treatment programs and focused on relapse prevention.

Another important part of social skills training involves educating the offenders to stop denial or minimisation of their offences and the likely impact on their victims (Marshall 1996). This is commonly dealt with in group therapy. Individual therapy is used to deal with issues that have arisen out of group discussions and may have been disturbing the offender. Low self-esteem may be an important reason that many sex offenders offend in the first place and as this presents an obstacle to any behaviour change, enhancing the offender's self-esteem becomes a specific aim of treatment programs. A consequence of this approach is the need for skilled therapists to guide the offender through this treatment process (Marshall 1996).

3.4 Cognitive Behavioural Programs

Whilst a range of treatment programs could be introduced it is generally accepted that variations of cognitive behavioural therapy with relapse prevention appears to be the most

preferred treatment approach (Allam, Middleton and Browne, 1997; Prentky, Knight and Lee, 1997; Marshall 1996; Hall, 1995).[4]

In this model sexual offenders will normally be treated in a group setting where the group discuss the actions of each offender. Cognitive-behavioural therapy focuses on the behavioural aspects of the offender and attempts to modify or alter those attitudes, beliefs, fantasies and rationalisations that justify and perpetuate sexually aggressive behaviour (Allam and Browne, 1998; Prentky, Knight and Lee, 1997). An important emphasis of the treatment is the teaching and development of relapse prevention skills. A typical model would involve conducting several weekly sessions over a period of up to twelve months and would normally include the following components:

- victim empathy- exposure to videos, discussions, and even victims, to help offenders understand the impact of their offending behaviour;
- social relationship and living skills- to assist offenders in developing appropriate means of interacting with others;
- sex education-to provide instruction on the basic anatomical and physiological facts, and normal dating and sexual practices;
- anger management and relaxation skills-to deal with stress and mood changes;
- alcohol and drug awareness- to provide an understanding of their dis-inhibiting qualities.

In addition, valuable research has been conducted on relapse prevention therapy, an integral part of the overall treatment, in order that the offender could more easily make the transition from prison to everyday life (Pithers, Marques, Gibat and Marlatt, 1983). These programs have continued to be further refined over the last ten years.

Relapse prevention techniques involve teaching the offender to control situations that may lead to re-offending. This includes identifying the potential relapse situation and using appropriate coping and avoidance strategies in order to avoid relapsing into offending behaviour. A thorough assessment of the individual offender is considered crucial for a

[4] For clinical categorisation of alternative therapies see, Prentky, Knight and Lee, (1997).

successful outcome. This involves discovering which situations constitute a high risk for the offender, identifying the offender's coping skills and analysing the early antecedents of the offender's sexually abusive behaviour (Pithers 1990). An internal management plan is developed to deal with the factors contributing to offending and is discussed by the group. Avoidance strategies include stimulus control, avoidance or escape, programmed coping responses whereby a routine of coping strategies are practised, and mitigating urges whereby an offender is encouraged to think past the pleasurable aspects of offending to the negative consequences that may follow (Pithers 1990). Parole officers generally carry out the external management plan and this supervision is for offenders who are considered to be at above moderate risk to re-offend. Present evidence suggests that relapse prevention is helpful in lowering recidivism (Marshall, Hudson and Ward 1992).

Obviously, it is considered important that strategies to deal with sex offenders should promote the efficient use of resources. Ideally, this means that serious offenders who require long term assistance - and consequently more resource-intensive services - to combat their re-offending receive the type of service commensurate with the nature of their problem(s). Conversely lower risk offenders should not receive treatment which is resource-intensive but overestimates their level of requirements. This report, for methodological reasons (discussed in Chapter 4), will confine the economic analysis to the most resource-intensive in-prison type programs normally reserved for high-risk offenders

An overview of some of the various SOTP available in the U.S., Canada, New Zealand and in Australia but with a focus on intensive-type programs is provided in Appendix A2 of this report.[5] The following section discusses the efficacy of sex offender treatment programs.

3.5 Efficacy of treatment programs

Many studies have shown that treatment programs, in particular cognitive behavioural therapy coupled with relapse prevention, can be effective (Marshall and Pithers, 1994; Marques et.al. 1994; Marshall, Eccles and Barbaree, 1993; Marshall, Jones, Ward, Johnson, and Barbaree, 1991). Marshall (1993) found that fifteen per cent of treated

offenders re-offended while 60 per cent of untreated offenders re-offended over a five year period. Prentky and Burgess (1990) in their study revealed a 40 percent recidivism rate for non-treated offenders versus fifteen per cent for treated offenders. Marques, Day Nelson and Wests' 1994 study seems to demonstrate a treatment effect. The study found that early treatment dropouts were at higher risk for sex crimes than those who completed a year or more of the program. In a follow up study by Marques and Day (1998) preliminary results show that those who complete the treatment program have a lower sexual re-offence rate (eleven per cent) vis-a-vis the control group (fourteen per cent). An important meta-analysis of recent studies conducted by Hall (1995) indicated that untreated sex offenders were re-offending at 27 per cent compared with a rate of 19 per cent for treated offenders.

A major factor accounting for the variability in the recidivism rates is the differences in definitional criteria of 're-offence'. Definitions range from the narrow considerations of formal convictions for specific offences through to new charges for other offences, new charges, new convictions and parole suspensions and revocations (Blanchette 1996:20). Another important difference is the length of follow-up period over which the study is being considered (Allam and Browne, 1998; Prentky, Knight and Lee, 1997). Even though treatment may be effective in the short term, recidivism measurement may be underestimated because the study does not take into account the time length of exposure in which offenders may re-offend at a later date.

A more fundamental problem associated with evaluating the SOTP is the lack of a randomised control group. Treatment effectiveness can only be determined in a controlled study where treated and untreated offenders are matched for variables such as age, previous criminal history, and admitting offence (Motiuk and Brown 1996).[6]

Marshall (1996:189-190) highlights the difficulty of evaluating treatment programs by commenting:

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[5] Comprehensive detail of the intensive treatment programs currently in operation in Australia, New Zealand and the U.K. can be found in the Woods Royal Commission into the NSW Police Service (1997).

[6] Ethical considerations makes it unlikely that a prospective fully randomised study is likely to occur - although improvements in standardising definition of re-offence, adopting longer follow-up periods and

> For example, there are difficult issues involving the population studied, the specific nature of the treatment program and the integrity of its application, the setting in which treatment is conducted, the skill of the therapist, and the outcome measure employed. Different treatment evaluation projects are likely to differ on each of these and no doubt on other factors

Given the above problems some researchers claim that the evidence that treatment reduces recidivism is equivocal (Quinsey, Khanna and Malcolm, 1998; Quinsey, Harris, Rice and Lalumière 1993). Currently in Australia the following states have intensive in-prison sex offender treatment programs using the cognitive behavioural therapy and relapse prevention model: Long Bay in New South Wales, Ararat in Victoria, Moreton in Queensland, and Casuarina and Bunbury in WA. These programs were introduced in 1997, 1996, 1990, and 1990 and are thus relatively recent. To date there has been no formal external evaluation of the Australian programs although several in-house studies have been conducted. Unfortunately, follow-up times for all of these informal departmental studies have been very limited and at present they lack refinement.

There has been, however, a recently published study by the Department of Corrections in New Zealand evaluating the Kia Marama treatment program (Bakker et.al., 1998). This comprehensive study was based on a ten year follow-up period and involved comparing 238 prisoners who undertook the program during its first three years of operation with a matched control group with similar characteristics and convicted over the same period. The outcome of the study revealed that the treated group has a recidivism rate of eight percent compared with a recidivism rate of 21 per cent for the control group.[7]

From the above, it can be seen there is now a significant body of literature indicating that treatment programs, of the cognitive behavioural type, may be effective in reducing recidivism rates although the results are not unequivocal. Deriving a specific magnitude for

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better matching of historical controls will enable more refined evaluations to occur overtime. This will also facilitate the greater comparability of studies for meta-analysis purposes.

[7] Longitudinal survival analysis indicate that the recidivism rate is predicted to rise to 10 per cent for the treated group and 22 per cent for the control group – see Bakker et.al. (1998).

the percentage point reduction in recidivism rates is, however at this stage, difficult; something that complicates the economic evaluation of treatment programs.

3.7 Summary/Conclusion

This chapter has provided an overview of the literature relating to sex offender treatment programs adopting the cognitive behavioural therapy model augmented with relapse prevention. In Australia there are several intensive in-prison SOTPs currently in operation but since they have only recently been introduced no formal evaluations have been completed. Results from a recent study of New Zealand's Kia Marama treatment program however, suggest that SOTPs may be able to significantly reduce recidivism rates.

From the overseas literature, there is substantial evidence to support the thesis that treatment programs reduce recidivism rates, although the variability in results and concerns over evaluation methodology means that determining the magnitude of the efficacy of programs is difficult. This complicates the economic evaluation of treatment programs, but it can be overcome, in part, by the use of a sensitivity analysis – a methodological issue discussed in Chapter 4 of this report

Chapter 4.

Economic Evaluation: theoretical and methodological issues.

4.1 Introduction

This chapter discusses the theoretical and methodological issues surrounding a cost-benefit analysis of child sex offender treatment programs for male offenders in correctional services. A discussion of the underlying approach of comparing program costs against the tangible and intangible benefits (costs avoided) of child sexual abuse is presented together with the importance of including 'intangibles'. Earlier related studies that omitted intangibles are reviewed. Finally, the methods of contingent valuation and revealed preference are outlined and their application in this study described.

4.2 Economic Evaluation – General Approach

It is now widely accepted that an economic evaluation is an essential appraisal tool of health care programs and related services (Drummond, O'Brien, Stoddart, et.al., 1997; Johannesson, 1996; and Backhouse et.al., 1992). A basic tenet of economics is that resources are scarce and insufficient to meet the various demands placed upon them to satisfy the community's preferences. Thus choices have to be made in how to allocate limited resources most efficiently amongst alternative uses, in order to maximise social welfare. Resources are said to be used efficiently if it is impossible to reallocate resources in any other way that would increase the overall benefits derived from the new allocation. Thus the analysis of economic efficiency involves comparing the costs of using scarce resources against the resulting benefits. The increasing financial constraints placed upon governments throughout all the major industrialised countries have brought to the fore the need to evaluate the economic efficiency of government expenditure.

In the case of implementing an intensive child sex offender treatment program (SOTP), the benefit is the reduction in recidivism rates of treated prisoners leading to a reduced incidence of child sex abuse. Thus the potential benefits of SOTP are all the costs associated with child sex abuse, identified earlier and highlighted in Figure 2 that are avoided as a consequence of reduced recidivism rates.

In economic analysis, the potential benefits (ie. costs avoided) of reduced recidivism can be classified into two main categories:

1. *Tangible Benefits* - such as savings on health care costs, incarceration costs, legal costs, etc. which represent explicit resource savings to society from no longer having to outlay such expenditure and;
2. *Intangible Benefits* – which relate to health and social effects such as reduced pain and suffering (and possible loss of life) and other related non-monetary consequences.

More briefly, the approach adopted in this economic evaluation involves calculating:

$$\mathbf{NB} = \mathbf{Tb} + \mathbf{Ib} - \mathbf{Pc}$$

where,

NB = Net Benefits;
Tb = Tangible Benefits (ie. Resource savings);
Ib = Intangible Benefits (eg Health and social effects); and
Pc = Program Costs.

If the resources saved (ie. tangible benefits) are greater than the costs of implementing a program then the economic result is unambiguous: there is a net positive economic benefit from implementing a SOTP. This is because any health consequences that occur only reinforce the original net (positive) benefit result. If, however, the costs of implementing a program are greater than the resource costs, no conclusion can be reached regarding the economic efficiency of a program unless the intangible benefits of the program are also valued. In the case where the value of the health consequences is greater than the net program costs (ie. program costs minus associated resources saved) the program should proceed on efficiency grounds. Conversely, if the tangible benefits are less than the net program costs then the program should not be implemented.

Thus no assessment as to the economic efficiency of a program can be determined until a full assessment of all benefits – both tangible and intangible – is made. Confining an

economic evaluation to resource savings and ignoring the health benefits (of reduced pain and suffering etc.) could lead to erroneous conclusions regarding the worth of a program.

The existing methods of economic evaluation in health care and related programs are classified into the methods by which benefits are measured. They are cost-benefit analysis, cost-effectiveness analysis and cost-utility analysis.[8] The most appropriate technique for evaluating SOTPs, and adopted in this report is cost-benefit analysis.[9]

Cost-benefit analysis is a well-known and comprehensive economic evaluation technique. Its theory and practice are well developed. One reason for its popularity among economists is that its methodological foundations derive directly from conventional economic theory (O'Brien and Gafni, 1995). The main difference between cost-benefit analysis and other methods of economic evaluation is that monetary valuations are placed on (benefit) outcomes as well as costs. An advantage of the use of cost-benefit analysis for policy makers is that since benefits and costs are expressed in the common numeraire of money, inter-sectoral comparisons can be made to determine the net benefits of resource use. Thus the net benefits of allocating resources towards for example, a mental health treatment program, can be compared with alternative net benefits of resources used in transport, housing or any other 'social investment'. This is in contrast to both cost-effectiveness and cost-utility analysis where comparisons with programs outside SOTP cannot be made.

To date, the use of cost-benefit analysis in health and related programs, has been limited; in part due to a reluctance to place a monetary valuation on 'intangible' benefits, in particular the cost of pain and suffering and also on life itself. Many studies particularly in the health-related field have, in reality, been cost comparisons and not strictly cost-benefit analysis as they have ignored valuing intangible benefits. There has been, however, a renewed enthusiasm for the adoption of this technique, particularly in health economics

[8] Cost-effectiveness analysis involves measuring health outcomes in natural units on a uni-dimensional scale such as pain-free days, life years gained, points of blood pressure reduction etc. Cost-utility analysis involves transforming improvements in health outcomes into a multi-dimensional scale of health status based on people's well being ranked ordered according to their preferences (utility). This utility when combined with survival data enables the calculation of Quality Adjusted Life Years (QALYs).

[9] Cost-effective analysis requires measurement of output in physical units specific to prisoner treatment programs which prevents comparison with any other social service program where output is measured in different units. Cost-utility analysis specific to health program evaluation where programs are ranked

and the sub-discipline areas of transport economics and environmental economics as a consequence of conceptual and methodological advancements (O'Brien and Gafni, 1995). This report will adopt a cost-benefit approach, which incorporates intangible benefits into the evaluation.

