Perception of Trauma of Childhood Sexual Abuse Related to Subsequent Psychological and Parental Functioning in a Community Sample

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Abstract

This thesis investigated the long-term psychological and parental functioning of 31 adult women, who were sexually abused as children, and 31 controls drawn from a community sample. It used a Perceived Trauma of Abuse Scale to investigate the relationship between the actual features of the abuse experience and the subsequent perception of trauma associated with the abuse, and to divide the sexually abused subjects into a High Trauma and a Low Trauma group.

A close relationship to the offender, abuse continuing over a long period, and disbelief or blame upon disclosure were most strongly correlated with high perceived trauma. The High Trauma group suffered significantly higher levels of psychological distress (withdrawal, dependence/low self esteem, anxiety, depression, borderline personality type, and alcohol abuse) and parenting stress than the Nonabused group. The psychological and parental functioning of the Low Trauma group more closely resembled that of the Nonabused group than the High Trauma group. Neither abused group differed significantly from the Nonabused group in parental attitudes, values and practices.

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Table of Contents

Chapter 1

The Incidence and Nature of Child Sexual Abuse.

Child sexual abuse, its incidence and consequence, has been the subject of much research over the past two decades. When discussing child sexual abuse it is important to clarify what is meant by the term, and what is considered to be 'normal' childhood sexual experimentation and experience, and how this differs from sexual abuse.

Goldman and Goldman (1988) using a large Australian college sample, found that over 82% reported that before the age of 13 they had had some kind of sexual experience with another person. For more than 60% of students these experiences involved other children of the same age, or slightly older by 1 or 2 years at the most. The highest incidence was between 6 and 9 years, closely followed by the 10 to 12 year age group. The dominant activity appeared to be heterosexual explorations involving the showing, fondling or touching of sex organs. Curiosity about the sex organs, especially within the context of sexual games appears to be a major preoccupation of children. Few of these experiences involved force, when asked if another child forced or threatened force, 82% said no, 5% said yes, and 13% said "a little". Reactions to these experiences were mostly positive, 70% said they had found the experience interesting or pleasurable, 15% reported surprise, and only 14% reported negative feelings. Thus it appears that the majority of children freely participate in sexual exploration with their peers as a natural and normal mode of enquiry, and find the experience to be positive. Definitions of child sexual abuse seek to exclude these 'normal' childhood experiences.

Browne and Finkelhor's (1986) working definition of child sexual abuse for their research, consisted of two overlapping but distinguishable types of interaction:

(a) forced or coerced sexual behaviour imposed on a child, and

(b) sexual activity between a child and a much older person, whether or not obvious coercion is involved (with 'much older' referring to 5 or more years older than victim).

This definition has been adopted by many researchers in subsequent research and is adopted in the present thesis.

Whilst peer experiences predominantly provoke reactions of surprise, interest or pleasure, sexual experiences with adults are considered much more negative. Goldman and Goldman (1988) found that when asked how they felt at the time, 68% of girls, who reported sexual experiences with older people during childhood, reported very negative reactions, such as fear or shock, during and immediately after the experience, while 30% of boys reported similar negative feelings. Asked how they felt 10 or more years later, 71% of girls said they still regarded their experience as negative and disturbing, as did 32% of the boys. This high rate of negative reaction, especially for girls, suggests that, for most, these experiences do constitute abuse if we take the common meanings of 'abuse', that is, to use wrongly or improperly; to misuse; to hurt or to injure by maltreatment.

1.1 Incidence of child sexual abuse .

Accurate and reliable incidence data is scarce, however the problem is almost universally conceded to be more extensive than statistics on reported cases would indicate (Finkelhor, 1982). Available estimates vary according to the operational description used, the research method employed, and the population sampled.

Many overseas studies have attempted to determine the incidence of child sexual abuse using retrospective studies on non-clinical populations. U.S.A. studies suggest that large numbers of adults, 15 - 34% of women and 3 - 9% of men report having been sexually victimized as children (Finkelhor, 1982; Russell, 1983). In a large national U.S. survey, 27% of women and 16% of men reported a history of childhood sexual abuse (Finkelhor, Hotaling, Lewis, and Smith, 1990). Baker and Duncan (1985) made a conservative estimate of a 10% prevalence in Britain.

Until recently we have had to rely upon clinical evidence (Hamilton, 1981) legal assessments, or reports from Women's Rape Crises Centres (South Australian Health Commission, 1984), in order to attempt to determine incidence in Australia. It is likely that such reports tend to underestimate incidence, as a very high proportion of abuse is not reported, but may overestimate consequences as only very traumatic experiences may be reported.

In order to provide general population, non-clinical, incidence figures Goldman and Goldman (1988) replicated Finkelhor's (1982) study with a sample of over 1,000 first year social science students from 10 post-secondary institutions in Victoria. The type of institutions used in this study ranged from apprenticeship schools to universities and were both rural and metropolitan. The authors claimed social indicators, such as ethnic background and religious affiliation, and family characteristics of 991 students who fully completed the questionnaires were typical of the Australian population, covering a wide range of socio-economic status. The results showed that 28% of the women reported incidents of child sexual abuse, based upon age discrepancy criteria, ranging from an invitation to do something sexual, to exhibitionism or fondling, through to actual or attempted sexual intercourse. It was also shown that 9% of the male respondents reported incidents of child sexual abuse. These incidence figures are very similar to those reported by the U.S. studies cited above.

1.2 Nature of child sexual abuse .

The nature of female child sexual abuse in overseas countries has been well documented: abusers are overwhelmingly male, the majority of sexual abusers are members of the child's immediate or extended family, victims are predominantly female, most girls are prepubescent when first abused, many victims are repeatedly abused over a long period of time, many victims do not tell anyone about the abuse at the time, and child sexual abuse is widely and broadly distributed throughout society (Blick & Porter 1982; Finkelhor 1982; Finkelhor 1984; Sgroi 1978; Sgroi, Jones & McGraw, 1987). Because the present research investigates the long-term consequences in females this review will be limited to female child sexual abuse.

Reports of the nature of female child sexual abuse in Australia indicate that the findings are consistent with those of USA studies. For example, the South Australian Health Commission Survey (SAHC) (1984) and the Goldman and Goldman (1988) survey found that:

(1) The majority of perpetrators are male, over 90%.

(2) Most perpetrators are known to the victim, the SAHC survey found only 2% of abusers were strangers to the child, over 70% of abusers were fathers, brothers, uncles or grandfathers, The Goldman and Goldman survey found 24% of abusers were strangers.

(3) Victims are predominantly female

(4) Most girls were prepubertal or trans-pubertal when first abused, the SAHC survey found 75% were first abused by the age of 10, the Goldman and Goldman survey found that 43% were younger than 10 and a further 41% were between the ages of 10 and 12 years when first abused.
(5) Most child sexual abuse experiences involve exposure and fondling. The Goldman and Goldman survey found the highest incidence where the abuser fondled the child sexually or touched the genitals, or persuaded the child to fondle or touch the genitals of the abuser, only 5% of abused girls experienced intercourse.
(6) Many victims are repeatedly abused, the SAHC survey found that victims had been abused more than once in 85% of cases, the Goldman and Goldman survey found 36% had been abused more than once.

The South Australian Health Commission Survey (1984) was a 'phone in' report. It is likely that victims of more severe abuse would respond to such a survey, explaining the greater severity of abuse in that study.