In a strict economic sense a cost-benefit analysis would normally involve comparing the benefits and costs of all alternative programs with net economic benefits rank-ordered. This report, however, will confine the economic evaluation to only considering the most intensive and therefore most expensive program type available. This is because the literature relating to SOTPs, discussed earlier, reveals a wide variability in the efficacy of programs. By adopting the most expensive program type for analysis (and thereby a conservative approach to program costs) for any given reduction in recidivism rates, a more robust and defendable set of results can be estimated.

4.3 Importance of Intangible Benefits: previous studies

To highlight the importance of including intangible benefits of reduced recidivism rates, work from two important studies from the United States is briefly discussed below.

One of the most comprehensive research programs carried out on the costs of crime generally, was recently conducted in the United States by the National Institute of Justice (Miller, Cohen and Wiersma, 1996).[10] The report estimated the 'tangible' cost of personal crime at $US 105 billion annually (1993 dollars), comprising medical costs, lost earnings and public programs related to victims assistance (Miller et.al., 1996:1). When pain and suffering and reduced quality of life are included, however, the estimated costs of crime to victims amounted to $US 405 billion annually. To underscore further the importance of intangible costs, in the case of child sex abuse, the tangible costs to victims is estimated to be $US 2.3 billion annually, whereas pain and suffering and lost quality of life was calculated at $US 20.8 billion. In this case the intangible costs of child sex abuse were calculated to be nearly ten times that of tangible costs. A difference of this magnitude suggests that to omit 'intangible' costs would be to produce a manifestly inadequate

according to their impact on (QALY's). For the evaluation of SOTPs, cost-utility is an unsuitable approach since comparisons can only be made with other programs using the QALY outcomes.

estimate of the 'true' benefits of programs designed to reduce the incidence of child sexual abuse. A breakdown of Miller's figures, on a per victim basis, is provided in Table 2.

Table 2

Costs of Child Sex Abuse Per Criminal Victimisation (in 1993 $US).

(i)	**productivity**	**2,100**
(ii)	**medical care / ambulance**	**490**
(iii)	**mental health care**	**5,800**
(iv)	**police**	**56**
(v)	**social victim services**	**1,100**
(vi)	**Σ = tangible losses**	**9,500**
(vii)	**quality of life - intangible losses**	**89,800**
(viii)	**Σ = total losses**	**99,000**

Source: Adapted from Miller, Cohen and Wiersma, (1996) *Victim Costs and Consequences: A new look*: 9.

Perhaps the most cited study in the use of cost-benefit analysis technique directly relating to rehabilitation programs for child sex offenders is that by Prentky and Burgess (1990). To the authors' knowledge this is the only formally published study which provides an economic analysis specifically of sex-offender treatment programs. The economic evaluation of their study found the implementation of a treatment program for child molesters reduced the risk of re-offence from 40 per cent to 25 per cent, resulting in a 'benefit' of $68,000 per treated prisoner. Tables 3 and 4 provide a summary of their results. Notwithstanding, these strongly favourable results, the Prentky and Burgess study is essentially a cost comparison, as the economic analysis is restricted to comparing tangible costs incurred with and without a treatment program; intangible benefits of pain and suffering avoided were ignored.[11] The Prentky and Burgess study, as a result, has some conceptual limitations.

[10]A comparable Australian study by Walker (1997) does not specifically address the issue of child sexual abuse or measure intangible costs of crime.

[11] Including intangible costs would not only reinforce the conclusions reached but importantly would also add to the robustness of the results particularly if there were some subjectivity in the use of some variables (ie recidivism rates) within the economic analysis.

Table 3

Tangible Costs of Child Sexual Abuse (in 1990 $US).

Cost Categories		$
Offender-Related Expenses		
Pretrial Investigation	**1,020**	
Trial Costs	**3,804**	
Incarceration (7 years)	**158,635**	
Parole	**5,570**	
Total Offender Expenses		**169,029**
Victim-Related Expenses		
Dept. of Soc. Services	**3,136**	
Hospital/Medical	**285**	
Victim Evaluation	**1,000**	
Witness Services	**6,383**	
Treatment	**3,500**	
Total Victim Expenses		**14,304**
Total Expenses Per Offence		**183, 333**

Source: Prentky and Burgess (1990:113).

The importance of including intangible costs can be illustrated by re-examining the findings of Prentky and Burgess. There is a logical flaw in their argument because of the restriction of their study to comparisons of tangible costs. Table 4 shows their analysis is predicated on the basis that prisoners undergoing treatment are incarcerated for 5.1 years compared with 7 years for untreated prisoners (treated prisoners receive a remission). Since the bulk of the identified tangible costs (identified in Table 3) relate to incarceration, the 'cost savings' are in fact the fiscal savings associated with having treated prisoners in jail for two years less than untreated prisoners. Victim costs are deemed to be a relatively minor component in their study (a further problem in itself).

Table 4

Expected Costs Associated with Reoffence (in 1990 $US).

Type of Offender	Cost of Maintenance	Total Cost Per Offence	Risk of Reoffence	Expected Cost of Reoffence $
Untreated	$158,635 (7 years)	($183,333)	0.40	= 231,968
Treated	$118,146 (5.1 years)	($183,333)	0.25	= 163,979
Savings per Offender				**67,989**

Source: Prentky and Burgess (1990:113).

Paradoxically, one conclusion derived from the study is that if the recidivism rate for untreated child molesters is three per cent, whilst the rate for treated offenders is 25 per cent, the treatment program is still cost-effective! Absurdly, the logical extension of their analysis highlights that treatment programs are economically efficient even if they increase recidivism rates. This is because savings are derived not from the treatment program per-se but from imprisoning offenders for a shorter length of time. Furthermore, the low victim-related costs suggest that it is better not to imprison convicted child sex offenders at all as the incarceration costs are significantly greater than victim costs.

4.4 Measuring Intangible Benefits – theoretical and methodological issues

Although the intangible costs associated with child sex abuse represent the greatest implicit benefit associated with reduced recidivism due to SOTPs, these costs are also the most difficult to calculate. As previously indicated, however, there have been significant advancements in the research methodology and applied techniques associated with valuing health consequences of program interventions that are also applicable in this study.

According to economic theory, a consumer's value of a good is reflected in what they are willing to give up in order to obtain the good (Johannesson, 1996). Theoretically this is predicated on the premise that the maximum amount an individual is willing to pay (ie sacrifice) for a commodity is a direct reflection of consumer satisfaction or utility (Ryan,

1996). Thus the market price of a purchased commodity reveals the extent to which individuals value the commodity. Where commodities or programs are not traded through the market exchange process (ie publicly provided programs) there is no explicit money value in exchange. Consequently alternative techniques have to be used to estimate willingness-to-pay (WTP) in the absence of markets (Ryan et.al., 1997). There are two methods used for estimating willingness-to-pay: revealed preference and contingent valuation. Both methods are discussed briefly below.

Revealed Preference

The method of 'revealed preference' involves observing individual behaviour in the market place and using these observations as a 'proxy' value for benefits. Valuation is ascertained where people trade-off income and risks to life and health as revealed in observable markets. A classic example is the 'danger money' or wage premium provided to workers as compensation for greater risk to health associated with hazardous jobs.[12] Other revealed preference studies have examined the non-use of pedestrian subways, the decision to wear a car safety belt, the decision to purchase smoke detectors and the frequency of car tyre replacement (Johannesson, 1996; Smith, Jan and Shiell, 1993). The advantage of the revealed preference approach is that it is derived from actual or observed consumer responses to choices between health risk and money rather than the use of hypothetical scenarios (Drummond et.al., 1997).

The main problem with the technique is that revealed preference tends to be context specific and particular to the types of health consequences or injuries at risk.[13] Since virtually all revealed preference studies in health–related areas have focused either on risk of life, on particular types of work-accident related injuries or on specific health diseases, the types of health consequences incurred are unlikely to be represented in child sex abuse injuries. In particular, the serious injuries experienced by child sex abuse victims tend to be more psychological than physical.

[12] For an extensive analysis on the use of labour market data in valuing risks to life and health see Viscusi (1993). For a recent Australian study on wage differentials for risk of death see Miller, Mulvey and Norris (1997).

There have been several major studies in the United States, however, using revealed preference principles, that have incorporated compensatory damages awarded by civil courts for injuries relating to particular types of crime, including child sex abuse (Miller et.al., 1996; Cohen, 1988). The use of the court system to elicit value is not based on individual consumer behaviour but the minimum value a jury places on damages. Of particular importance is that the civil courts have awarded damages not only for loss of income or for health costs but also for the pain and suffering incurred by victims. In the case of child sex abuse, there have recently been a number of civil proceedings around the world brought against particular organisation and religious institutions for allegations of child sex-abuse. The types of compensatory damages sought are mainly associated with pain and suffering experienced by victims including related intangible costs such as breach of trust.

The National Institute of Justice study by Miller et.al. (1996), highlighted in Table 2 adopts this approach of civil compensation awards in their extensive analysis of the costs of crime. For non-fatal quality-of-life cost estimates, the study analysed jury awards to crime victims and burn victims. Lawsuits against third parties were sufficiently common to enable researchers to obtain data on jury verdicts designed to compensate victims for pain and suffering. The analysis of the awards was adjusted to allow for the typical crime in the project data set. As indicated earlier, the intangible costs of child sex abuse were calculated to be in the order of nearly ten times the tangible costs. On a severity of crime scale, the costs of child sex abuse per victim in the Miller et.al. (1996) study were calculated to be the highest of all crime injuries categorised. To the authors' knowledge, this is the only major study on the economic costs of crime that has explicitly incorporated the intangible costs of pain and suffering into its analysis. In addition, the use of civil damage awards from this study has the advantage of being specific to child sex abuse.[14]

[13] Another problem is that the market being observed - for instance the labour market - may be subject to imperfections or distortions, such that the observed outcomes may fail to reflect rational choice in accordance with economic efficiency conditions.

[14] A fundamental assumption underlying the use of these data is that the awarded compensation reflects an 'efficient' outcome. That is, jury awards reflect 'fair compensation' for damage done and hence a fair market value. This assumption does not hold in circumstances where compensation payments are capped by legislation.

Contingent Valuation

The contingent valuation technique is not based on actual decisions but involves the use of surveys or questionnaires where individuals are asked to value hypothetical events. Much of the development of contingent valuation methods has been in transport economics estimating the value of life (Jones-Lee, 1976). Individuals are asked what they are willing to pay for a small decrease in the risk of dying. Studies using this approach have analysed the risk of death by heart attack, fire and air travel (O'Brien and Gafni, 1996; Smith, Jan and Shiell 1993). Early advancements in this method also occurred in valuing environmental goods such as clean air, noise control, preservation of wilderness areas etc. In recent times there has been increasing use of contingent valuation methods in health care program evaluations. Areas of use in health economics have ranged from in-vitro fertilisation, hypertension and screening for cystic fibrosis to assessing community values in health priority setting (Diener, O'Brien and Gafni, 1997).

The advantage of contingent valuation is that consumer decisions (albeit hypothetically) are used to elicit values for non-marketed socially provided goods. An inherent problem in the use of contingent valuation methods has been the difficulty in obtaining valid and reliable estimates of willingness-to-pay (Diener, O'Brien and Gafni, 1997).[15] This is particularly so in the case of child sexual abuse where the nature of the offence and its 'invisibility' make individuals' subjective assessment of such risk to their children extremely difficult.

To the authors' knowledge there have been no studies that have used contingent valuation methods to determine what individuals are willing to pay specifically to avoid the pain and suffering associated with child sex abuse. There is, however, a New Zealand study by Scott (1996) which has attempted to measure the intangible costs of child abuse in general. The study adopts, as proxy measures, results from New Zealand road accident research projects that had calculated what individuals were willing to pay (using the contingent valuation method) in order to avoid particular types of road accident injuries.[16] The Scott report

[15] A major issue has been that hypothetical questions may, for a variety of reasons, fail to reveal the true preferences of the individual; and in the case of observed behaviour it may be uncertain whether the individual knows exactly what the risks are and whether there exist other confounding motives for the individual's observed behaviour (See Zweifel and Breyer, 1997; Johannesson, 1996).

[16] For the road accident studies see Millar and Guria (1991) and Guria (1993).

attempted to align various categories of child abuse damage to the categories adopted in the road accident studies.

Given the problematic nature of estimating the intangible costs of child sex abuse, Chapters 5 and 6 of this report employ both the contingent valuation and revealed preference approaches to ascertain both a lower and upper bound parameter estimate of the intangible benefits associated with implementing intensive in-prison child sex offender treatment programs. The contingent valuation approach draws heavily from the New Zealand study by Scott (1996) modified to reflect specifically child sex abuse. The alternative approach adopts the revealed preference method using those results of the U.S. study on the costs of crime by Miller, Cohen and Wiersma (1996) that specifically relate to compensatory damages for child sex abuse. The two parameter estimates of intangible benefits will then be incorporated into a sensitivity analysis together with other variables and their associated parameter settings. More detailed discussion of each method, their dollar estimates and associated qualifications are outlined in Chapters 5 and 6 of this report.

4.6 Summary

Despite the apparent simplicity of the equation **NB** = **T**b + **I**b – **P**c, there are numerous theoretical and methodological questions that need to be resolved in order solve the equation. Of these, the factors that affect the measurement of the intangible benefits of avoiding child sexual abuse produce the most significant variation. This study adopts two different techniques, contingent valuation (ie. willingness-to-pay) and revealed preference, to estimate a plausible range values for this variable. Chapter 5, however, reveals that there are also important practical issues to be overcome before a final estimate can be attempted.

Chapter 5. Economic Evaluation: practical issues.

5.1 Introduction

This chapter outlines the basic costs and benefits associated with an in-house child sex-offender treatment program for male offenders. After providing estimates of the cost associated with a 'typical' sex offender treatment program, the chapter then examines the benefits (costs avoided) by such a program. There are two major components to this. The first, tangible costs, includes the direct costs of child sexual abuse that accrue to the State and Federal Governments, non-government organisations and out-of-pocket expenses to victims and families. The second component consists of the intangible costs of child sexual abuse. This second cost component is subject to two estimation techniques that produce a range of values that are discussed and presented in this chapter.

5.2 Costs Estimates of Sex Offender Treatment Program(s)

There is no uniformity in the structure and delivery of treatment programs using the cognitive behavioural framework described. As highlighted in Chapter 3 and outlined in more detail in Appendix A2, there is great variation even within intensive-type programs. A combination of factors including levels of funding, professional judgement, and type of sex-offender risk cohorts all contribute to variations in the delivery of intensive in-prison child sex offender treatment programs (SOTP). Consequently costs vary across programs between the various states. Furthermore, the quality of the information systems that operate in correctional services in different states is generally poor, resulting in comparatively crude cost measures.

One method of overcoming some of these problems is to estimate the costs of a 'generic' program, using an average figure derived from several programs where cost data are currently available. Taking the average from a range of programs should, in part, help to overcome the crudeness of the cost data provided and also avoid having to distinguish cost structures across different forms of intensive programs.[17] For this report, cost data have

[17]Whilst estimating the efficacy and cost-effectiveness of various models within the cognitive behavioural model framework is outside the scope of this project it should, nevertheless, be an area of future research.

been identified for a number of programs. They are Kia Marama in New Zealand, Moreton in Queensland, Casuarina and Bunbury in Western Australia and Ararat in Victoria.[18] Table 5 below shows approximate annual operating costs per treated offender for these respective programs.

Table 5

Summary of Program Costs for various SOTPs (in 1998 dollars).

Program	No. of Prisoners treated*	Average operating cost per prisoner treated (Approx.)
New Zealand: Kia Marama	60 (1996 calender year)	$7,900**
Western Australia: Casuarina and Bunbury:	24	$8,000
Queensland: Moreton	27	$9,400
Victoria: Ararat	30	$7,400
'Average' annual operating cost per prisoner treated		≈ $10,000

* This heading refers to the number of offenders who successfully completed the program.

** The New Zealand cost data represents an average figure drawn from two studies: Bakker et.al. (1998) report and an unpublished study by Gee (1997).

Source: The costing information was provided by various State correctional services departments.

As indicated above, the cost data made available represents annual operating costs per treated prisoner and include the costs associated with relapse prevention. Various administrative overheads and joint costs, however, have not been included in the costing calculations and average costs rather than marginal costs have been used. Currently the information systems of the various government agencies lack sufficient sophistication to provide more accurate reporting of costs of programs. Notwithstanding these limitations, the average variable cost figures presented are likely to be higher that their marginal costs

[18] Information for the New South Wales program was not available at the time of preparation of this report.

and consequently the above cost estimates are likely to overstate rather than understate program costs.

From the information presented in Table 5 a conservative 'ball park' figure of $10,000 per treated prisoner will be adopted in the sensitivity analysis in Chapter 6, to represent program costs of running a 'generic' intensive SOTP. Whilst this figure is higher than the cost data presented, a conservative approach to program costs has deliberately been adopted in order to overcome the limitations in the costing information and to accommodate variability in costs across programs. Adopting a maximum figure will improve the robustness of the results presented in the sensitivity analysis and should more than compensate for any possible under-costing of programs that may have occurred as a result of poor information systems.

5.3 Benefits of Sex Offender Treatment Program(s)

The two components of benefits that must be estimated are the 'tangible' benefits (ie. resource cost savings) and the 'intangible' benefits (ie. health consequences such as pain and suffering) associated with implementing a SOTP. Both sets of 'benefits' are in fact, costs foregone by the implementation of a 'successful' (recidivism reducing) treatment program.

Tangible Benefits. (Resource cost savings).

Child sexual abuse involves direct expenditure by the community in a number of areas. In this project, three major areas of expenditure have been estimated: expenditure by the State Government, Federal Government and private, 'out-of-pocket' expenditures by victims and their families.[19] Another category of expenditure, not estimated in this study, is that made by the community in the form of voluntary donations to charitable organisations that run shelters, hostels and other institutions that may be involved in providing services to victims or families where child sexual abuse has occurred.

[19] Expenditures by local government have been ignored, because the sums involved are likely to be minimal and any variations between councils large.

State Government expenditures

In 1995/96, the total fiscal expenditure on child abuse by the South Australian Government was conservatively estimated at $41.4 million. The principle component areas contributing to total expenditure are shown in Table 6.

Several caveats need to be placed on this result. First, it represents only State Government expenditures that can be directly and closely linked to child abuse. Direct Commonwealth government expenditure on services, non-government health and welfare services addressing the effects of child abuse and out-of-pocket expenditures incurred by victims and their families are calculated in another section. These State data are themselves, incomplete. For example, they omit treatment services for adult perpetrators; prosecutions and criminal proceedings; the cost of non-custodial sentences for adults and adolescent perpetrators and educational support services required to respond to children as a result of child sex abuse. Second generation costs have also not been included due to a lack of data. Thus the data shown are likely to underestimate significantly the explicit costs incurred by society as a result of child abuse. Given the current difficulty of obtaining such data, however, and until information capabilities improve, a conservative measure of tangible fiscal costs, as highlighted in Table 6 below, will be adopted.

Government records, at present, do not record the costs of programs or services so as to identify child sexual abuse. As an approximation, we have used figures from Broadbent and Bentley (1997) shown in Table 1 which provide details on the number of sexually abused children in South Australia as a percentage of all abused children (ie. 25 per cent) and multiplied these by the total fiscal expenditure recorded in Table 6. On this basis just over $10.3 million a year is currently spent by the State Government of South Australia in direct response to child sexual abuse of which $9.9 million was victim related and the remainder offender related.

In 1995/96 there were 600 substantiated notifications of child sex abuse in South Australia (Table 1) implying that the average state fiscal costs for victim related costs were $16,505 per victim. Taking into account the increase in prices between 1995/96 and 1998, the final figure is $16,670 per victim.

Table 6[20]

Fiscal Expenditure on Child Abuse by the South Australian State Government 1995/96

	total expenditure	expenditure child sexual abuse (25%)
Care and Protection	$	$
Family and Community Services	31,066,210	7,766,552
Primary Services		
Health	4,312,657	1,078,164
Education	491,796	122,949
Law Enforcement and Justice		
Police	1,428,134	357,033
Attorney General	646,216	161,554
Legal Services	874,691	218,673
Courts Administration	791,274	197,819
Correctional Services	1,800,432	450,108
Total	**41,411,410**	**10,352,852**
Total victim related costs	**39,610,978***	
Amount attributable to (victim related) child sexual abuse		**9,902,744**
Average cost per victim of child sex abuse		**16,505**
Average cost per victim of child sex abuse (1998 dollars)		**16,670**

Source: Derived from McGurk and Hazel (1998: Appendix 1).
Note: The cost per victim calculations excludes offender-related costs. Incarceration costs will be re-included elsewhere in the cost-benefit calculations.
Inflated using data from ABS Cat 6401.

Federal Government expenditures

Federal Government expenditures in the area of child sexual abuse include a proportion of the cost of providing services in several diverse areas. These include: the judiciary (especially the Family Court and High Court); Federal Police; the Federal Attorney General's Office (including elements of services provided in Family Services programs, such as counselling, mediation, child contact services, domestic violence prevention

[20] We gratefully acknowledge the help and cooperation the South Australian Government and in particular Ms Vivien Hazel of the Department for Family and Community Services in collecting many of these figures. Further, these figures would not have been obtained without the assistance of the late Professor Harry McGurk of the Australian Institute of Family Studies.

programs etc.) as well as child focused health services under the jurisdiction of the Commonwealth government; pharmaceuticals used for therapy and the cost of medical services not under the jurisdiction of hospitals (such as private psychiatrists, general practitioners etc).

Unfortunately, to date there has been no attempt at the Federal level to estimate expenditures directly related to child abuse or child sexual abuse, as has occurred at the state level in South Australia. At present, therefore, it is virtually impossible to estimate Federal Government expenditures in these areas in anything but the crudest manner.

As the expenditures by the Federal Government relating to child sexual abuse is not zero, we have attempted to estimate tangible expenditures at this level of Government using a number of plausible, and collectively conservative, assumptions. For the purposes of this project we assume Federal Government expenditures that are related to the costs of child sexual abuse in South Australia can be calculated as a proportion of the costs of the Family Court alone. We thus assume that Federal expenditures relating to visits to a GP or private psychiatrist, medication, counselling, mediation, and family support services outside the Family Court; Federal Police costs, or any other Federal program that in part deals with child sexual abuse, collectively cost zero.

The proportion of expenditures attributable to issues of child sexual abuse that involve the Family Court is estimated using information from a number of diverse sources. In 1995/96 the running expenses of the Adelaide division of the Family Court was just over $7.7 million dollars (Australian National Office of Audit 1996/97). A recent study by Brown et.al. (1998a) conducted in the Melbourne and Canberra courts found that while only five percent of cases were initially 'tagged' as involving child abuse at the beginning of an action, by the mid-point of possible proceedings (the pre-hearing conference), the proportion involving child abuse was 50 percent. Of these 50 percent, 70 percent involved 'severe abuse (that is physical or sexual abuse or combinations of both)' (Brown et.al. 1998b:3). One quarter of all cases that went to court involved allegations of such abuse.

As a proxy measure for Federal Government expenditures in this area, therefore, we estimate Family Court costs associated with child sexual abuse at 70 percent of one quarter

of annual total expenditures in 1995/96. Again using 'substantiated cases' as the denominator, and taking into account inflation between 1995/96 and 1998 we estimate the per victim cost of expenditures at $2,220 (rounded down).

As with expenditures by state governments, obtaining information about the proportion of Federal Government expenditures that can be attributed to child sexual abuse is difficult. This estimate, however, while identifying an important fraction of Federal Government expenditures, is a conservative estimate of total tangible costs by the Commonwealth Government.

Non-government organisations expenditures

A large proportion of the expenditure undertaken by non-government welfare organisations is derived from government revenues, and has already been considered. A proportion of the donations and other gifts made to these organisations, however, represent additional costs to the community of child sexual abuse. Likewise, all voluntary and otherwise 'under-funded' services provided by these organisations also represents a net transfer from the community.[21] In order to estimate the value of these costs correctly would require information on the total value of donations and gifts to every non-government organisation; an accurate estimate of the true worth of services provided by these agencies and knowledge of the proportion of their services devoted to assisting in cases of child sexual abuse. Unfortunately none of this information is accurately known.

For the purposes of this project, the estimated value of the services provided by non-governmental organisations above public funded assistance will be set at zero.

Appendix A3 lists the non-government organisations currently involved with assisting people in circumstances where child sexual abuse has occurred.

[21] As many people and resources in this sector of the economy donate time and effort to serve others, any financial remuneration they receive, even as full-time employed workers, frequently under-states the true cost of their work.

Direct out-of-pocket expenditures by victim's family

In addition to the costs incurred to government and non-government agencies, victim's families incur out-of-pocket expenses as a result of the notification of child sexual abuse. There is obviously an enormous range of possible costs, depending on the nature of the sexual abuse, the relationship between the victim and the perpetrator, the extent to which official procedures are enforced and the particular type of enforcement adopted, and the family's response to these actions.

Some of the factors that involve direct out-of-pocket costs to the victim's family include: phone calls to support agencies; travel costs to these agencies (which can be especially high in the case of rural families); possible additional accommodation costs if attending treatment in Adelaide; child care; additional costs of meals taken away from home and days taken off work by parents when accompanying children to appointments. Where the action is taken further, say to trial for Criminal Injuries, a new set of costs is involved. For example, people who voluntarily act as witness 'support' can incur the cost of lost wages, accommodation, meals etc; the preparation of Victim Impact Statements, if prepared by a private practitioner cost around $1,500 while solicitors' costs can reach $2,000 per day if the case goes to trial for Criminal Injuries Compensation. There are also the costs of professional witnesses at $300-$400 per hour and perhaps psychiatrists' reports at around $800 each.

This list is by no means comprehensive. For example, it excludes situations where the child fails a year(s) at school as a result of stress. It does not include the costs of additional security added to the house, particularly where an offender has been expelled. Families may purchase answering machines. In some cases people move home.

As a conservative estimate, and assuming a victim wins their Criminal Injuries Compensation, their family is still likely to be out-of-pocket by in excess of $1,500. Where the case is not won, an average out-of-pocket expense would likely exceed $3,500. Where a family goes to the Family Court, legal bills could exceed $32,000.[22]

[22] Source: private correspondence with Joanne Bradbury (Attorney-General's Department) and Chris Boltje (South Australian Police Department), 23 October 1998. Currently, compensation for legal costs is capped under family law at $32,000, but it is not uncommon for costs to greatly exceed this amount. All figures are in 1997/98 dollars.

To calculate an 'average' figure for out-of-pocket expenses requires an estimate of the proportion of cases that can be viewed, from the economic aspect as 'minor' (with few out-of-pocket expenses); those with some expenditure by victims or family; and those that involve major out-of-pocket expenditures.

In an important study, Hood (1997) examined the progress of 500 individual children from an initial 'request for service' at the Child Protection Service of the South Australian Women and Children's Hospital, through the criminal court system, to estimate the proportion of cases that resulted in conviction of the perpetrator. Using information from this study we have made the following conservative estimates: 88 percent of cases do not result in the Crown Prosecutor proceeding with the case. Out-of-pocket expenses are assumed to be zero in these situations.[23] Of the remaining twelve percent, half result in dismissal of the case, the accused acquitted or the case withdrawn. We assume these cases involve out-of-pocket expenditures of $1,500. The remaining six percent of cases result in guilty convictions and it is assumed these cases involve the 'capped' upper limit of expenditure of $32,000.[24] If these proportions are now applied to the initial 600 'substantiated notifications' for 1995/96 the weighted average out-of-pocket expenses per notified case is $2,010. To ensure the estimate of out-of-pocket expenses is conservative, we have made the admittedly arbitrary assumption of approximately halving this figure. The final estimate for tangible private out-of-pocket expenses, is $1,000 per victim.

Total tangible costs

In this report, conservative estimates have been used to calculate the total tangible costs associated with child sexual abuse. The total tangible cost per victim, in 1998 dollars, is estimated at $19,890. Table 7 provides a summary of the main components of this figure.

[23] The categorisation of these proportions refers to direct out-of-pocket expenses and not the intangible costs to the victim.

[24] While the expenditure of $32,000 refers to Family Court cases and not those involving criminal courts, there is an overlap in some situations. This, together with a lack of alternative information compels the use of this figure.

Table 7

The Tangible Cost of Child Sexual Abuse, per Victim (in 1998 dollars).

Expenditure by	Amount ($)
State Government	16,670
Federal Government	2,220
Non-government organisations	0
Victim and family out-of-pocket expenditures	1,000
Total tangible costs	**19,890**

Source: Derived from McGurk and Hazel (1998, Appendix 1) and authors' calculations.

As can been seen from the table, the State Government bears the most significant single component of tangible expenditures. This is directly related to the quantity of services it supplies in this area. Federal Government expenditures, while far smaller, are not negligible. Estimates for this category, together with out-of-pocket expenses and non-government organisations are, by all measures, conservative.