1.3 Social and family variables relevant to girls 'at risk' of sexual abuse.

There has been much speculation, and some research, about the family characteristics of sexually abused children. Whilst not proven, research has indicated probable accompanying characteristics of 'at risk' families. Such families are frequently geographically or psychologically isolated and are highly patriarchal with mothers playing a subordinate role that is unsupportive and unprotective of daughters (Anderson & Shafer, 1979; Briggs, 1986; Finkelhor, 1982; Sgroi, Blick & Porter, 1982; Vevier & Tharinger, 1986). Goldman and Goldman (1988) reported the following accompanying variables:
(1) Rural background - 32% of reported experiences were from children who were reared in rural settings, and 54% of incestuous experiences occurred when father's occupation was given as farmer or agricultural worker.
(2) Socio-economic factors - child sexual abuse is prevalent at all levels of society although girls in low income families appear to be at greater risk,
(3) Alcoholic parents - where fathers were reported to be 'often drunk' 32% of girls reported experiences with an older partner and 47% reported some kind of incestuous experience, where mothers were reported to be 'often drunk' 37% of girls reported

experiences with an older partner and 51% reported some kind of incestuous experience.
(4) An ineffective mother or absent father - where mother was reported as 'often ill' 37% of girls reported experiences with an older partner, where mother was reported as 'often nervous' 33% of girls reported experiences with an older partner. Of girls who had lived without a father, due to death, separation or divorce, 34% reported child sexual abuse experiences.
(5) Unhappy marriages - where the parents' marriage was perceived as 'unhappy' 34% of girls reported experiences with an older partner.
(6) Size of family - the larger the family the greater incest risk occurred for a daughter, in the large families, of five or more children, 42% of girls reported some kind of incestuous experience.

Finkelhor (1984) proposed the Four-Preconditions Model of Child Sexual Abuse. He suggested that the four preconditions that need to be present before sexual abuse can occur are; (1) motivation of the offender to sexually abuse, (2) the overcoming of the offender's internal inhibitions, (3) the overcoming of external inhibitions to abuse - especially the protection offered by the mother, and (4) overcoming the resistance of the child. It is likely that such factors as isolation, alcoholic parents and ineffective mother or absent father, could contribute towards these preconditions being met.

On the basis of the above studies it may be concluded that child sexual abuse is a frequent occurrence in both the U.S.A and Australia. Evidence also indicates that there are long-term psychological consequences that follow from child sexual abuse during childhood and these are discussed in the following chapter.

Chapter 2

Childhood Sexual Abuse and Subsequent Psychological Functioning.

2.1 Adult symptomatology associated with a history of childhood sexual abuse.

The first aim of the present thesis is to investigate the long-term consequences of childhood sexual abuse in terms of subsequent psychological functioning. Thus the present chapter reviews the research on the psychological functioning of women who were sexually abused as children.

Browne and Finkelhor (1986) in a review of the literature, noted that most recent studies found that women with childhood histories of sexual abuse are more likely than their nonabused peers to report psychological problems as adults. They concluded that sexual abuse is a serious mental health problem. In summarizing the long-term effects based on empirical studies, they concluded that adult women sexually abused as children are more likely to manifest depression, self-destructive behaviour, anxiety, feelings of isolation and stigma, poor self-esteem, a tendency towards revictimization, and substance abuse. In terms of interpersonal relationships, it was found that they have difficulty in trusting others and exhibit sexual maladjustment. The sexual maladjustment manifested itself as sexual dysphoria, sexual dysfunction, impaired sexual self-esteem, and avoidance of or abstinence from sexual activity, although agreement between studies is less consistent for the variables on sexual functioning. One of the main problems of studies in this area is that many are based on clinical samples, thus the findings may not be able to be generalized to the whole population of women who were sexually abused as children.

Much of the more recent research has tended to focus on community samples in an effort to determine how widespread the phenomenon of adult symptomatology associated with a history of childhood sexual abuse is. Despite more rigorous samping

techniques these studies largely support the findings of the earlier studies which used clinical samples. (see Browne & Finkelhor, 1986 for a review).

Harter, Alexander, and Neimeyer (1988) surveyed a college sample and found increased perception of social isolation and poorer social adjustment among women with a history of childhood sexual abuse by a family member than women with no history of abuse. Briere and Runtz (1988) also found significant symptomatology associated with a childhood history of sexual abuse in a university sample, abused women reported higher levels of acute and chronic dissociation and somatization, along with greater anxiety and depression. Findings of such high levels of symptomatology among non-clinical university women is especially significant as the university screening process is likely to require a minimal level of general functioning, thus resulting in the inclusion of a disproportionate number of more 'healthy' subjects relative to the general population.

Burnam, Stein, Golding, Siegel, Sorenson, Forsythe, and Telles (1988) in a survey of 3,132 household adults representing two Los Angeles communities, found that a history of sexual abuse predicted later onset of major depressive episodes, substance use disorders, and anxiety disorders (phobia, panic disorder, obsessive-compulsive disorder) but was not related to later onset of mania, schizophrenic disorder, or antisocial personality. Those sexually assaulted in childhood were more likely than those first assaulted in adulthood to report the subsequent development of a mental disorder. Demographic characteristics of gender, age, ethnic background, and education were generally unrelated to the probability of developing any specific disorder after childhood sexual abuse.

Murphy, Kilpatrick, Amick-McMullan, Veronen, Paduhovich, Best, Villeponteaux, and Saunders (1988) surveyed a representative U.S. community female sample. They found that compared to nonvictims, women sexually abused prior to age 12 displayed anxiety symptoms as adults, and also revealed significantly more psychological symptoms on a global mental health measure. Women sexually abused between the ages of 12 and 17 showed elevated levels of obsessive-compulsive symptoms, heightened interpersonal sensitivity, increased anxiety, and elevated signs of hostility and paranoid ideation when compared to a sample of non-abused women.

Bagley and Ramsay (1986) surveyed a random adult Canadian sample and found that women sexually abused in childhood were twice as likely to have poor mental health

as women who were not abused. A total scale score measuring general psychoneurosis, and subscales measuring depression and anxiety distinguished between the abused and nonabused groups at a statistically significant level. Chronic psychoneurosis as well as acute psychological problems, and suicidal ideas and behaviour in the previous six months, were linked to a history of childhood sexual abuse. Women with very poor self-esteem were nearly four times as likely to report having been sexually abused as children.

Briere and Runtz (1988) claimed that the nonclinical data suggests the presence of a large body of "silent" abuse victims, who, despite their psychological symptoms, have not sought mental health services .

In summary, experimental evidence tends to support the notion of a broad sexual abuse syndrome with levels of impairment that may need professional intervention. The following section discusses research that explores whether this syndrome is specifically a long-term effect of childhood sexual abuse, or whether other variables contribute to it.

2.2 Associated symptomatology, or long-term effects of childhood sexual abuse?

The consistent symptomatology pattern; of depression, self-destructive behaviour, anxiety, feelings of isolation and stigma, poor self-esteem, a tendency towards revictimization, and substance abuse, has led many researchers to speak of these symptoms as long-term effects of childhood sexual abuse. However the current state of the research does not allow the categorical assumption of causality. Whether these correlates of childhood sexual abuse represent effects, or whether both history of abuse and adult symptomatology co-vary as a function of some common third set of variables is unclear. "Third variables" most commonly suggested are those involving disrupted or dysfunctional family systems. Chaotic or conflict-laden families may produce various types of child abuse and neglect, along with other more subtle traumas, unknown combinations of which may produce long-term effects. Thus, a history of childhood sexual abuse may co-vary with symptomatology because such experiences reflect a broader family dysfunction (Briere,1988).