Note also that while such figures provide one estimate of 'tangible costs' they are also reliant on the political decisions made by governments. For example, the tangible costs associated with the State and Federal Governments could be reduced to zero if the political decision was made not to fund any expenditure in the area of child sexual abuse. Not all these costs would be translated into out-of-pocket expenses or 'intangible' costs (although undoubtedly some would). Thus this estimate of tangible costs, while an underestimate of the total direct expenditure by governments and individuals, is also a construct of prior community choices to spend money in the area of child sexual abuse.

The estimated tangible expenditures calculated above are not all directly related to child sexual abuse that result from the actions of previously convicted child sex offenders. That is, if the recidivism rate of convicted and released sex offenders fell to zero, there would still be a need for many of the government expenditures described here. Sensible estimates (rather than guesses) of the proportions of these expenditures that are causally linked to the actions of previously convicted child sex offenders are impossible. Political, social and

community attitudes and actions are too closely inter-woven into the decision making process to unravel this issue. Second, the current state of information in this field also makes more precise estimates impossible. Consequently, we argue that our conservative estimates of the tangible per victim costs attributable to child sexual abuse for 1997/98 in South Australia, are the most reasonable currently available.

Intangible Benefits

Chapter 4 highlighted the importance of including the value of intangible benefits into the economic calculus when valuing the benefits of intensive SOTPs. The previous chapter also discussed the theoretical and methodological issues surrounding attempts to value the costs of pain and suffering of child sex abuse victims that can potentially be avoided if treatment programs lower recidivism rates. The two methods of analysis used to value the intangible consequences of public programs were contingent valuation (ie 'willingness-to-pay') and revealed preference techniques. Both these methods are now discussed.

Contingent Valuation

To the authors' knowledge no studies have attempted to place a dollar values on the various categories (of intensity) of pain and suffering suffered specifically by victims of child sex abuse. There have been, however, two important studies that have adopted willingness-to-pay techniques to estimate the costs of child abuse in general.

First, a recent study by Scott (1996) attempted to measure the intangible costs of child abuse generally, by adopting, as proxy measures, results from New Zealand road accident research projects which applied willingness-to-pay techniques to determine the intangible costs of various categories of road accident injuries. The Scott study attempted to align the categories of child abuse damage to the categories adopted in the road accident studies. That is, the various categories of injuries shown in Table 8 below were classified for road accident victims but have been adopted to represent child abuse injuries.

Scott defined 'permanent injury' in the child abuse context as permanent adult dysfunction, which required ongoing life-long professional treatment. This would include problems such as recurrent substance abuse, inability to parent or maintain social relationships,

inability to gain or retain work, criminal re-offending, depression and suicidal tendencies etc. Inter-generational costs, as described earlier, would fall in this category. 'Serious injury' classified injuries requiring at least some form of hospitalisation or other institutional care. In the case of child abuse generally this would mainly relate to physical injuries requiring hospital treatment. 'Other injuries' defined injuries requiring some form of medical care or professional treatment but short of hospital care.

These categories of injuries are better described as a range of injury type since the extent of hospitalisation for a victim of child abuse, for instance, could span from a few days to several months or even years, depending on the extent of damage inflicted. This approach, however, implicitly assumes a weighted 'average' intensity of injury within each category

The Scott study then used the willingness-to-pay valuations derived from the road accident surveys and adopted them to the categories of injuries described. Thus from Table 8, New Zealanders were prepared to pay up to $2 million to save a statistical life, $200,000 for a program that would prevent an injury resulting in permanent impairment, and $50,000 and $10,000 to prevent injuries that required hospitalisation and non-hospital medical treatment respectively.

The incidence rate for each category of injury of child abuse in the Scott study was determined by adopting findings from New Zealand and overseas studies on the incidence rates of 'permanent', 'serious' and 'other injuries' categories of injuries and using these as proxy measures for New Zealand incidence rates.[25] The reason for relying on overseas studies for determining the incidence rates was the paucity of research data in New Zealand in this area. Table 8 summarises the salient variables adopted in the Scott study.

The only other major study that has attempted to use the contingent valuation method to value the intangible costs of child abuse in general is that by McGurk and Hazel (1998) described earlier. The report prepared jointly by the Office for Families and Children and the Australian Institute of Family draws heavily from the Scott study in terms of the methodology adopted for valuing the various categories of injuries. The study adopts the same broad category ranges of injuries used in the Scott study and also uses, as proxy

measures, the same willingness-to-pay valuations that were originally used in the New Zealand road accident surveys.[26] Consequently the only difference between the two reports is the relative incidence for each category of injury. A comparison of the two reports is shown in Table 8. The difference in relative incidence rates stems from the greater availability of local data (ie. South Australian information) regarding seriousness of injuries inflicted and the use of a wider range of overseas studies for use as proxy measures. The McGurk and Hazel report can be considered a later version of the Scott study in a South Australian context. Whilst the South Australian study has a greater overall incidence for injuries in general, relative to the Scott study, there is a lower incidence of the more serious forms of injuries. Interestingly, despite the variations in incidence rates for each category of injury between the two reports, the impact on overall total value for the cost of child abuse is marginal.

The above two reports are the only studies of their type to use the willingness-to-pay techniques to measure the costs of pain and suffering to victims of child abuse, although the valuations for each category of injury was based on New Zealand road accident surveys.

Since there has been no other research that specifically values the costs of child sex abuse, this report will adopt the methods employed by both Scott (1996) and McGurk and Hazel (1998). The monetary valuations attributed to each category of child sex injury will be taken directly from the New Zealand valuations used by both reports adjusted for the exchange rate and inflation.[27] Due to the lack of any other information, the categorisation of injuries adopted by both Scott (1996) and McGurk and Hazel (1998) will also be applied to child sex abuse. The relative incidence for each category of injury is also taken from the McGurk and Hazel report, however, the parameter settings are modified to adapt their incidence rates specifically to child sex abuse. The qualifications associated with this approach will be discussed later in this section.

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[25] For obvious reasons, New Zealand data were able to be used for determining the number for deaths.

[26] The McGurk and Hazel report retained the New Zealand dollar numeric in their monetary valuations and did not convert into Australian dollars.

[27] The exception will be the value of a statistical life which will based upon Australian road accident survey conducted by Smith, Jan and Shiell (1993). Their study valued a statistical life at $Aus 2 million in 1993 dollars. This report adopts this figure and converts it into 1998 dollars. Smith et.al. (1993) confine the use of willingness-to-pay technique to the value a statistical life; non-fatal categories of injuries were not valued.

Table 8

Monetary Valuations and Relative Incidence Rates for each Category of Child Abuse Injuries adopted by Scott (1996) and McGurk and Hazel (1998).

Category of Injury	Valuation ($NZ 1996)	Relative Incidence rates: Scott (1996)[28] (Percent)	Relative incidence rates: McGurk and Hazel (1998)[29] (Percent)
Death	$2.0 million	0.04	0.08
Permanent emotional damage	$200,000	4.93	6.1
Major injury requiring hospitalisation	$50,000	15.84	5.7
Other injury requiring treatment	$10,000	26.40	50.0
Minor or no damage	$nil	52.79	38.12

Source: Scott (1996): McGurk and Hazel (1998).

Table 9, on the following page, shows that using the methodology and parameter setting employed by McGurk and Hazel (1998) for categorising and valuing intangible costs and for determining incidence data, a value for the intangible cost per victim from child sex abuse in South Australia was $19,650 (in 1998 dollars).

[28] The relative proportions of injuries for each category in the Scott report was calculated by dividing the annual incidence for each category by the total incidence of child abuse. The total annual incidence of child abuse was calculated to be 56,820 victims – which included an annual incidence of 30,000 victims of child abuse where it was presumed minimal or no damage was inflicted.

[29] McGurk and Hazel (1998:9) estimated the total annual incidence of child abuse in South Australia at 17,574. The relative proportions for all the injury categories were then calculated as a proportion to the total annual incidence of child abuse - which implied that an estimated 8,787 victims (ie. 50 per cent) incurred minimal or no damage.

Table 9

Intangible Costs of Child Sex Abuse in South Australia: Using Contingent Valuations derived from McGurk and Hazel (1998)

Category of Abuse	Valuation ($AUD)	Number of injuries per category using McGurk and Hazel incidence rates (N = 600)	Value of damages ($AUD) 1998 dollars
Death	$2.21 m	0.5	$1.11 m
Permanent emotional damage	$177,200	36.6	$6.49 m
Physical injury requiring hospitalisation	$44,300	34.2	$1.52 m
Other serious damage	$8,900	300	$2.67 m
Minor or no damage	$nil	228.7	nil
Total		**600**	**$11.79m**
Average intangible cost per victim			**$19,650**

Note: Figures are in 1998 Australian dollars.
Value of a statistical is life derived from an Australian study by Smith, Jan and Shiell (1993). All other monetary valuations of injury categories and their relative incidence rates have been adopted from McGurk and Hazel (1998) adjusted for the exchange rate and inflation.
Data on exchange rates and inflation rates were obtained from the ABS *dx*Data base (1999).

The data presented in Table 9 should be read carefully.

It is unclear how methodologically sound it is to adopt willingness-to-pay surveys that derive their valuation for particular types of injuries from road accident studies rather than child abuse. The issue is whether the types of injuries categorised in the road accident surveys are sufficiently similar in impact to the categorisations of injuries for child abuse. Although the use of broadly defined injury categories (eg. injury requiring hospitalisation etc.) may make comparisons between road accidents and child abuse easier, the wide range of possible outcomes within each category also makes direct comparisons problematic. In this report there is the additional problem of the link between child abuse in general and child sex abuse specifically. According to the literature, the pain and suffering experienced by victims of child sex abuse tends to be more psychological and emotional rather than physical and therefore is likely to be different to the injuries received by victims of

physical abuse. (See Chapter 2). For instance, many victims of child sex abuse may not receive hospital or other types of medical treatment, as they exhibit no outward sign of damage, yet the damage inflicted may be substantial and could reasonably be classified as major.

This report, in using broadly defined categories adopted from other reports implicitly has rank ordered the intensity of pain and suffering into five categories ranging down from death, to severe psychological damage, and ultimately to no damage. Ideally, a contingent valuation study valuing intangible costs should be conducted specifically for assessing the estimated value of child sex abuse, and where injuries are grouped into clinically meaningful categories.

None-the-less, the measurement of pain and suffering from proxy measures can be considered a base-line measure and is likely to be conservative. Child abuse tends to conjure up strong emotive responses and consequently there is *prima facie* evidence to suggest that individuals in contingent valuation surveys are willing to pay more to avoid a child being at risk (*ceteris paribus*) than if adults faced the same circumstance. Thus the monetary valuations ascribed to each category of injury in the above tables are likely to be conservative estimates.

Chapter 2 described in detail the traumatic nature of the injuries that could be suffered by victims. Furthermore, there is the intra-generation cycle of child abuse where victims become emotionally dysfunctional and, in the extreme, become perpetrators of crime including child sex abuse. Ostensibly, while these problems should be captured by the categories of injuries defined above, to the extent they do not, then such monetary valuation for each category are again likely to understate or represent conservative values.

Until there is further research, using the proxy measures for monetary valuations from previous child abuse studies that have used contingent valuation methods is one approach that can reasonably be adopted within a sensitivity analysis. Such monetary valuations are unlikely to overestimate the amount society is willing to pay to avoid the different categories of pain and suffering experienced from child sex abuse.

A second difficulty with this approach is the relative incidence of each category of injury. The lack of research in Australia in this area resulted in McGurk and Hazel relying heavily on overseas studies and adopting as proxy measures modified findings from those studies. It is unclear to what extent overseas rates of incidence for various categories of child abuse injuries can be adopted as proxy measures for local incidence rates. This report, however, in modifying overseas results adopted a relatively conservative position on incidence rates. In the case of child sex abuse there is even less information available on the incidence rate for each category of injury.

Current Australian information, where available, focuses on the perpetrator's actions (eg. 'sexual penetration', 'sexual fondling') rather than the outcomes for the victim such as severe trauma with lifelong emotional damage etc. The Australian Institute of Health and Welfare does provide incidence data from the various states on the injury or harm, by child abuse category. The categories, however, are poorly defined and are not outcome measures. The exception is Victoria, where the figures indicate that in 1995/96, 69 per cent of child sex victims in substantiated notifications had a 'likelihood of significant harm' due to sexual abuse. Unfortunately this categorisation is too broad for the purpose of this study. In South Australia, Hood (1997) has attempted to categorise the incidence of injury by incidence rate, and categorise injury into very serious, serious and not serious. For the purposes this project, however, such definitions are still too broad and ill defined for quantification.

Conceptually, what is required are clinically meaningful outcome measures, coupled with a comprehensive study identifying what proportion of child sex abuse victims fall into each category. Either a prospective study or a very sophisticated statistical analysis of historical data would be required to achieve this. Recent work by Professor Kym Oates and his colleagues in New South Wales is beginning this process (Tebbut, Swanston, Oats and O'Toole, 1997; Stern, Lynch, Oats, O'Toole and Cooney, 1995; Oats, O'Toole, Lynch, Stern and Cooney, 1994). Work by Irazuzta, McJunkin, Danadian, Arnold and Zhang (1997) that compares the cost of child abuse with other admissions in an American paediatric intensive care unit also begins to categorise and quantify the damage to child victims in a manner that highlights the economic cost of specific injuries. Unfortunately, in this latter research child sexual abuse has not been specifically identified.

The above highlights the paucity of Australian information on the incidence rates of various categories of harmful consequences for child abuse generally and the difficulty associated with determining incidence rates for child sex abuse in particular. Adopting the incidence rates for child abuse injuries determined by McGurk and Hazel's comprehensive study, although not a 'first-best' solution, is more likely to understate rather than overstate the incidence rates for the more severe type injuries; although to what extent is unclear. Nevertheless, the McGurk and Hazel report is the most comprehensive of its kind in Australia and until further research findings become available, adopting parameters from the South Australian report is the most reasonable approach to follow in the absence of any other relevant information.

Within the contingent valuation framework, the value of intangible costs of child sex abuse amounts to $19,650 per victim. Despite the limitations of the methodology adopted, there is the strong possibility the contingent valuation approach is likely to understate the monetary valuations for each category of incidence and therefore the intangible costs per victim.

The contingent valuation approach, however, is not the only method available to value intangible costs; another approach is the 'revealed preference' method. In this study, the estimated value derived from the contingent valuation method represents only one measure of the intangible cost per victim. A value derived from revealed preference is also used to estimate the other end of the cost spectrum. Valuing the intangible costs per victim of child sex abuse using the revealed preference approach is discussed below.

Revealed Preferences

Civil Damages for Pain and Suffering

Chapter 4 outlined that in the absence of willingness-to-pay data an alternative approach, revealed preference can be used to estimate intangible costs. One particular application of this method involves using compensatory damages awarded by civil courts for injuries relating specifically to child sex abuse. Civil courts have awarded sums of money to compensate victims for damages of pain and suffering. Whilst it is acknowledged that it would be difficult in some instances to implement pain and suffering awards, since no amount of money would be able to 'restore a person to a position if the wrong had not been

committed', civil courts in the U.S. have reformulated standard compensation to be an 'amount a reasonable person would estimate to be fair compensation' (Cohen, 1988:540-541).

As previously indicated, the U.S. study by Miller et.al. (1996) revealed the intangible costs of pain and suffering were by far the largest cost component for crimes of violence. For child sex abuse the report valued the loss in quality of life at approximately $US 90,000 per criminal victimisation (in 1993 dollars) vis-a-vis approximately $US 9,000 for tangible costs such as lost productivity, medical care, police and social/victim services. That is, the intangible costs of child abuse were calculated to be in the order of nearly ten times the tangible costs. On a severity of crime scale, the costs of child sex abuse per victim in the Miller et.al. (1996) study were calculated to be the highest of all types of crime injuries.

Unlike the U.S., the tradition of the Australian legal system has been to pursue justice against offenders through the criminal rather than the civil court system. Thus the number of jury award pay-outs are insufficient for robust statistical inference. Second, the practice of capping some compensation pay-outs by statute within the Australian legal system reduces the prospects of obtaining a market value from this approach. For one example where estimates relating to child sexual assault have been attempted using Australian court data, see Salmelainen (1993). Unfortunately, for the purposes of this study, the results from this study are compromised by legislation that caps compensation pay-outs.

More recently, there has been an increasing propensity in Australia to pursue damages through the civil court system, particularly for child sex abuse cases involving perpetrators who were members of religious and other institutional organisations. Internationally, there have been a number of civil proceedings brought against particular institutions involving allegations of child sex abuse. Some of these cases have only recently been determined whilst others are close to completion, with final decisions pending. Those civil cases that relate directly to compensatory damages for child sex abuse potentially offer an opportunity to provide information about the market value of the intangible costs of pain and suffering. Developing a data base of recent child sex abuse court awards and developing further the conceptual and methodological underpinning of measuring value through legal outcomes are important areas of future research.

Given the current lack of Australian information on civil compensation awards, this paper will use as proxy measure, results from the Miller et.al. (1996) report on the economic costs of crime relating to child sex abuse. The National Institute of Justice report represents one of the most comprehensive economic analysis undertaken by a government agency anywhere in the world in this area and as such, is methodologically sound and robust. The U.S. report revealed a ratio of intangible costs at nearly ten times the tangible costs. For sensitivity analysis purposes a value of ten times the tangible costs of child sex abuse, equivalent to the U.S. rate will be used as the 'upper end' value for the intangible costs of pain and suffering in South Australia. Thus an alternative amount for intangible costs in the sensitivity analysis based on South Australian data for tangible costs of $19,890, is $198,900 per victim (in 1998 dollars).

The lack of data, this time from the relevant jury awards in South Australian, again prevent a 'first-best' approach, and results in the adoption of overseas estimates as a proxy for intangible costs. It is difficult to determine the extent to which resorting to such measures produces a reliable indicator for South Australian circumstances. For example, different attitudes to compensation between U.S. and Australian juries when awarding damages could be an important cause of variation between the two jurisdictions. Using the estimate that intangible costs are ten times tangible costs can be considered as an upper bound value for sensitivity analysis purposes.[30] Clearly, more research is required in this area.

5.4 Efficacy of in-prison sex offender treatment programs

An important variable in the determination of benefits associated with child sex offender treatment programs (SOTPs) is the magnitude of the reduction in recidivism rates. That is, the greater the reduction in recidivism rates *ceteris paribus*, the greater the associated benefits. Conversely the lower the recidivism rate reductions then the lower will be the overall benefits of the treatment programs. As outlined in Chapter 3 and Appendix A2 however, there is wide variability in study findings on recidivism rates for both treated and untreated offenders and consequently the efficacy of treatment programs is subject to

[30] For the sake of comprehensiveness, a value of five times the tangible costs, that is $99,450, will also be used as a 'mid-point' estimate of intangible costs. In this way the sensitivity of results to change of specification can be more clearly observed.

debate among researchers (Quinsey, Khanna and Malcolm, 1998; Marshall, 1996; Rice, Harris and Quinsey, 1991; Quinsey, Harris, Rice and Lalumiere, 1993).

Of the studies examined the most recent and comprehensive has been reported by the Department of Corrections in New Zealand evaluating the Kia Marama treatment program (Bakker et.al., 1998). After ten years of follow-up and over 200 treated prisoners, the study revealed that the treated group has a recidivism rate of eight per cent compared with a recidivism rate of 21 per cent for the control group.

Given the variability in overseas empirical results and the lack of formal evaluations in Australia of SOTP, this report will adopt a conservative range of two to fourteen per cent to represent parameter estimates of percentage point reduction in recidivism rates. This parameter range together with the upper and lower bound estimate of intangible benefits will be presented in a sensitivity analysis of results outlined in Chapter 6 of this report.

5.5 Summary

The range of values used in this study varies widely. This is partly a result of methodological differences in estimation and importantly, due to the lack of precise data. These difficulties themselves reflect some of the conceptual and philosophical problems associated with placing monetary values on intangibles such as pain and suffering. Problems with estimating the efficacy of treatment programs reflect both the recent nature of some programs and the uncertainty surrounding questions of definition.

As a result of these problems, chapter six will present a range of results using a variety of parameter settings. Such an approach, while reflecting the uncertainty surrounding particular values, does permit an overall judgement to be made as to the costs and benefits of child sex offender treatment programs. It also facilitates the testing of overall outcomes against their sensitivity to changes in parameter settings.

Chapter 6. Results and sensitivity analysis.

6.1 Introduction

This chapter presents the results of estimates of the net economic benefits of implementing in-prison intensive child sex offender treatment programs (SOTPs) based upon the parameter settings described in Chapter 5. The parameter settings are incorporated into a sensitivity analysis and the interpretation of economic results and associated qualifications are then discussed.

6.2 Summary of Parameter Estimates

Table 10 below outlines the parameter settings for the value of benefits associated with the costs of child abuse avoided through reduced recidivism. 'Offender-related costs' are now also included in the analysis since the benefits of reduced recidivism rates are not only victim-related but also the costs of incarceration that are avoided. Total incarceration costs of $137,400 (1998 dollars) were calculated by multiplying the average length of imprisonment of 189 weeks for a child sex offender convicted of a previous sex offence with the average operating costs of incarceration per prisoner of $37,800 per annum (1998 dollars).[31] This figure is unchanged regardless of the value adopted for the intangible costs of child sex abuse and therefore is constant as shown in the first row of Table 10.

The first column of figures include only the tangible costs of child sex abuse together with incarceration costs and ignores all the intangible costs of child abuse (ie health consequences). This can be considered an extremely conservative position as the health and welfare consequences of child sex abuse is valued at zero.

[31] Information on average length of imprisonment was obtained from the Office of Crime Statistics database and annual incarceration costs from the Department of Correctional Services in South Australia.

Table 10

Range of Parameter Values for Costs of Reoffence (in 1998 dollars).

	Zero Value	Intangibles valued using: Willingness-to-Pay	Revealed Preference (5 times tangible costs)	Revealed Preference (10 times tangible costs)
Offender-Related Expenses				
Incarceration Costs (at av. 3.6 years)	137,400	137,400	137,400	137,400
Victim-Related Expenses				
Tangible costs	19,890	19,890	19,890	19,890
Intangible costs	-	19,650	99,450	198,900
Total Victim Expenses	19,890	39,540	119,340	218,790
Total Costs Per Re-offence	**$157,290**	**$176,940**	**$256,740**	**$356,190**

The second column of figures adopts a value for intangible costs based on the willingness-to-pay estimates derived from McGurk and Hazel (1998). As highlighted in Chapter 5 this also adopts a conservative approach to valuing intangible costs.

The fourth column shows a value for intangible costs based on the revealed preference approach used by the National Institute of Justice study by Miller et.al. (1996). The U.S. study, based on civil compensatory damages, calculated the intangible costs of child sex abuse to be ten times the value of tangible costs. In the absence of Australian information, the proportion calculated by Miller et.al. is incorporated into this study as a proxy measure for the South Australia situation. This monetary valuation for intangible costs can be considered an upper end estimate for the value of child sex abuse.

The third column also uses a revealed preference approach but adopts a value of five times the tangible costs of child sex abuse as a measure of intangible costs. This figure is quite arbitrary. It is a 'mid-point' estimate between the upper and lower bound range of

intangible costs and highlights the robustness of the economic results to different measures of intangible costs. The bottom row in Table 10 shows four valuations for the potential costs of child sex abuse that are avoided through reduced recidivism rates on the basis of one victim per re-offence.

The other parameter that has to be incorporated into the sensitivity analysis is the percentage reduction in recidivism rates for offenders undergoing treatment. As highlighted in Chapter 4 a range of percentage point reductions from 2 per cent to 14 per cent will be adopted.

6.3 Results

The results for the expected net economic benefits of treatment programs incorporating the above parameter settings are presented in Table 11. The estimate of net economic benefits includes the cost of implementing a 'generic' in-prison intensive child SOTP estimated at $10,000 per prisoner. The results are also based on the assumption that a person who re-offends is caught and re-convicted after attacking only one victim. The assumption of one victim per re-offence is relaxed later.

Table 11

Expected Net Benefits Per Treated Prisoner (in 1998 dollars).*

Total Cost per Offence**	**Reduction in recidivism rates (%)**						
	2	**4**	**6**	**8**	**10**	**12**	**14**
$157,290 zero intangibles	(6,850)	(3,710)	(560)	**2,580**	**5,730**	**8,870**	**12,020**
$176,940 WTP	(6,460)	(2,920)	**620**	**4,160**	**7,690**	**11,230**	**14,770**
$256,740 RP 5 x tangible	(4,870)	**270**	**5,400**	**10,540**	**16,670**	**20,810**	**25,940**
$356,190 RP 10 x tangible costs	(2,880)	**4250**	**11,370**	**18,500**	**25,620**	**32,740**	**39,870**

Note : * These dollar values are calculated after deducting program costs of $10,000
:** These values derived using different estimates of 'intangible' costs. See Table 10.
:Values in parentheses indicate negative values.

Table 11 reveals the economic benefits of a treatment program range from an expected net loss of $6,850 to an expected net benefit of $39,870 per treated prisoner depending on the monetary valuation placed upon intangible costs of child sex abuse and the efficacy of the treatment program. The figures have been derived by multiplying the dollar value of benefits by the reduction in recidivism rate to determine an expected benefit of implementing an intensive SOTP, from which the cost of the program of $10,000 is then subtracted to yield a net economic benefit per re-offence.[32]

The negative values in the first column (from -$6,850 to - $2,880) and subsequent negative values in other columns are not unexpected. They reveal that a program with minimal effectiveness (column one, where reduction in recidivism is two per cent) does not result in a positive cost-benefit outcome. Negative values in other columns show that where programs are still only minimally effective at reducing recidivism and the costs of child sexual abuse are considered low, than economically, such programs do not produce positive results.

One way of interpreting Table 11 is to consider the expected net economic benefits that result from the treatment of one hundred offenders. For a ten percentage point reduction in recidivism rates, the net economic benefits range from $573,000 to $2.56 million. Similarly, if there were a six percentage point reduction in recidivism rates the net economic benefits would range from a net economic loss of $56,000 to a net economic gain of $1.137 million.

Another way of interpreting the above table is from a 'break-even' perspective. That is, if only tangible costs are valued, then a child SOTP only becomes cost-effective if the percentage point reduction in recidivism rate is about six per cent. If intangible costs are valued using the willingness-to-pay technique, the break-even efficacy rate is about five per cent. Similarly if the revealed preference approach is adopted to measure intangibles, then the program becomes cost effective using 'five times the tangible cost' valuation if the

[32] Note the $10,000 cost of implementing the program is deducted for all treated offenders regardless of whether the treatment program is effective. The benefits are based on an expected value depending on the proportionate likelihood of the effectiveness of the program.

reduction in recidivism rates is four per cent and for 'ten times the tangible cost' at approximately three per cent.

The issue that remains unresolved is which combination of costs and reduction in recidivism rates is the most 'likely'. In part this requires professional judgement to determine the most plausible ranges of results and whether there is some 'lee-way' within those results to accommodate variations that do not impact on the net outcome.

For example, if the efficacy of a SOTP is in the order of six to eight per cent, a conservative estimate based on the recent Kia Marama findings (Bakker et.al., 1998) and the often cited meta-analysis by Hall (1995), then regardless of which measure is used for intangible costs (other than zero), the treatment programs are cost effective. The potential net economic benefit per 100 treated prisoners could range from a loss of about $56,000 to a potential gain of about $1.85 million. There is substantial literature supporting the higher rather than the lower end of the efficacy of treatment spectrum, however this literature is not unambiguous.

In the case of measuring the costs per re-offence, it is clear the value of the intangible costs of child sex abuse is more than zero dollars. Furthermore, as highlighted in Chapter 4, despite methodological problems, valuing intangible costs using the willingness-to-pay approach is likely to result in conservative estimates.

Bringing together these two 'educated assessments', (ie six to eight percentage point reduction in recidivism rates together with a minimum value of costs per re-offence of $176,940), a 'plausible' range for net economic benefits is at least in the range of $62,000 to $416,000 per 100 hundred treated prisoners. Varying the underlying assumptions, however, could challenge this result.

It has been argued that unless a dedicated study specific to child abuse, using the willingness-to-pay technique is used, the present method of WTP is likely to be conservative. This in part explains the use of revealed preference as an alternative (upper-bound) measure. Chapter 5 highlighted, however, that the validity of adopting the U.S. proxy measure of civil compensatory damages (calculated at ten times the tangible costs)

as a measure of intangible costs was problematic and should be considered an upper-bound limit. Consequently 'five times the tangible costs' was also included for the sake of conservatism within the revealed preference framework. Accordingly, observing values towards the higher end for intangible costs under the revealed preference method, particularly at the 'ten times' end of the spectrum should be viewed cautiously. Until more rigorous analysis within the revealed preference framework is undertaken in the Australian context, erring on the more cautious side of 'five times' the tangible costs (ie half the U.S. rate) could be considered a more unambitious proxy. Given this, an 'educated assessment' of the plausible range in the sensitivity analysis could be refined further to span $62,000 to $1.05 million. This remains, however, a subjective assessment based on the balance of evidence and erring on the side of conservatism.