Some researchers have recently explored the separate contributions of family characteristics and sexual abuse by controlling for family variables in abuse effects research. They have used multivariate statistical analyses in order to partial out the variance shared by child abuse and family variables when exploring the relationship between child abuse and adult symptomatology. This kind of analysis ensures a very conservative test, that is, in order to be significant abuse must correlate with symptoms after all variance shared with the control variable (eg. family background) has been removed. Briere (1988) notes that studies that show that abuse continues to predict later adjustment after "control" variance has been extracted (as reported in Briere, 1988) should be considered seriously, whereas those with negative findings do not necessarily indicate that abuse has no psychological impact.

Other researchers have looked for the presence of significant covariation between specific abuse features and subsequent psychological problems, in order to add support to the notion that it is the abuse itself that results in later psychological disturbance. Several research reports (Groth, 1978; Herman, Russell and Trocki, 1986; Sgroi, 1978) indicate that the risk of psychological trauma is greater when: (1) there is a close relationship between the offender and the victim - abuse by a father/father figure is considered especially traumatic, (2) when the abuse is ongoing and repetitive, (3) the abuse involves penetration, and (4) when the abuse is accompanied by physical aggression. Browne and Finkelhor's (1986) review showed that the preponderance of studies indicate that abuse by fathers or stepfathers has a more damaging impact than abuse by other perpetrators. Experiences involving genital contact seem to be more serious. Presence of force seems to result in more trauma for the victim. Two studies each showed that when perpetrators are adult men, the effects seem more disturbing, and when families are unsupportive of the victims, and/or victims are removed from their homes, the prognosis has been shown to be worse. Briere and Runtz (1988) found greater anxiety, dissociation (where mental processes are cut off from the main stream of consciousness, or behaviour loses its relationship with the rest of the personality), and somatization (where a person continually seeks medical help for recurrent and multiple physical symptoms that have no discoverable physical cause, and are believed to be linked to psychological conflicts) in women whose victimization involved parental incest, older abusers, and a longer history of abuse. Hartman, Finn, and Leon (1987) found that familial abuse subjects reported higher current levels of depression and anxiety when thinking about the abuse than nonfamilial abuse subjects. Younger age at the time of the first sexual abuse incident, more extensive sexual involvement during the abuse, and a greater number of lifetime

abuse incidents were associated with current higher levels of reported distress when thinking about the abuse.

Briere and Runtz (1990) explored the possibility of differential adult symptomatology associated with physical, sexual, or psychological child abuse histories. They concluded that there may be specific impacts of each form of child maltreatment, above and beyond any effects they have in common with one another. Their findings suggested there is a substantial, unique relationship between retrospective reports of parental psychological abuse and subsequent low self-esteem, controlling for all other forms of abuse and types of symptoms, followed by a smaller but statistically significant unique relationship between sexual abuse and dysfunctional sexual behaviour, and between physical abuse and later anger/aggression. They cautioned that these conclusions must be tempered by the retrospective nature of the study, and such findings amongst college women may not be generalizable to the constellation of abusive childhood events often present in clinical samples.

Not withstanding the previous findings there are significant methodological issues which to some extent limit the force of past work. These methodological problems include the long history since the reported abuse took place in most studies, and the nature in which the data was gathered. These brief comments are not meant to devalue past work but to act as pointers for future research.

In summary, the abuse research has provided some evidence for a fairly precise constellation of symptoms in adult women who have been sexually abused in childhood. It has also shown that this syndrome is fairly specific to individuals with a history of sexual abuse and is distinguishable from individuals who have been physically abused, and is also not solely a result of family variables.

2.3 Explanations of the traumatic impact of child sexual abuse

Linberg and Distad (1985) suggested that the impact of child sexual abuse may be best understood by thinking of it within the framework of a post-traumatic stress disorder (PTSD) model because the pattern of symptoms and symptom onset, in a clinical sample, closely fitted the diagnostic criteria defined by DSM-111. They suggested that

incest is a traumatic event and the child, much like the captive of an assailant, is overwhelmed by fear. They concluded that people, whether they are victims of incest, rape, war, or terrorism, have characteristic ways of reacting to gross stress, and the long-term response, sometimes delayed for years, may be reflected in sexual or interpersonal dysfunctioning, or other self-destructive behaviour.

Briere and Runtz (1987) argue that a number of the problems of former sexual abuse victims could not be neatly subsumed within the diagnosis of PTSD. They suggested a more global notion of "post sexual abuse trauma" that referred to symptomatic behaviours that were initially adaptive responses, accurate perceptions, or conditioned reactions to abuse during childhood, but that elaborated and generalized over time to become contextually inappropriate components of the victim's adult personality. The developmental and adaptive aspects of such post sexual abuse trauma are stressed.

Finkelhor (1987), whilst acknowledging the salutary effects the PTSD framework has had on the research, outlined some limitations:

1) It does not adequately account for all the symptoms, eg. cognitive disturbances - the distorted beliefs about the self and others, self-blame, sexual misinformation, and sexual confusion.
2) It accurately applies to only some of the victims, some victims may manifest symptoms common to sexual abuse, such as depression, substance abuse, and sexual problems, without the signs of PTSD. DSM 111R states that the stressor producing the PTSD syndrome "would be markedly distressing to almost anyone, and is usually experienced with intense fear, terror and helplessness." Much sexual abuse does not occur under such conditions. Sometimes the fact of having been abused is recognized only in retrospect, the trauma may result from the meaning of the event as much as the event itself. Sexual abuse may be less an 'event' than a 'relationship' or a 'situation', it often goes on for a long period and may change over time. The trauma may come from the betrayal in the relationship, or from being trapped in the situation, rather than from an overwhelming event.
3) It does not truly present a theory that explains how the dynamics of sexual abuse lead to the symptoms that follow.

Finkelhor and Browne (1985) and Finkelhor (1987) have provided an alternative, the Traumagenic Dynamics model of Child Sexual Abuse, that incorporates some elements of the PTSD model, but also incorporates sexual abuse of the non-PTSD type. The

model proposes four traumagenic dynamics to account for the impact of child sexual abuse: traumatic sexualization, betrayal, stigmatization and powerlessness. A 'traumagenic dynamic' is an experience that alters a child's cognitive or emotional orientation to the world and causes trauma by distorting the child's self-concept, worldview, or affective responses. This model thus explains both affective and cognitive distortions. It may be children's ideas about the world that are affected as well as their emotional responses. The assumptions and coping mechanisms the child develops may be adaptive and well integrated to the experience of abuse and its aftermath, but may be dysfunctional in coping with a world where abuse is not the norm. Finkelhor claimed that these four traumagenic dynamics can be used to analyse sexual abuse as a process that will have implications for subsequent functioning over a long period of time, rather than simply as an event.

Traumatic sexualization refers to the the conditions in sexual abuse under which a child's sexuality is shaped in developmentally inappropriate and interpersonally dysfunctional ways. Sexually abused children are often rewarded for developmentally inappropriate sexual behaviour, they may then learn to use sexual behaviour, appropriate or inappropriate, as a strategy for manipulating others to get their needs met. Because of the attention they receive, certain parts of sexually abused children's anatomy may become fetishized and given distorted importance and meaning. Children may become confused and acquire misconceptions about sexual behaviour and sexual morality as a result of the things they are told by offenders or the ways that offenders behave. A child's sexuality can become traumatized when frightening and unpleasant memories become associated in the child's mind with sexual activity. These dynamics are unique to sexual abuse since they do not occur in other traumas of childhood. The impact of traumatic sexualization may be seen in children in the form of sexual preoccupations, compulsive masturbation and sex play, and sexual knowledge and behaviours inappropriate to their age group. Among adults sexual problems - including aversion to sex, flashbacks during sex, difficulty with arousal and orgasm, may be connected with this dynamic.