6.4 Multiple Victims per Re-offence

Another important parameter that could be modified is the assumption that there is only one victim per re-offence. There is a large body of literature (see Chapter 2) supporting reporting admissions by child sex offenders that they have committed child sex offences against multiple victims prior to apprehension. Although the major focus of this economic analysis is predicated upon ignoring the issue of under-reporting, the overwhelming evidence to the contrary warrants at least some acknowledgment of its existence in order to determine the possible extent of its impact.

If the assumption of one victim per re-offence is relaxed and instead it is assumed that each recidivist sexually abuses two victims before being arrested and convicted then the net economic benefits of reduced recidivism rates are substantially higher than those indicated in Table 11.

The framework outlined in Tables 10 and 11 are represented in Tables 12 and 13 with the modification that reduced recidivism will prevent two victims of child sex abuse per re-offence. The results are presented below.

Table 12

Range of Parameter Values for Costs of Reoffence assuming Two Victims per Re-offence (in 1998 dollars).

	Zero Value	Intangibles valued using: Willingness-to-Pay	Revealed Preference (5 times tangible costs)	Revealed Preference (10 times tangible costs)
Offender-Related Expenses				
Incarceration Costs (3.6 years)	**137,400**	**137,400**	**137,400**	**137,400**
Victim-Related Expenses				
Tangible costs	19,890	19,890	19,890	19,890
Intangible costs	-	39,300	198,900	397,800
Total Victim Expenses	19,890	59,190	218,790	417,690
Total Costs Per Re-offence	**$157,290**	**$196,590**	**$356,190**	**$555,090**

Note: that only the intangible costs of child sex abuse are scaled up by a factor of two. Incarceration costs for re-convicted offenders is the same regardless of the number of victims. Tangible costs are also unchanged since the basis of calculation was determined at the macro-level irrespective of the number of victims. That is, doubling the number of victims per re-offence would simply halve the tangible costs per victim and consequently the costs per re-offence (ie. tangible costs per victim times by two) would remain unchanged.

Under the assumption of two victims per re-offence, and if only tangible costs are considered, break-even remains unchanged at about six percentage points, while if intangible costs are valued on the basis of willingness-to-pay proxies then break-even occurs at about a five percentage point reduction in recidivism rates. On the basis of measuring intangible costs through revealed preference proxies, break-even occurs if recidivism rates are reduced to three per cent for the 'five times the tangible costs' measure and less than two percentage points for 'ten times the tangible costs' approach.

As could be anticipated, the greatest impact to net economic benefits from two victims per re-offence occurs at the higher end of recidivism rate reductions and for higher measures of

intangible costs.[33] That is, the most dramatic effect on economic results occurs moving in a south-east direction on the sensitivity analysis in Table 13.

Table 13

Expected Net Benefits per Treated Prisoner: assuming Two Victims per Re-offence (in 1998 dollars).

Total Cost per Offence**	Reduction in recidivism rates (%)						
	2	4	6	8	10	12	14
$157,290 zero intangibles	(6,850)	(3,710)	(560)	**2,580**	**5,730**	**8,870**	**12,020**
$196,590 WTP	(6,070)	(2,140)	**1,800**	**5,730**	**9,660**	**13,590**	**17,520**
$356,190 RP 5 x tangible	(2,880)	**4,250**	**11,370**	**18,500**	**25,620**	**32,740**	**39,870**
$555,190 RP 10 x tangible costs	**1,100**	**12,200**	**23,310**	**34,410**	**45,510**	**56,610**	**76,710**

Note : * These dollar values are calculated after deducting program costs of $10,000
:** These values derived using different estimates of 'intangible' costs. See Table 10.
:Values in parentheses indicate negative values.

Using the same 'plausible ranges' described in the previous section, of a six to eight percentage point reduction in recidivism rates, and the two lower monetary valuations for intangible cost (ie. willingness-to-pay proxy and 'five times' revealed preference proxy), the net economic benefits per 100 treated prisoners range from $180,000 to $1.85 million. These figures suggest there are potentially substantial savings that could be achieved with the implementation of a child SOTP. As with the previous section, however caveats apply to this conclusion.

Whilst there appears to be substantial evidence to suggest that under-reporting is systemic and that recidivists are known to have multiple victims prior to re-conviction the actual

[33] At three victims per re-offence - not an unreasonable assumption according to the literature - the revealed preference approach at 'five times the tangible costs', almost breaks even at the two percentage point reduction in recidivism rate level while the 'ten times the tangible costs' achieves a substantial net economic benefit of over $500,000 per 100 treated prisoners at that efficacy level.

extent to which this occurs remains problematic. Accordingly, in the absence of more definitive information the most conclusive results rest on the assumption of one victim per re-offence, as highlighted in Table 11. The results of Table 13, however, should not be over-looked. Thus where the net economic results may, in the first instance, appear to be marginal for certain parameter settings then reference should also be made to the Table 13 in order to observe the impact on net benefits under alternative assumptions regarding the number of victims.

6.5 Other Issues

It should be noted that this study is based upon implementing an intensive in-prison program; usually the most expensive type of SOTP. It should not be concluded, however, that this type of program is the most appropriate program available in every circumstance. The less expensive the program, the greater the net economic benefits per unit percentage point reduction in recidivism rate.

This analysis has assumed child sex offender treatment programs cost $10,000 per prisoner. If, however, the true cost of such programs was actually $7,000 per prisoner, then where recidivists offended against two children before re-incarceration, only programs with minimal (two percent) reduction in recidivism rates, or where intangible costs are assumed to be zero, would not be economically effective. A similar result holds where the number of victims per recidivist is assumed to equal one, although here the cost-benefit result is negative when the program only manages to reduces reoffences by four percentage points and intangible costs are given their lowest positive value. In short, program costs have a large impact on the cost-benefit analysis.

Thus if it can be shown that juvenile offender programs or community-based programs specifically targeted to the most receptive child sex offenders can reduce recidivism rates then, from an economic perspective these cheaper alternatives should be preferred relative to an expensive program. The reason for incorporating the most expensive program into the analysis was to ensure that a conservative approach was adopted since the efficacy of (all) treatment programs is problematic. For any particular level of reduction in recidivism rates, the finding that there is a net economic benefit to be derived from an expensive program produces, *ceteris paribus*, a more robust result than if less expensive programs

had been considered. The preoccupation with costs based on the most expensive program should not taken as excluding alternative programs, but rather, that where any program produces equal or similar reductions in recidivism and is cheaper, the cost-benefit results are even more favourable.

6.6 Conclusion

Until there is more specific research into child sex abuse where methodology and data gathering capabilities can be developed and continuously improved over time, policy makers and allied professionals will need to exercise professional judgement in assessing the 'plausible' range of parameter estimates used in this study. Although there are methodological problems associated with placing monetary valuations on benefits through the use of willingness-to-pay and revealed preference proxy techniques, a conservative approach had been taken wherever possible.

The results of this report reveal that in-prison child sex offender intensive treatment programs could result in substantial net economic benefits to the community when the set of parameter values are within the feasible range accepted by overseas studies. Potential savings could vary range from tens of thousands of dollars to millions of dollars per 100 treated prisoners. If multiple victims per re-offence are added to the equation then the net economic benefits are even greater.

Despite these conclusions, much work remains to be done in this area. Little Australian data exist. Few comprehensive studies of recidivism rates have been completed. Our understanding of the short and long-term impact of child sexual abuse and the relative the distribution of injuries that occur is only sketchily understood. The economic value of the damage caused by child sexual abuse is only partially measured. The next chapter summarises our findings and discusses the need for more research and better data.

Chapter 7. Findings, future research and conclusion.

7.1 Findings

Primary Findings

The results of this study reveal that within a plausible set of parameter estimates, in-prison intensive child sex offender treatment programs (SOTPs) could result in substantial net economic benefits to the community. Given the previous caveats regarding recidivism rates and the measurement of intangibles, potential economic savings could range from around $60,000 dollars to over a million dollars (in 1998) per 100 treated prisoners.

Using the lowest monetary valuation for measuring intangible costs of child sexual abuse (based upon a willingness-to-pay proxy), an in-prison intensive child SOTP 'breaks-even' if the percentage point reduction in recidivism rate is approximately five per cent, although this is subject to qualification.

Adopting two higher monetary valuations for intangible costs of child abuse based upon alternative proxy measures using the revealed preference approach, the economic break-even point for the percentage point reduction in recidivism rate reduces to four and three per cent. The methodology involved in determining these higher monetary valuations, however, becomes more problematic.

If the assumption of one victim per re-offence is relaxed, and instead two victims per re-offence is presumed, the potential economic savings rises to about twice the range of dollars highlighted above. The percentage point reduction in recidivism rates necessary for SOTPs to break-even falls by about one percentage point for the two higher categories of monetary valuations used to measure the intangible costs of child sex abuse. Accuracy in recidivism rates and the number of victims per re-offence remains a problematic issue however.

The net economic results appear to be sensitive to the costs of running a 'generic' in-prison intensive child SOTP – which for this study was based on the conservative figure of

$10,000 (1998 dollars) per prisoner. A reduction in the cost of running an in-prison SOTP has a large impact on potential net economic savings and on the break-even level of reduction in recidivism rates.

The results presented in this study do not preclude alternative cheaper programs from being more cost effective such as community-based programs and juvenile treatment programs. Where any program produces equal or similar reductions in recidivism to those analysed here, and is cheaper, the cost-benefit results are even more favourable.

Other Findings

In the process of producing this report, a number of important issues concerning child sex abuse research have emerged. The most important issue is the lack of official data; ie poor or incomplete data on the prevalence of sexual abuse, incomplete records of sex abuse incidents etc. More generally, there is an overall lack of information about issues surrounding child sexual abuse. For example, the impact of sexual abuse in the short and long-term; the distribution of injuries among child victims; the efficacy of treatment programs for sex offenders, and so on. While some of these problems are related to the secretive nature of child sexual abuse, some are the result of government inaction and a lack of quality research in the field.

Information systems associated with determining the costs of running treatment programs appear to be quite poor. Inadequate costing information appears to be a problem across all states.

There appears to be very poor coordination between government and semi-government agencies in statistical data gathering and information-generating capabilities. These problems include, differences in definitional standards; poor communication links between agencies; differing reporting requirements between states and between agencies; and institutional boundaries created by state jurisdictions. All contribute to the problem of poor information.

For example there is poor information relating to: the definition and incidence of child sex abuse; the characteristics of victims and offenders; types of injuries sustained; what

treatment and services were received; the costing of those services; or who paid for those services. Similarly in the area of court proceedings and prosecution, there is lack of detailed information regarding the progress of individuals through the system or even, in some cases, the final outcome.

There is very limited quality research in Australia on sex-offender treatment programs in general and on the efficacy of various programs in particular.

7.2 Future Research

Outlined below are some of the problematic areas that require further investigation in order to improve the validity and robustness of the results presented and thereby provide a more comprehensive economic evaluation.

There should be a comprehensive assessment of the efficacy of all treatment programs currently in operation in Australia. This would also include research into juvenile treatment programs and community-based programs. Such studies should build upon quality overseas empirical research.

A fundamental area of research should involve valuing the intangible costs of pain and suffering. Initial results suggest the dollar amount attributable to this category is likely to be substantial and will have a significant bearing on economic results. Consequently willingness to pay (WTP) studies focusing on valuing different types of injuries specific to child abuse and child sexual abuse should be conducted. Such a study would include both developing further the methodology of using the WTP technique and in effectuating its application.

There is a need for the development of clinically meaningful measurement categories of the nature and type of damages incurred by victims of child sex abuse. In addition, research is required to determine the relative incidence of each of the categories. In the first instance, developing a database of quality overseas empirical evidence on the relative incidence of particular injuries should be established on which Australian studies could then build.

Further research should also be conducted in developing the methodology of using compensatory damages paid to victims of child sex abuse as a measure of intangible costs of pain and suffering. A related issue is to develop a comprehensive database of recent court awards from Australia and overseas on child sex abuse. Data such as the amounts awarded, the nature and type of injuries and reasons for the compensation should be collated and analysed.

Ideally, if the problems identified in the previous section relating to poor information systems and inadequate coordination were addressed as a policy issue, then further research into determining the full tangible costs of child sex abuse and on costs of treatment programs could be undertaken.

7.3 Conclusion

Initial estimates of a cost-benefit analysis of child sex offender treatment programs for male offenders in correctional services suggests that, within plausible parameter settings, the costs of such programs are likely to be more than compensated for by the benefits which they produce (in terms of costs foregone).

The major difficulties highlighted in this study are determining appropriate values for the intangible costs of pain and suffering, as they are likely to be substantial, and determining the appropriate figures for the reduction in recidivism rates for offenders undergoing treatment. This exploratory work, however, also suggests that despite these difficulties, the magnitude of the problem of child sexual abuse generally and offences by recidivists in particular, are such that the costs of such abuse are substantial and the associated benefits to be achieved from appropriate treatment programs high. Finally, the study highlights that the potential net economic benefits are sufficiently large to warrant support for future research into identifying the relative incidence of different types of injuries, engaging rigorous assessment of recidivism rates of programs, and valuing the intangible costs of pain and suffering.

This report should be considered as providing a general framework and an initial platform from which to conduct further research in the area of child sex abuse.

Appendices

Appendix A1

The following brief extracts are taken from a larger study by Nayda, and Higgins (1998), *The experiences of mothers whose children have been sexually abused.* These examples come from verbatim account of the experiences of mothers of abused children and highlight some of the less direct effects of sexual abuse on victims and their families.

1. ... we sort of fumbled along trying to change their lives. We took out all the presents he'd given them and gave them away to the church. X didn't like seeing people drink from cans because he [the perpetrator] used to drink canned beer. There were certain phrases that we had to make sure nobody said. We tried to change everything ... we took out all the furniture where the abuse occurred and replaced it. We changed their bedrooms around. We moved into their bedroom and put them into ours. We bought different beds, different quilts. We tried to change as many trigger factors of remembering in those early days, always telling them that they were the brave ones.

   For about seven or eight months we bought them presents every week. We'd go ... to the city. We bought them radios, we bought them music tapes, we bought them dolls. .... We bought so many things ... we were just trying to, I don't know whether it's guilt, but you sort of felt that you let them down ... you felt like you failed to protect ... you feel stupid ... you feel naive. Everything in hindsight seems so clear and you wonder 'how the hell did I miss that'.

2. At one stage the judge ordered that the girls be brought from A [place] to B [place]. There was no security brought in for them. He [the judge] didn't even want to bother putting someone on the plane with my children. Now these kids ... had left B terrified and anything to do with coming back here meant daddy would get them. As far as they were concerned there was no doubt about that. So my sister paid for my cousin to come over ... She stayed with them on the plane. By the time they got there X had broken out in so many mouth ulcers that

she could hardly open ... or close her mouth or drink or swallow. .... The kids were terrified. The kids were silent. They would burst into tears.