In the betrayal dynamic children discover, at the time or belatedly, that someone on whom they were dependent has caused them or wishes to cause them harm. It is often assumed that the main component of betrayal lies in the closeness of the relationship between the offender and the child, but another important aspect may be how taken-in the child feels by the offender. They may experience the greatest sense of betrayal when they find that their mothers are unable or unwilling to believe and protect them.

A number of symptoms frequently seen in victims may be connected with the experience of betrayal. Depression may be seen as a result of the disenchantment, disillusion, and loss of a trusted figure. Another symptom is seen in extreme dependency in young victims, and the desperate search for redeeming relationships or impaired judgement about the trustworthiness of others. The opposite cluster of symptoms, hostility and anger, distrust of men or intimate relationships in general, may be a form of protection against future betrayals. Antisocial behaviour may be a form of retaliation for betrayal.

The dynamic of stigmatization refers to the negative messages about the self - evilness, worthlessness, shamefulness, guilt, that are communicated directly or indirectly to the child by offenders or others upon disclosure. The child may search for self-attributions to explain the abuse. Reports indicate that victims feel isolated and tend to gravitate to stigmatized levels of society, report low self-esteem and high levels of self-destructive behaviour and suicide attempts. These symptoms may be seen as a consequence of stigmatization

The dynamic of powerlessness may be experienced by having one's body-space repeatedly invaded against one's wishes, whether this occurs through force or deceit, or by the violence, coercion, and threat to life and body that may occur. Powerlessness is exacerbated when victim's efforts to end the abuse are frustrated, and upon disclosure when victims are unable to control the decisions of the adult world regarding separation from family, prosecutions etc.. The powerlessness dynamic seems connected to three clusters of symptoms: fear and anxiety, and the PTSD symptoms of nightmares, phobias, sleep problems, dissociation, somatic complaints, and deadness of affect; impairment of coping skills and a low sense of self-efficacy; or the compensatory reaction seen in an unusual need to control or dominate.

Finkelhor (1987) claims the four dynamics are ongoing processes, and the impact that the sexual abuse has always needs to be understood in relation to the child's life beforehand. He cautions that the understanding of the trauma of child sexual abuse is still in its early stage, and it would be premature for the field to adopt uncritically one particular framework. This model may be of great use to clinicians and may provide the impetus for the much needed 'second phase' of child sexual abuse research that goes beyond the listing of associated symptomatology and attempts an understanding of the trauma in terms of cognitive developmental aspects.

Newberger and De Vos (1988) offered a conceptualization of coping and adaptation following victimization from a life-span developmental perspective, where recovery is characterized as an evolving process of interaction among three dimensions: social cognition, environmental sensitivity, and emotional-behavioural functioning. They stressed the role of cognition suggesting it is not only the events themselves, but the meaning with which people imbue them that determines reactions. In the case of a sexually victimized child then, the ways in which the feelings generated by the experience are defined will also influence the child's behaviour. If the feelings are labelled as pleasurable or if the situation is experienced as within the child's control in a psychological sense, the child may not feel abused. They suggested that in part, abuse is a function of the perception of being victimized and the distinction between the "objective" reality and the child's subjective experience of it, is important both for research and clinical work. This distinction suggests that any analysis that attends only to the surface features of the victimization will be limited in its ability to demonstrate consistent relationships with outcomes. Emphasizing the role of the person as the processor, or 'meaning maker', and understanding the person's interpretation of events should allow the prediction of behaviour that would not be foreseeable from the events themselves. As yet, little research has focused on this distinction between the objective reality and the child's subjective experience of it in relation to subsequent functioning.

2.4 An assessment of traumatic impact and its relationship to subsequent functioning

FitzGerald and Slaghuis (1989) assesed victim's experiences in terms of perceived trauma of abuse, rather than actual features of the abuse experience, and related subsequent functioning to this perception. A Perceived Trauma of Abuse Scale based on Finkelhor's (1985) and Browne and Finkelhor's (1987) traumagenic dynamics of sexual abuse was constructed by the authors (FitzGerald & Slaghuis, 1989). The sexually abused subjects were divided into a Severely Abused (SA) and a Less Abused (LA) group on the basis of their scores on the Perceived Trauma of Abuse Scale. This was a preliminary study with a small sample (n=14), mainly drawn from clinic populations, and only women who were mothers were included. The 10 abused women recruited through clinical settings were all assigned to the Severely Abused (SA) group on the basis of their scores on the Perceived Trauma of Abuse scale. Four subjects recruited as controls revealed a history of childhood sexual abuse and on the

basis of their much lower scores on the Perceived Trauma of Abuse Scale, were assigned to the Less Abused (LA) group.

The two abused groups were compared with each other and a control group of nonabused (NA) mothers on measures of psychological functioning, using the MMCI (Millon, 1983), and maternal functioning, using the Parenting Stress Index (Abiden, 1983) and Child Rearing Practices Report (Block, 1965). The SA group differed significantly from both LA and NA mothers on: an Avoidant measure, suggesting they were more likely to report feeling ill-at-ease, anxious and sad, and more likely to express feelings of loneliness, unwantedness, isolation and fear and distrust of others; a Passive-Aggressive measure, suggesting a greater preoccupation with personal inadequacies, bodily ailments, guilt feelings, social resentments, frustrations and disillusionment; an Alcohol Abuse measure; a Psychotic Thinking measure, suggestive of some degree of dissociation; and a measure of Psychotic Depression. The SA group differed from the NA group only on measures of: Borderline Personality, suggesting a greater uncertainty in their perception of themselves; and a Compulsive measure, suggesting they were less likely to see themselves as conscientious, dependable, prudent, and responsible. The SA group differed from the LA group only on a measure of Psychotic Delusion. The SA mother's mean score on a measure of parenting stress was higher, but not significantly so, than that of LA and NA mothers. However the SA mother's mean score was above the level where some form of intervention is recommended because of the likelihood of dysfunctional parenting behaviours or behaviour problems in the children.

The functioning of the LA mothers in this study was more similar to that of the NA mothers, than that of the SA mothers. The results support the need for some form of differentiation between abuse victims in research. Most research that has attempted a division of childhood sexual abuse victims into more homogeneous groups has employed familial vs nonfamilial abuse as the distinguishing factor (eg Hartman, Finn and Leon 1987). Many studies suffer from unclear definitions of "family", whether it includes only nuclear family members, or extended family members including uncles and older cousins, or whether extended family members are viewed as father figures. A method of differentiation based on perceived trauma of abuse rather than surface features of the abuse may be useful in both research and clinical settings, as it may allow more homogeneous groupings.

The present thesis adopts a method of differentiation based on perceived trauma of abuse using the scale devised by Fitzgerald and Slaghuis (1989) to differentiate between those victims who perceive themselves as having been severely traumatized by their childhood sexual abuse experience and those who do not perceive themselves as having been so severely traumatized. It relates the psychological functioning of adult women, who were sexually abused in childhood, to their perception of the level of trauma associated with this abuse.

The specific aims of the first section of this thesis are to:

1. Investigate the relationship between the actual features of the sexual abuse experience and the victim's perceived trauma of abuse in order to determine which actual features of the abuse experience are most closely related to perceived trauma.

2. Investigate the relationship between the perceived trauma of childhood sexual abuse and the subsequent psychological functioning of victims. It is hypothesized that women with high Perceived Trauma of Abuse Scores will suffer higher levels of subsequent psychological distress than women with lower Perceived Trauma of Abuse Scores, and that they, in turn, will suffer higher levels of subsequent psychological distress than nonabused women.

Chapter 3

Childhood Sexual Abuse and Subsequent Maternal Functioning

3.1 Child sexual abuse victims as an 'at risk' group for dysfunctional parenting.

The second major aim of the present thesis is to further investigate the long-term consequences of childhood sexual abuse and to relate this to one aspect of adult functioning, in this case the highly valued task of maternal functioning. Thus the present chapter reviews the research on the relationship between sexual abuse and maternal functioning.

Many clinicians work on the assumption that childhood experiences may serve to determine functioning as a parent when individuals reach adulthood. It is important to determine whether links between adverse childhood experiences and subsequent parenting difficulties do in fact exist, and if so how the links apply to different features of parenting and to the degrees and types of parenting problems (Quinton, Rutter & Liddle, 1984).

Clinical experience and research evidence suggest a link between childhood sexual abuse and subsequent difficulties in maternal functioning. However it is unclear to what extent these difficulties may result from the experience of sexual abuse, as the conflict and disorganization frequently reported within the family systems of victims is likely to be a confounding factor.

Summitt and Kryso (1978) reported that 90% of a group of mothers seeking help for child abuse at a Californian therapeutic shelter for physically abusing families had themselves been sexually abused as children. Goodwin, McCarthy and DiVasto (1981) found that 24% of a group of 100 mothers of abused children reported incest experiences in their childhood, whereas only 3% of a control group of mothers of nonabused children reported prior incest, a difference which was highly significant.

The 34 mothers from families where sexual abuse was occurring were no more likely to report prior incest than were the 66 mothers from families where physical abuse occurred. Faller (1989) reported on a clinical sample of 154 cases of intrafamilial sexual abuse. She found that almost half of the mothers of victims reported sexual abuse in their own childhood. In cases where the abuser was a stepparent or the mother's live-in boyfriend, the mother's victimization or exposure to sexual abuse as a child appeared to play a crucial role.

Maltreatment as a child does appear to be an important risk factor in the etiology of abuse of one's own children. However the majority of abused children do not become abusive parents (Cichetti & Aber, 1980; Kaufmann & Zigler, 1987). Much of the research investigating the parenting ability of mothers who were sexually abused as children has used the presence or absence of abuse in the next generation as a determinant of dysfunctional parenting. It has centred on abused mother's increased tendency to become physically abusive mothers, or their lessened ability to protect their own children from similar sexual assault. Paull (1990) argues that due to the lack of the fulfilment of their own needs, the general ability to parent children effectively may be damaged in female victims of child sexual assault. More sensitive measures of parental functioning are needed to investigate general ability to parent effectively.

3.2 The effects of childhood sexual abuse on parenting skills

Goodwin, McCarthy and DiVasto (1981) suggested that difficulty in parenting results when closeness and affection is endowed with a sexual meaning, and observed that abused mothers maintained an emotional and physical distance from their children, thus potentially setting the stage for physical or sexual abuse within the family. Summitt (1983) proposed that in many victims of sexual abuse, rage is focused on the mother for her abandonment which incubates over years only to erupt as a pattern of abuse against offspring in the next generation.

Gelinas (1983) reported typical problems that occur in the parenting of incestuously abused mothers seeking psychiatric treatment. She argued that because they tend to feel depleted, helpless, and lack self-confidence, they have difficulty providing their children with an organizing structure and a reasonable balance of discipline and affection. They are often ambivalent towards their children and tend to be easily

overwhelmed by them. They may feel guilty about setting limits, correcting their behaviour and enforcing schedules. The children may become increasingly demanding and may eventually develop contempt for their mother's weakness with them, and with their father.

Paull (1990) reported the following types of parenting behaviour observed within a group of sexually abused mothers attending a parent support group: low self-esteem - they had learned that their own feelings and desires were relatively unimportant and they did not expect their children to obey them; they were socially isolated and found interpersonal relationships difficult; they often had an inability to feel or be "grown-up"; their identities tended to be confused - they struggled between feeling like loving mothers, punitive mothers and females in their own right; they were vulnerable to crises of all sorts, and generally unable to cope; their children stimulated memories of their own sexual assault; their children reminded them of their own vulnerability as children - they feared pushing away their children, thus repeating their own mother's model, and depriving them of a close, confiding relationship; they had unrealistic standards for their children; they repeated aspects of inadequate or abusive parenting they received; they had difficulties setting appropriate boundaries; they felt confused, overwhelmed, exploited and often jealous; they tended to be needy women who needed someone to love and care for them - they often looked to their children to nurture them.

Virtually no systematic research exists on the parental style, skills, or attitudes of women with a history of childhood sexual abuse. As noted above, FitzGerald and Slaghuis (1989) found abnormally high parenting stress levels, as measured by Abiden's (1983) Parenting Stress Index, amongst a clinical sample of women who perceived themselves as having been severely traumatized by their childhood sexual abuse experiences. When scores on all subscales were converted to percentile rankings according to Abiden's (1983) norms, subscales from both the Child Domain and Parent Domain were outside the normal 15-75 percentile range. Scores on the following subscales fell beyond the 75th percentile: (1) Child Adaptability; (2) Acceptability of Child to Parent; (3) Child Demandingness/Degree of Bother; (4) Child Mood - with high scores one should look for impairment in maternal attachment to the child; (5) Child Reinforces Parent - where high scores suggest the parent doesn't experience the child as a source of positive reinforcement; (6) Parental Depression - where, as a result of depression, the parent often finds it difficult to mobilize the psychic and physical energy to fulfil parenting responsibilities, and withdrawal

behaviours and the general inability to act with assertiveness and authority towards the child is a frequent behavioural concomitant; (7) Parent Attachment - where the parent doesn't feel a sense of emotional closeness to the child or there is a real or perceived inability to accurately read and understand the child's feelings and/or needs; (8) Parent's Sense of Competence - high scores suggest lack of practical child development knowledge or a limited range of child management skills or where parents don't find the role of parent as reinforcing as they expected and feel overwhelmed; (9) Social Isolation - parents who earn high scores are under considerable stress and speedy intervention is recommended; (10) Relationship with Spouse; and (11) Parental Health. Their mean Total Parenting Stress Score of 269.3 was well above 260, the score beyond which some form of intervention is recommended.

Mothers who were the victims of childhood sexual abuse but did not perceive themselves as having been severely traumatized by the experience, scored beyond the 75th percentile rank on the measures of Child Reinforces Parent, Parent Attachment, and Relationship with Spouse. Their mean Total Parenting Stress Score of 228 was well below the 260 score where intervention is recommended. The control group of nonabused mothers scored beyond the 75th percentile on subscales of Child Distractability/Activity, and Child Reinforces Parent. Their mean Total Parenting Stress Score of 235.9 was also well below the level where intervention is recommended.

No significant differences were found between the groups on factors of the Child Rearing Practices Report (Block, 1965). These measures provide a description of parental socialization attitudes, values and practices, rather than a measure of "functional" parenting.