3. Then it was X's birthday and she went missing that day ... [she] rang me and she was suicidal, then the school were involved. They saw that things had come to an absolute head and they organised Operation Flinders and you should have seen how fast they worked on it. It was virtually within ... 48 hours ... they had her up in the Flinders ranges away from all her worries. It was a joint effort between the police department, the education department and that place in Franklin Street. They put in this joint effort and they just got her in time, ... they were going round the clock to save her because she was suicidal, she was on her last legs.

4. ... the special mums' group, by going to that, what I've found is that a lot of mothers of the mothers whose children have been abused, aren't supportive, and when I ask the reason why, and I ask that question over and over again, ... it's because they're in denial. ... It's like I'm answering my own question but I'm still finding myself asking 'how could the mothers go against their own grandchildren and their child and not believe them?' even to the point where one woman ... the mother is actually supporting the son in law who is the one who abused the children. I can't comprehend that.

5. ... he [the father] felt guilty, being a man. When he went to the shops with the kids he thought to himself 'Well do people think that I did this to my children?' He said 'there's nothing for a man like the women at the women's group. They don't want a man at the women's group because they're the enemy'. So there was really nothing for him.

6. ... if I didn't have a boyfriend when this happened I probably would never have had one ever again because you'd always be thinking 'does this guy want to go out with me or does he want to go out with me because I have a five year old daughter. It makes you very mistrustful of people. ... There's actually one of these booklets that says 'You will not walk around for the rest of your life

looking at every male and thinking that they're a paedophile' and I think `yes I will'. We went to the Justice Forum during Victim Awareness Week and there were magistrates and judges from the Supreme Court ... and the whole time I sat there I was thinking 'You're probably a paedophile yourself.' You just can't help but think it because they [paedophiles] are just so devious ... and you know they're out there.

7. ... I was passing out all of the time. I just thought I was tired after X disclosed. There was a lot of emotion and I was really down ... I was thinking, 'why did I bother waking up...the kids have to go [die] with me'. For the first time in my life ... and I know this sounds terrible ... I can understand why people take their children with them [in death] because leaving them here meant he could get them and he would hurt them more and staying here meant that I couldn't do it [cope] any more. I had blame for myself, I cried all the time, I paced the floor, I couldn't sleep. I felt destitute. I was lonely. I felt stupid. I felt ignorant. ... People make comments. I think `Why didn't you see it?'. Surely you must have seen something. How did it go on for so long? He was a bastard from the start, you should have known better. On and on, it makes you feel worse.

8. ... I was ... on auto-pilot in those first few months. I don't know how I got through the day. I'd get to places and I don't know how I'd get there. I'd do the washing and the washing machine would sound so much louder because the house was so quiet and it was devastating knowing that you couldn't fix what had already been done.

9. ... She would come back from access and she was terribly sick, she had a lot of medical problems and they were very extreme. She was almost like an autistic child when she came back from access [to the alleged perpetrator]. She would hold onto her bowel movements and I used to have to ... take her to the hospital and get her an enema and in the end ... she'd have ... gastro ... and end up in the hospital because she was dehydrated.

10. So I'd be reading in the diary that she [the abused daughter] wanted to commit suicide and I started to feel what she was feeling. ... After she left school, she decided to go back to school ... and she'd arrive there with alcohol or being tipsy or drunk ... because it doesn't take much, X's so skinny. She's also anorexic now too...so she was seeing a counsellor to do with drug and alcohol ... and he would get her to draw pictures ... and she'd be drawing pictures where she's holding a gun and she'd shoot him and blood coming out, So I guess that was her way of trying to deal with it.

11. ... He [the abused child] was feeling so guilty that it was his fault. [the abused child said] 'What if he says that we did it to him, not he did it to us?' I then had to explain to him that what he [the perpetrator] did was wrong, the police really thought it was wrong. He [the alleged perpetrator] was an adult, you were only a child. 'Why did he do it when we weren't around, why did he bribe?' At that stage we didn't know, it wasn't until it came out in counselling that he [the child] disclosed that he'd [the alleged perpetrator] threatened to kill us.

12. ... So in my opinion court is costly. There is no justice. They don't care about the best interest of the child because no one listens to the child because the mother is naturally presumed to be a bitch and feeding the children bullcrap. The father's a poor bastard and hard done by and it's still not over. I paid for the final hearing and I didn't get a final hearing. What else could I have done and how much more damage? I never saw the police report. Oh. I went to see them. Then they told me that he wouldn't be charged. I said. 'Why?' And they said. 'Not enough evidence' and I was really upset. .... They all said 'Oh. Yeah we believe it. I said 'So he is just going to walk scot-free because there is not enough evidence and this happens all the time you reckon. That you get five percent.' And he said. 'Five percent is better than no percent' and I said 'Not for the children that are being sexually abused it's bloody not'.

13. ... even if X had brought it up. If X had disclosed. It would not have helped Y's case. It would have been a separate case. So. In other words two cases with flimsy evidence because that's the nature of the crime, [it] could go undetected.

> The person could be classed as innocent and go on to do it again and again and again because of the system. It all makes such good sense doesn't it? So. It hasn't finished. We are still in the middle of it. The kids have had umpteen different schools they've had umpteen different addresses and they still maintain that we have done the right thing and we are doing the right thing and I've decided that if we lose the second house again then so be it. ... They have to feel safe. They can't grow up feeling like this. Because they won't grow up happy and that's the reason why I had them. It doesn't matter what else I lose. I'll keep fighting it and saying that sounds really easy but there are times when I think I am going absolutely nuts and I can't do this any more. So. It hasn't finished.

These are a very few but telling illustrations of the effect of child sexual abuse on mothers and children. Other mothers described the effect on friends and siblings when the child began acting out sexually with them. Loss of trust in men and the court system were paramount findings. System abuse featured in their stories frequently. Psychological trauma occurred continually as each new phase unfolded. As these examples show, although the damage done may be intangible, it is the no less real for that.

Appendix A2

Cognitive behavioural programs with relapse prevention.

Introduction

This appendix provides a brief overview of a variety of treatment programs in a number of countries. At their core, each program involves providing individuals with cognitive behavioural treatment, although there are variations between each. The aim of this appendix is to illustrate the variety of programs available, even within one form of treatment program. Program descriptions are categorised by location.

NEW ZEALAND

The Kia Marama Sex Offenders Treatment Program

The New Zealand Department of Corrections has established a treatment program for sex offenders at Rolleston in New Zealand. This program typifies the modern therapeutic approach to treating sex offenders. A multi-discipline therapy team runs the program. The team includes, a senior clinical psychologist and a senior psychologist who provides training and clinical supervision for the therapists who conduct the treatment groups. Other members of the team are therapists, three of whom are also psychologists and run group therapy programs. A social worker, a psychiatric nurse, a re-integration coordinator and a secretary /administrator complete the team.

Offenders come to Kia Marama from regional prisons. They are assessed and their treatment options explained. If they consent to treatment the offenders are transferred to the unit one or two months before treatment begins and are allocated to an appropriate intake so that the completion date of their program will closely coincide with their eventual release date.

Criteria for acceptance

The criteria for entering the program are that the inmate:

- has committed one or more sexual offences against a person under the age of 16;

- has been informed about and voluntarily consents to entering the treatment program;
- has a sentence long enough to complete the 37 week program before the earliest possible release date;
- is not intellectually disabled and has a sufficient intellectual ability to comprehend and participate in the treatment program;
- is currently free of any major psychotic disorder; and
- does not require maximum security classification.

(Woods Commission 1997:s19.107)

The Program

The sex offender program is designed to deal with the type of thinking which encourages sexual offending; the absence of empathy, sexual preferences, inter- personal difficulties and mood and lifestyle problems (including habits) of offenders. The central therapeutic goal is control. There is a balance between an educative approach and process-oriented learning.

> All treatment is provided in a group format with eight to ten participants and one therapist. Admission depends upon favourable initial assessment, and as a result of a decision made between the offender and the treatment team. The program lasts for a period of 37 weeks, the first and last four weeks of which are devoted to assessment. For the remaining 29 weeks, the group meets for 2.5 hours per day or days a week. The program essentially consists of two phases.
>
> In the first phase, the focus is on the inmates 'offence chain', increasing the motivation to change, by enabling the participants to understand the factors that motivated their offending in the first place, to challenge any distorted ideas they hold concerning their behaviour, to encourage them to take responsibility for their behaviour and to develop empathy for their victims.
>
> The remainder of the program concentrates on the acquisition of skills centred around mood management and social competence (relationships,

> sex education, social skills, anger and stress management and social problem solving), followed by relapse prevention strategies.
>
> During the relapse prevention stage, a six- month post- release program is formulated and coordinated by the unit social worker, which aims to develop:
>
> - ongoing psychological therapy;
> - contact with a probation officer;
> - attendance at a follow-up/support group; and
> - the establishment of a community support network.
>
> The unit is actively engaged in research and evaluation, with the aim of improving the treatment and developing strategies for preventive initiatives. Progress to date has been reported as encouraging.
>
> (Woods Commission 1997:1278)

After release, the Probation Officer takes over responsibility for the management of the case.

> The core of post-release management is a schedule of meetings with the Probation Officer. Officers involved in this work have each undergone training, conducted by Kia Marama staff, in relapse prevention work with offenders. Other common components to an individual's release program include psychological treatment with a Corrections Department psychologist, and attendance at a Relapse Prevention Support Group. The individual is encouraged also to establish a personal support network. A meeting is arranged shortly after release, facilitated by the Probation Officer, at which the offender informs the support people of his offence history, describes what he has learned while in treatment, and invites them to both monitor and support him during the foreseeable future
>
> (New Zealand Department of Corrections 1995:3).

The Kia Marama Program has recently been evaluated. It has been running for seven years and some of its graduates have lived in the community for the last six years. For the purposes of evaluation, 238 men, graduates of the first three years have been matched against a control group selected from child sex offenders convicted between 1983 and

1987. The evaluation found the treatment at Kia Marama had produced a significant effect. (Bakker, Hudson, Wales and Riley, 1998).

AUSTRALIA

The Woods Commission Report lists the various programs available to sex offenders in Australia. Most of these are prison based, although there are community-based programs that may be attended voluntarily or as part of a court order.

New South Wales[34]

Apart from the NSW pre-trial diversion program, no community based special management program existed in New South Wales for several years. No therapy groups have been provided for sex offenders although psycho-sexual education groups have been offered at Cooma and individual work was being done with offenders at Bathurst, Cooma, Cessnock, Kirkconnell, St Heliers, Silverwater and Long Bay.

In May 1996 the NSW Minister for Corrective Services announced an overhaul of the NSW prison system. Proposed restructuring included the redevelopment of the Long Bay correctional complex to offer special treatment units for inmates convicted of sex offences. The aim was to improve rehabilitation programs and phase out outdated correctional facilities that were difficult to manage and expensive to run.

The new program at Long Bay, the 40 bed Custody Based Treatment Unit (CUBIT), appears to be modelled on United States, Canadian and New Zealand psycho-sexual models and includes a rigorous program of assessment.

Criteria for acceptance

There are a number of criteria that must be fulfilled before prisoners are accepted into the CUBIT program. These criteria, such as a minimum IQ; English ability; no physical disabilities; acceptance of responsibility for previous offences and that the offenders are

[34] The information in this section is based on the Woods Royal Commission.

not politically committed to paedophile sex are similar to criteria in other cognitive behavioural programs. Inmates must have enough time to complete their treatment and go on to the transitional program, so most would be within 24 months of their release date.

The Program

Treatment times average around 44 weeks. All inmates must leave after 52 weeks. After release transitional care and long term after care are proposed. The proposed programs include-

- provision of full documentation of the index offences and court depositions;
- initial assessment of all sex offenders soon after sentence;
- psychosexual education in a number of correctional centres;
- more detailed assessment for selected sex offenders;
- twelve months intensive residential treatment within prison;
- a further 12 months of transitional support and monitoring of all graduates of the intensive treatment phase whilst the offender is on temporary leave programs;
- post release support and follow up for periods from 5-20 years;
- research facilities to monitor the program's effectiveness, efficiency and operation and to produce information which can be used to refine and adapt the methods used;
- training for clinical, custodial, parole and community based staff in treatment management and supervision of sex offenders;
- clinical supervision and case management supervision for staff dealing with sex offenders.

In the CUBIT program:

- The offender is defined as the client

- treatment is voluntary and the offender is to be kept well informed about the treatment contract, and the conditions of the treatment before making any decision to proceed further with it;
- the offender is to be treated with respect regardless of the offence;
- the offender is to take responsibility for the abusive behaviour without minimisation and without shifting the blame;
- providers of the treatment are to maintain up-to-date records and to keep those records safe and confidential;
- information gathered during the treatment is not normally to be released without the written permission of the offender, save where the safety of a child or other person is at risk; and
- staff are to have adequate training supported by regular supervision, and therapeutic work is to be balanced with research, non-contact times, relaxation and change of duties at regular intervals

(Woods Commission 1997: s19.48).

There is provision for a transition program, as well as long-term follow-up post–release through the COBAC (Community Based Aftercare Program) program. The follow-up will normally be mandated for the length of the offender's parole, licence, or probation (Woods Commission, 1997: s19.53).

For this and like programs to be effective, staff must be properly trained, while accurate assessment of offenders should take place as soon as possible after their arrival for effective case management. Obtaining suitably qualified psychologists and junior psychologists with insight into the problems of sex offenders requires significant expenditure.

The victim's rights have also been addressed. The victim is to be informed of the offender's release date, and the victim's wishes and safety are to be considered in relation

to contact with the offender. If there is a clash of rights between offender and victim, the victim's rights are to take priority.

QUEENSLAND

> The Sex Offender Treatment Program (SOTP) at Moreton Correctional Centre in Brisbane Queensland is a twelve month comprehensive pre-release program that provides assessment and treatment services to sexual offenders serving custodial sentences in Queensland Correctional Centres. Based on cognitive behavioural principles, and with a strong relapse prevention focus, the SOTP has engaged 216 sexual offenders in its core group program since the first intake in September 1990
>
> (Smallbone et.al., 1996:1).

Criteria for participation

The offender must be convicted of a sexual offence, must consent to treatment and eligibility for parole must be between six and eighteen months away. Offenders are excluded by means of psychiatric illness, an IQ lower than 85 or denial of the offence. Participation in the program ceases if the offender displays threatening behaviour, breaks the contract of treatment or confidentiality, or consistently refuses to disclose or take part in the group process (Smallbone et.al., 1996:4).