Cole and Woolger (1989), examined the child-rearing attitudes of incest and nonincest child sexual abuse victims and their perceptions of their own parent's behaviour. They found that a history of incest, particularly when combined with negative perceptions of their own mother was associated with endorsement of autonomy promotion attitudes. These women tended to endorse statements that are extreme in requiring that children become autonomous quickly. Cole and Woolger suggested that incest survivors may feel resentful of their child's desires and demands for indulgence, and inadequate in providing their children with the indulgences they themselves never received. They raised the possibility that there may be a rejecting quality to this emphasis on autonomy

promotion. Without positive models for loving, parental control, these women may lack strategies for being responsive to their children's dependency on them and may experience anxiety and anger in certain child rearing situations. They suggested that incest survivors feel differently about some aspects of child rearing than women who were sexually abused by men who were not family members.

Whilst the experience of clinicians leads many to link a history of childhood sexual abuse with subsequent parenting difficulties, little progress has been made in the empirical investigation of differences in parenting behaviour in mothers with a history of child sexual abuse compared to nonabused mothers. Such research must investigate parenting behaviour with more sensitive measures than simply the presence/absence of physical or sexual abuse in the next generation.

The second section of the present thesis investigates the relationship between the level of perception of trauma of abuse and subsequent parenting style, using measures that quantify the level of parenting stress, and describe child-rearing practices and attitudes.

The specific aims are :

1. To investigate the relationship between the perception of trauma of childhood sexual abuse and subsequent parental functioning in terms of stress in the mother-child relationship. It is hypothesized that women with high Perceived Trauma of Abuse Scores will experience higher levels of parenting stress than women with lower Perceived Trauma of Abuse Scores, and they in turn will experience higher levels of parenting stress than nonabused women.

2. To investigate parental functioning in terms of the parenting styles and attitudes of women with high Perceived Trauma of Abuse Scores, women with lower Perceived Trauma of Abuse Scores, and nonabused women.

These aims are dealt with separately. That is the treatment of subjects, procedure and results for each aim are from the same data base but they are presented in two sections for ease of interpretation.

Chapter 4

Perception of Trauma of Childhood Sexual Abuse Related to Subsequent Psychological Functioning in a Community Sample.

Introduction

FitzGerald and Slaghuis (1989) proposed that because the definition of child sexual abuse is so broad victims experiencing very different levels of abuse are included within the rubric of "child sexual abuse victim". Whilst not underestimating the impact of any childhood sexual abuse experience, it is likely that some experiences are likely to have greater long-term impact than others. They argued for the need to differentiate in some way between different levels of sexual abuse experience and suggested that a differentiation based upon the victim's perception of the level of trauma associated with the abuse may be a more useful one than a differentiation based on actual features of the abuse. Such a differentiation is likely to take into account not only the actual features of the abuse experience but also the meaning the victim made of the experience.

The present research uses the Perceived Trauma of Abuse scale (FitzGerald & Slaghuis,1989) to differentiate between those victims who perceive themselves as having been severely traumatized by their childhood abuse experience and those who do not perceive themselves as having been so severely traumatized.

In light of the literature reviewed above the present research aims to:
1. Investigate the relationship between the actual features of the sexual abuse experience and the victim's perceived trauma of abuse in order to determine which actual features of the abuse experience are most closely related to perceived trauma.

2. Investigate the relationship between the perceived trauma of childhood sexual abuse and the subsequent psychological functioning of victims. It is hypothesized that women with high Perceived Trauma of Abuse Scores will suffer higher levels of subsequent psychological distress than women with lower Perceived Trauma of Abuse Scores, and that they, in turn, will suffer higher levels of subsequent psychological distress than nonabused women.

Method

Subjects

Subjects for the present research were recruited from mothers of children attending two Hobart Child Care Centres, staff at the centres, and mothers who were students in the Psychology Department of the University of Tasmania. The Directors of both child care centres considered that the families using their centres were fairly representative of the general population. These were considered community settings, no subjects were recruited from clinical settings.

Thirty-one mothers who reported a history of childhood sexual abuse returned fully completed questionnaires and were thus the experimental subjects, the Abused group. Childhood sexual abuse was defined as `any forced or coerced sexual activity imposed on you as a child or any sexual experiences with a person 5 or more years older than you, before the age of 15 years'. The same number of nonabused mothers from each centre who returned fully completed questionnaires acted as controls, the Nonabused group.

Group characteristics

Data was collected on the marital status, number of children, age of children, and whether or not the subject was living with the father of her children. Twenty of the 31 Abused group women were married or remarried, 11 were separated, divorced or single. The marital status figures were identical for the 31 Nonabused group women. The average number of children of mothers of each group was: Abused group = 2.65, Nonabused group = 2.16. These differences were not significant. The mean age of the oldest child of the mothers in each group was: Abused group = 14.2, Nonabused group = 9.84. These differences were significant. Seventeen of the Abused group

mothers were currently living with the father of their children, and 20 of Nonabused group mothers were currently living with the father of their children. These differences were not significant.

Materials

Each protocol contained the following sub-questionaires:

Questionnaire 1 providing explanatory information and requesting information regarding marital status, number and age of children, Living/not living with father of children. (Appendix A)

Questionnaire 2. i) Dynamics of Abuse Questionnaire. This produced a series of Dynamics of Abuse scores reflecting information regarding concerning the number of offenders, relationship to offender, age of onset of abuse, frequency, duration, and type of abuse, disclosure and reaction to disclosure.

ii) Perceived Trauma of Abuse Questionnaire. This provided scores which attempted to estimate the perceived traumatic impact of the abuse experience. Questions required a subjective estimate, ranging from 1 (not at all) to 5 (very much), on questions exploring the injurious dynamics of; betrayal, feelings of powerlessness, feelings of guilt/stigmatization, and questions relating to how often one reflected on the abuse, and how much the abuse experience had affected one's life, giving a maximum Total Perceived Trauma of Abuse score (TPTA) of 25. (Appendix B)

3. Millon Clinical Multiaxial Inventory (Millon 1983) providing information relating to emotional and interpersonal functioning. The twenty clinical scales reflect distinctions between persistent personality features, listed on Axis 11 of DSM 111 (American Psychiatric Association 1983), and current symptom states and levels of pathological severity, listed on Axis 1 of DSM 111.

An additional questionnaire further exploring the perceived trauma of abuse experiences was included. This Expanded Perceived Trauma of Abuse Questionnaire was based on Finkelhor's (1987) Traumagenic Dynamics in the Impact of Child Sexual Abuse. Victims were requested to fill it in even though it was not a component of the questionnaire kit. (Appendix C)

Procedure

Letters explaining the research and requesting both mothers who had experienced childhood sexual abuse and nonabused mothers to participate were distributed. Questionnaire kits were left at the Child Care Centres and the Psychology Department office for voluntary and anonymous collection. All kits were the same, mothers who

were victims of abuse were asked to fill in all questionnaires, mothers who had not experienced childhood sexual abuse were asked to ignore the questionnaires relating to dynamics and impact of child sexual abuse experiences. If subjects filled in the questionaire relating to their history of childhood sexual abuse they were deemed to have been the victims of childhood sexual abuse and were thus considered to be experimental subjects. It was assumed if abuse related questionnaires were not filled in that those mothers had not experienced childhood sexual abuse and they were assigned to the non-abused control group.

Results

Raw data appears in Appendix D.