The Program

The program follows Marshall and Barbaree (1990) and addresses the primary aspects of the aetiology of sexual offending. It aims for an integrated approach and is similar to those existing in the United Kingdom. The program is of 8-12 months duration with a core treatment program that embodies the goals common to other programs of this genre. The SOTP is designed to take 12 offenders three times a year. Offenders are exposed to a minimum of 180 hours of group therapy and between 20 and 50 hours of individual counselling.

Between weeks 15 and 20 a review is undertaken with some offenders being diverted to the remedial program and others into other areas dealing with specific difficulties, while most continue with the program. A comprehensive pre-release report is written that

includes monitoring of the offenders and community networks and reviewing the offenders' relapse prevention plans.

Post-release, graduates of the program can attend community-based maintenance groups that review the content of the SOTP over a period of 20 weeks. This is followed by attendance at a standardised maintenance group that meets for two hours per fortnight over a period of twelve weeks. The program has shown some positive preliminary outcomes (Smallbone et.al., 1996).

VICTORIA

Criteria for acceptance

Pursuant to the investigations of the Crime Committee 1995, a state-wide sex offender program was proposed to target all convicted sex offenders and those not convicted of a sexual offence but where there may have been a sexual element to the crime. The program is offered to those who have offended both against adults and children. Offenders must consent to take part in the program and those that commence the program can withdraw at any time.

The Program

The basic (CORE) program includes the Wimmera Treatment Unit, which is the only residential unit available in Victoria for intensive therapy for sex offenders. It comprises cognitive-behavioural program skills programs, a management and intervention program and a maintenance group. The program has a one-month assessment period and this is followed by eight months of intervention. Two groups of twelve offenders are in treatment at any one time. Entry into intensive therapy occurs within the last 18 months of the sentence.

The multi-discipline programs team comprises the Manager, (Sex Offender Programs) and teams based at Ararat (Wimmera Treatment Unit) and Melbourne (Carlton Community Correctional Services). The Wimmera Treatment Unit provides services to Langi Kal Kal prison, and community correctional service offices at Horsham and Ballarat. The Melbourne based unit delivers it services to the remaining prisons and community service

offices. Ararat and Langi Kal Kal prisons manage a combined total of approximately 400 sex offenders.

These prisons have developed a program of environmental management, which has been used to challenge the behaviours and thinking of sex offenders and restrict their opportunities for deviant sexual fantasy and networking. This also includes the screening of children's visits, the maintenance of a pornography-free environment, and such things as appropriate work placements.

After the process of assessment where all convicted sex offenders are interviewed to determine their needs, an appropriate intervention plan is prepared which is appropriate for the length of sentence the offender is serving. The skills programs are typical of other cognitive behavioural programs and delivered to all categories of offenders.

Where offenders on shorter sentences require intervention before their orders expire, or offenders are repeating the intervention or serving a community based intervention, a detailed plan of relapse prevention is developed. The program takes place over four sessions per week for four months at Ararat and Langi Kal Kal. In community correctional services it is one session per week for six months. Consistency of delivery across Victoria is ensured by the program being co-facilitated by programs staff in CORE's prison services or community corrections officers in community correctional services together with members of the program team.

The modules are offence specific and offence-related and reflect the practices in other programs of this type. The final component of the program is a maintenance program and as such is less intensive. The maintenance groups are in Langi Kal Kal Prison and Community Correctional Services (Victorian Public Correctional Enterprise, 1997).

WESTERN AUSTRALIA

Within Western Australia, the Ministry of Justice Sex Offender Treatment Unit (SOTU) aims to provide treatment programs for convicted sex offenders, and to provide expert advice to sentencing and releasing authorities and the ministry on management and

treatment of sex offenders. The program involves integrated structures from prison to the community. Group work therapy is the primary mode of intervention.

Criteria for acceptance

Offenders are assessed for their suitability for the program while the Ministry deals with denial issues, as the parole board insists on participation for the offender to be considered for early release. Offenders on community based programs have special conditions. Some offenders refuse and do other programs but these programs are not considered substitutes. Denial and refusal results in intense supervision and denial of parole.

The Programs

The SOTU Programs are based on the cognitive behavioural with relapse prevention model. There is an intensive sex offender treatment program within the Casuarina Prison. Two groups (with 12 members) run concurrently and there are eight or nine therapeutic groups per week. It is a 38-week program. In addition to the intensive programs at Casuarina, Bunbury and Albany prisons, there are different programs in other locations. At Karnet, the process involves 36, three hour sessions, involving 10 individuals at a time. It is based on a relapse prevention model of treatment. Similar programs that have been designed to be culturally relevant to aborigines are provided at Broome, Greenough and Eastern Goldfields Regional Prisons.

Community based programs are conducted through Northbridge and Bunbury community corrections centres. Offenders are either on probation or parole. They are considered to be at the lower end of the risk scale. There are 10 participants who attend once a week for three hours over eight months. The core modules include relapse prevention, victim empathy, sexuality and relationships, and anger management.

The Northbridge unit also includes three programs for men who have completed the prison-based program but may still be at risk. It also caters for the intellectually disabled, treating six to eight intellectually disabled offenders twice weekly. (Upton-Davis, undated).

THE UNITED STATES

The political response to the increase in sexual crime in the United States has resulted in a 'get tough' policy with offenders and a decreased emphasis on rehabilitation (Murphy 1996). Many prison-based programs have recently been closed and the move has been towards social control (Murphy 1996). All states have been required by legislation to create sex offender registers and prison sentences are lengthy.

The Vermont Centre

The Vermont Centre for the Prevention and Treatment of Sexual Abuse commenced in 1989 with the purpose of developing a 'systemic' approach to the problem of sexual abuse. The Department of Corrections may refuse parole to sex offenders who do not choose to enter and complete the program. Offenders entering the program in the hope of early release are weeded out because of the intensity of the treatment monitoring. 'Relapse prevention proposes that a variety of factors influence whether or not a sexual offender will avoid committing another abusive act. The interaction of the factors affects the probability of relapse' (Pithers 1990, in Marshall, Laws and Barbaree 1990:346).

The assessment procedure is of prime importance. Assessment includes: specifications of the clients' high risk situations (including apparently irrelevant decisions creating those situations); identification of existing skills for coping with identified high risk situations; and the analysis of early antecedents of the clients' abusive acts. 'Several methods are used to identify factors that increase the threat of relapse for a given offender. These include analysis of case records, structured interviews, self-monitoring, direct observation, and self-report measures' (Pithers, in Marshall, Laws and Barbaree 1990: 349). This is followed by treatment in relapse prevention.

The Vermont Centre has developed external management procedures that include:

- ... a model county-based inter-agency agreement specifying the way in which each department involved in an investigation and the prosecution of an abuser should perform its role;

- ... supervision groups for individual's offering treatment to abusers or victims; so that they could ensure the quality of the service offered; and
- ... procured legislative change to provide a more compassionate treatment to victims, and more effective treatment and options for the offenders.

(Woods Commission Report (1996 :1278)

Atascadero, California

Of the programs that exist in the United States another of the most frequently cited is that run at the Atascadero State Hospital in California. It is a cognitive-behavioural program, with a strong relapse prevention component. It is known as the Sex Offenders Treatment and Evaluation Program (SOTEP).

Criteria for acceptance

The program is available for offenders serving sentences for child molestation or rape. It excludes those convicted of gang rape and incest offenders. Other criteria for eligibility are the offender must be within 14-30 months of release, aged between 18 and 60, have no more than two prior convictions for felony and admit to the offence. The offender must be English speaking with an IQ above 80, have no psychotic or mental condition and not medically debilitated to the extent of needing nursing care, not present severe management problems in prison and have no pending holds or felony warrants (Marques, Day, Nelson and West, 1994).

The Treatment Program

The offenders attend a relapse prevention core group for 4.5 hours per week. The offender attends a weekly one-hour session with the primary therapist (a clinical psychologist or psychiatric social worker). In addition, two hours per week are spent in individual therapy with the nursing staff. Specialty groups include relaxation training, sex education, human sexuality, stress and anger management, social skills training and groups which concentrate on preparing the offender for release into the community. Substance abusers are also required to attend a substance abusers group.

Offenders are psychophysiologically assessed before discharge. Subject to the offender's consent, those who show deviant arousal patterns are provided with behavioural reconditioning. After the hospital program is complete, the offenders participate in the Sex Offender Aftercare Program (SOAP) for one year. These are community-based programs run by trained clinicians. Attendance at SOAP is a condition of parole and failure to attend can result in a return to prison.

This program is subject to rigorous methodological evaluation and to date, the results of these are positive.

THE UNITED KINGDOM

The Sex Offenders Treatment Program (SOTP) is a multi-modal cognitive behavioural program similar to others of its kind. It is a national prison strategy for the assessment and treatment of sex offenders in England. Its purpose is to be a 'co-ordinated and systematised assessment and treatment package' (Grubin and Thornton 1994). It differs, however, from some cognitive behavioural programs as the program is delivered by staff who may not have had formal academic training; something some cognitive behavioural programs find desirable.

Grubin and Thornton (1994) admit that having lay staff to run the courses, with psychologists present to ensure treatment integrity rather than to offer primary treatment, is controversial. They argue, however, that such an approach allows specialists to oversee many more cases. Priority can thus be given to more serious offenders; those with a higher probability of repetition and to those offenders nearer their release dates. One intention of the program is that those men whose previous record indicates a risk of future offences should be offered a place on the treatment program, regardless of the offence for which they are serving a sentence.

Criteria for acceptance

There are factors, however, that may indicate a treatment program is not appropriate for a particular offender. For example, if the offender does not speak English; has a mental illness or insufficient intelligence; is a suicide risk or has a personality disorder, then he will be ineligible for the treatment program.

> [The] distinctive feature of the prison services' Sex Offenders Treatment Program is that it is designed so that it can be delivered in a consistent way across multiple sites by a broad range of staff who are selected for their personal qualities rather than their academic or professional background (Home Office 1996: 3).

The Program

There are four linked treatment components of the core program. The core program is undertaken in 18 session and its purpose is to undermine offender thinking and justification of the sexual offence. Victim empathy is an important component and also an awareness of the way the offender's own life has been affected.

> The enhanced thinking skills program is undertaken in 20 sessions and its purpose is to improve thinking skills in problem solving and decision making and to assist the offender in thinking through the consequences of his actions. This helps apply relapse prevention strategies. The extended program takes place in 3 x 10 sessions. This deals with anger management, stress management, relationships and behaviour therapy. In addition, there is a 24 session booster program which takes place during the year before the offender is released, in order to build up relapse prevention strategies. All of these programs are delivered through structured group work. (Home Office 1996:3).

As well as the prison-based services, community-based Sex offender Treatment programs have proliferated in the United Kingdom in recent years. (Allam, Middleton and Browne 1997).

CANADA

Canada appears to offer the most sophisticated models of cognitive-behavioural treatment. High-intensity institutionalised programs target high risk offenders and may last from eight months to two years and involve a range of professionals in providing treatment.

Criteria for acceptance

Offenders participate in the programs only after giving informed consent and on a voluntary basis (Williams 1996). Offenders are selected for treatment after consideration of their willingness to volunteer, motivation to change their offending behaviour, proximity to probable release, likelihood of treatment gain, and likelihood of risk for re-offending (Williams 1996).

The Programs

Moderate-intensity programs may last up to five months and are institutionally based and run by psychologists or sexologists. Low-intensity programs offered in minimum security institutions last between two and four months (Correctional Services, Canada 1995).

Existing treatment largely reflects the Kia Marama style of sex offender program.
Although cognitive behavioural programs are most commonly employed in Canada (Marshall 1992), some Canadian programs also use antiandrogen drugs (Bloom, Bradford and Kofoed, 1990 in Marshall 1992:112)

Community-based relapse prevention programs are designed to support the offender after being released from custody when he may find himself vulnerable to re-offending. Psychologists generally conduct these. Canada has over 600 such programs (Correctional Services Canada, 1995). In addition, individual counselling may address issues closely related to the offender's sexual offending.

Summary

There are a variety of cognitive behavioural treatment programs. They vary in their criteria for acceptance of clients; the intensity of the program; the length of the program; the qualifications and number of staff involved and the extent of follow-up they require. There is no such thing as a 'typical' program, but rather there is a collection of similarly based programs with a common approach to treatment philosophy. For this reason the estimated costs of a treatment program in the South Australian context is derived from an 'average' across a number of different institutions.

Appendix A3

Non-government organisations in South Australia involved in providing services potentially associated with child sexual abuse.*

Adelaide Central Mission
Domestic Violence Helpline
Bramwell House
Catherine House
Dawn House SA
Domestic Violence Outreach Service
Elouera House Emergency
Accommodation for women
Hope Haven Women's Shelter
EFC Respite Care Scheme
Pt Augusta Women's Shelter
South East Women's Emergency
Services
Weena Mooga Gu Gudba
SA Foster Care Association
Society of Sponsors
Emergency Foster Care
Teenage Care Scheme
Lutheran Community Care
SA Aboriginal Child Care Agency
Anglican Community Services
South East Anglican Community Care
Northern Family Accommodation
Bowden Brompton Housing Service
Centacare Family Services
Family Care Team
Counselling
Parent Education

Surviving Sexual Abuse by
Finding Empowerment

Wesley Uniting Mission
Parent Education
Male Counselling Pt Augusta

Calvary Family Services
Emergency Family Shelter
Irene Women & Child Centre
LEP Women's & Children's
Centre Inc: Emergency Hostel
Migrant Women's Emergency
Support Services Inc
Northern Areas Women's and
Children's Shelter Assoc.
Nunga Miminis Shelter
Riverland Women's Shelter
Southern Areas Women's &
Children's Shelter
Western Areas Women's Shelter
Murray Bridge Supported
Accommodation Service
Port Pirie Central Mission
SAAP Accommodation Service
Salvation Army
Community Housing
Ingle Farm/Pt Augusta/Renmark
St Joseph Family Care Centre
Young Women's & Children's
Support Services Inc
Family Support Services Association
Lifeline
Mission SA
Counselling Program
Parent Education
Victim Support Service Inc
Family Support Program
Counselling Parent Education

Source: South Australian Department of Family and Community Services, 1996-97; Appendix 2.

Note:* The monetary value of the services provided by these non-government organisations is too ill-defined to calculate specific values. Even less is known about the quantity of resources, financed through donations, that is directly spent as a result of child sexual abuse. This list suggests, however, that assigning these services a value of zero results in an underestimate of expenditure in this area.

This list does not provide an exhaustive listing of all non-government organisations involved in this field.

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