(a) The relationship between the Perceived Trauma of Abuse scores and features of the actual abuse experience.

In order to explore this relationship Pearson's r correlations between the Perceived Trauma of Abuse Scores and each of the actual features of the abuse experience were computed. These correlations appear in Table 1.

Table 1. Correlations Between Actual Features of the Abuse Experience and Perceived Trauma of Abuse Scores. (n = 31)

Actual Features of the Abuse Experience	Perceived Trauma of Abuse Scores					
	Betrayal	Powerlessness	Guilt	Reflect	Effect	**Total TPTA**
Number of Abusers	.035	.199	.107	.102	.044	**.135**
Relationship of Offender	.527 **	.270	.504 **	.322 *	.448 **	**.593** **
Age of Onset	-.189	-.013	-.092	-.174	-.318 *	**-.214**
Frequency of Abuse	.090	.125	.295	.269	.408 *	**.322** *
Duration of Abuse	.366 *	.493 **	.508 **	.133	.485 **	**.574** **
Type of Abuse	.160	.049	.196	.316 *	.130	**.230**
Violence/Threat of	.230	-.023	-.049	.197	.007	**.096**
Disclosure	.219	.142	.354 *	.224	.331 *	**.358** *
Reaction to Disclosure	-.654 **	-.376 *	-.514 **	0	-.384 *	**-.585** **

Note * p<.05, ** p<.01.

It can be seen from Table 1 that highly significant correlations were found between Relationship of Offender and the traumagenic dynamics of Betrayal ($r=0.53, p<.01$), and Guilt ($r=0.50, p<.01$), and between How often one reflected on the abuse ($r=0.32, p<.05$), Effect of Abuse on one's life ($r=0.45, p<.01$), and the Total Perceived Trauma of Abuse Score ($r=0.59, p<.01$). These strong correlations suggest that the closer the relationship of the offender the greater the perceived trauma.

A significant correlation was found only between Age of Onset and Effect of abuse on one's life ($r=-0.32, p<.05$). The negative correlation suggests that abuse beginning early is likely to be more injurious.

Significant correlations were found between Frequency of Abuse and Effect of abuse on one's life ($r=0.41, p<.05$), and the Total Perceived Trauma of Abuse Score ($r=0.32, p<.05$).

Highly significant correlations were found between Duration of Abuse and Powerlessness ($r=0.49, p<.01$), Guilt ($r=0.51, p<.01$), Effect on one's life ($r=0.49, p<.01$), and Total Perceived Trauma of Abuse Score ($r=0.57, p<.01$), and a significant correlation was found with Betrayal ($r=0.37, p<.05$).

Type of Abuse was significantly correlated only with How often one reflected on the abuse experience ($r=0.32, p<.05$).

Significant correlations were found between Disclosure and Guilt ($r=0.35, p<.05$), Effect ($r=0.33, p<.05$), and Total Perceived Trauma of Abuse ($r=0.36, p<.05$), indicating that nondisclosure of abuse was more harmful.

The strong negative correlations between Reaction to Disclosure and Betrayal ($r=-0.65, p<.01$), Powerlessness ($r=-0.38, p<.05$), Guilt ($r=-0.51, p<.01$), Effect ($r=-0.38, p<.05$), and Total Perceived Trauma of Abuse ($r=-0.59, p<.01$) indicate that the nonsupportive reaction, of disbelief and blame, makes a significant contribution to trauma.

It can be seen from Table 1 that there was no evidence for a relationship between the number of different abusers involved in the abusive experiences and perceived trauma

of abuse scores. No evidence for a relationship between Violence/Threat of Violence and Perceived Trauma of Abuse scores was found.

The correlations between the Total Perceived Trauma of Abuse Score and each of the actual features of the abuse experience are of most importance in determining the combination of actual features of the abuse experience that are most detrimental. **It can be seen that a close relationship to the offender, abuse extending over a long period of time, and a negative reaction to disclosure were most closely related to perceived trauma.**

Very few women completed the additional Expanded Perceived Trauma of Abuse Questionnaire. This was unfortunate as insufficient data was thus available to compare responses and usefulness of this expanded questionnaire with the original Perceived Trauma of Abuse Questionnaire.

(b) Sexual abuse group re-classification on the basis of perceived trauma of abuse scores and actual abuse experiences of the two groups.

In light of the previously mentioned argument for a differentiation between sexual abuse victims, subjects in the Abused group were reclassified into a High Trauma group (HT), or a Low Trauma group (LT) on the basis of scores on the Perceived Trauma of Abuse Scale. Those with a Total Perceived Trauma of Abuse Score (TPTA) >17 were assigned to the High Trauma (HT) group. To gain a score >17 subjects had answered 4 (quite a lot) to the majority of questions measuring perceived trauma of abuse. Mothers whose TPTA score was 17 or less were assigned to the Low Trauma (LT) group as the mothers who scored 17 or less would not have answered 'quite a lot' to the majority of questions.

Of the 31 mothers in the Abused group, 16 scored more than 17 on the Perceived Trauma of Abuse Scale and thus were assigned to the High Trauma (HT) group, the remaining 15 scored 17 or less and were assigned to the Low Trauma (LT) group.

The actual features of the sexual abuse experiences of the subjects in each group were as follows:

i) Number of offenders

Of the mothers in the High Trauma group (HT), 3 (18.75%) had been abused by more than one offender, the remaining 13 (81.25%) had been abused by one offender only. Of the mothers in the Low Trauma (LT), 2 (13.33%) had been abused by more than one offender, the remaining 13 (86.66%) had been abused by one offender.

ii) Relationship of offender.

Relationship of offender to victims of each group appears in Table 2.

No victims in this study had been abused by a step-father. Thus (81.25%) of mothers in the HT group were the victims of familial abuse, compared with 40% of mothers in the LT group.

Table 2. Relationship of Offender by Group (n=31)

	High Trauma n=16	Low Trauma n=15	Totals n=31
Stranger	0 (0.0%)	4 (26.7%)	4 (12.9%)
Neighbour/Family Friend	3 (18.8%)	5 (33.3%)	8 (25.8%)
Other Family Member	4 (25.0%)	5 (33.3%)	9 (29.0%)
Stepfather	0 (0.0%)	0 (0.0%)	0 (0.0%)
Biological Father	9 (56.3%)	1 (6.7%)	10 (32.3%)

iii) Age of onset of abuse

Of the HT mothers, 3 (18.75%) were first abused between 1-4 years of age, 10 (62.5%) were first abused between 5-9 years, 3 (18.75%) were first abused between 10 14 years of age. Of the LT group, 1 (6.6%) were first abused between the ages of 1-4 years, 8 (53.33%) between 5-9 years, 5 (33.33%) between the ages of 10-14 years, and 1 (6.6%) at 15 years of age. Thus the majority of both groups were first abused when younger than 10 years of age, 81.25% of the HT women and 60% of the LT women.

iv) Frequency of abuse.

Of the HT group, 3 (18.75%) were abused once only, 7 (43.75%) were abused about once a month, 6 (37.5%) were abused about once a week, and none were abused mostly every day. Of the LT group, 10 (66.66%) the majority, were abused once only, 4 (26.66%) were abused about once a month, none were abused about once a week, and 1 (6.66%) was abused mostly every day.

v) Duration of abuse.

Of the HT group, 3 (18.75%) experienced abuse that lasted for less than one week, none experienced abuse that lasted less than one month, 2 (12.5%) experienced abuse that lasted between 1-5 months, none experienced abuse lasting between 6-12 months, 4 (25%) experienced abuse lasting between 1-3 years, and 7 (43.75%) experienced abuse lasting more than 3 years. Thus the majority, 68.75% experienced abuse lasting more than one year.

Of the LT group, 11 (73.33%) experienced abuse lasting less than one week, none experienced abuse lasting less than one month, none experienced abuse lasting 1-5 months, 2 (13.33%) experienced abuse lasting between 6-12 months, 1 (6.66%) experienced abuse lasting 1-3 years, and 1 (6.66%) experienced abuse lasting more than 3 years. Thus the majority, 73.33% experienced abuse lasting for less than one week; and only 13.33% experienced abuse lasting more than one year.

vi) Type of abuse

Of the HT group, none experienced abuse involving no physical contact, 10 (62.5%) experienced abuse involving fondling of breasts or genitals, 3 (18.75%) experienced penetration other than by penis, 3 (18.75%) experienced abuse involving intercourse. Of the LT group, 2 (13.33%) experienced abuse involving no physical contact, eg. exposure or masturbation, 10 (66.66%) experienced abuse involving fondling of the breasts or genitals, 2 (13.33%) experienced abuse involving penetration other than by penis, 1 (6.66%) experienced abuse involving intercourse.

vii) Violence or the threat of violence.

For the HT group, violence or the threat of violence was used in 3 (18.75%) of cases, and was not used in 13 (81.25%) of cases. For the LT group, violence or the threat of violence was used in 3 (20%) of cases, and was not used in 12 (80%) of cases.

viii) Disclosure

Of the HT group, 4 (25%) told someone about their abuse at the time, 12 (75%) did not tell anyone at the time. Of the LT group, 8 (53.33%) told someone about the abuse at the time, 7 (46.66%) did not tell anyone at the time.

ix) Reaction to disclosure

Of the 4 (25%) of the HT women who disclosed their abuse at the time, none received the reaction of 'believed me and helped me to stop it', 1 (25%) received the reaction of

'believed me but didn't do anything to stop' it, and 3 (75%) received the reaction of 'didn't believe me or blamed me'. Of the 8 (53.33%) of the LT women who disclosed their abuse at the time, 5 (62.5%) received the reaction of 'believed me and helped me to stop it', 1 (12.5%) received the reaction of 'believed me but didn't do anything to stop it', and 2 (25%) received the reaction of 'didn't believe me or blamed me'.

Thus it can be seen that the HT group's sexual abuse experiences were more likely to involve a family member, were more frequent, and were of longer duration than those of the LT group. Members of the HT group were less likely to have disclosed the abuse at the time, and if they did they were less likely to have received a supportive response.

The following section investigates the current psychological functioning of women in the two abused groups and the nonabused group.

(c) Relationship between perceived trauma of abuse and subsequent psychological functioning

Overall psychological functioning was measured by the Millon Clinical Multiaxial Inventory (MCMI). Because of the large number of comparisons being made and the increased possibility of Type 1 errors a multivariate analysis of variance was performed. It was found that there were significant global differences between the groups across the various scales of psychological functioning (Wilks' Lambda = .224, $F(40,80) = 2.228$, $p = .0012$).

This initial multivariate analysis was followed by individual analyses of variance to assess differences on each of the scales of pyschological functioning, and post-hoc tests to determine significant differences between the three groups. Results of analysis of variance of base rate scores on the clinical scales of the MCMI, and Tukey-Kramer tests to determine significant differences between the three groups, appear in Table 3. Significant differences are reported at both the $p<.05$ and the $p<.01$ levels. On most scales a linear trend was apparent, with low scores on the scale in the Nonabused group, slightly higher scores in the Low Trauma group, and substantially higher scores in the High Trauma group.

Interpretation of scores on the Millon Clinical Multiaxial Inventory was based on Millon (1981) and Millon (1983). Raw scores are converted to base rate scores, a base

rate score of 75 or greater is indicative of the presence of a disorder at a clinical level. It should be noted that no mean score for any group on any measure reached this level. Thus discussion of differences is purely a matter of degree, the presence of significant differences between groups does not indicate the presence of a clinical disorder, but suggests that the high scorer is more likely to experience such feelings or exhibit such behaviours.

It can be seen from Table 3 that significant differences were found between the High Trauma group and the Nonabused group on the following scales:

1) Basic Personality Pattern measures: Schizoid ($p<.05$) suggesting some psychological withdrawal, interpersonal indifference, behavioural apathy and perceptual insensitivity; Avoidant ($p<.01$) suggesting affective dysphoria, alienated self-image, aversive interpersonal behaviour and perceptual hypersensitivity; Dependent ($p<.05$) suggesting interpersonal submissiveness, inadequate self-image and initiative deficit; Passive-Aggressive (Negativistic) ($p<.01$) suggesting behavioural contrariness, discontented self-image and interpersonal ambivalence.

2) Pathological Personality Disorder measures: Schizotypal ($p<.05$) suggesting social detachment, disquieting estrangement and either anxious wariness or emotional flatness; Borderline ($p<.01$) suggesting self-condemnatory conscience, dependency anxiety, intense endogenous moods and dysregulated activation.

3) Clinical Symptom Syndrome measures: Anxiety ($p<.05$) suggestive of feelings from vague apprehension to specific phobias, indecision, restlessness and complaints of a variety of physical discomforts such as tightness, ill-defined muscular pains etc.; Somatoform ($p<.01$) suggestive of the expression of psychological difficulties through somatic channels, and preoccupation with ill-health and a variety of dramatic but nonspecific pains in different and unrelated regions of the body; Dysthymic ($p<.01$) suggestive of downheartedness, preoccupation with feelings of discouragement or guilt, lack of initiative and behavioural apathy and sense of futility; Alcohol Abuse ($p<.01$), Psychotic Thinking ($p<.05$) suggestive of confusion and disorientation, incongruous and disorganized behaviour, and occasional inappropriate affect; Psychotic Depression ($p<.01$) suggestive of severe depression.

Mean scores of High Trauma mothers were highest on all these measures.

Significant differences were also found between the High Trauma group and the Low Trauma group on the following scales:

1) Basic Personality Pattern measures - no significant differences.

2) Pathological Personality Disorder measures - Borderline ($p<.05$).

3) Clinical Symptom Syndrome measures - Somatoform ($p<.05$), Dysthymic ($p<.05$), Alcohol Abuse ($p<.05$).

Mean scores of High Trauma mothers were highest on all these measures.

Table 3 Analysis of Variance of MCMI Scores (n=62)

MCMI Scale			Group				Anova		Tukey-Kramer		
	1 = HT, n =16		2 = LT, n = 15		3 = NA, n = 31		df=2.59		1 vs. 2	1 vs. 3	2 vs. 3
	Mean	SD	Mean	SD	Mean	SD	F	P			
Basic Personality Patterns											
Schizoid	50.8	28.0	42.9	28.3	29.9	16.1	4.81	0.018		*	
Avoidant	52.4	24.8	34.8	27.6	27.7	14.4	7.25	0.002		**	
Dependent	52.9	30.6	42.0	28.9	33.7	18.9	3.17	0.049		*	
Histrionic	56.0	30.4	66.2	28.1	64.3	20.4	0.77	0.467			
Narcissictic	59.6	25.4	66.1	13.3	66.1	13.5	0.83	0.441			
Antisocial	52.8	21.8	66.0	14.0	62.4	12.8	3.05	0.055			
Compulsive	65.6	16.0	61.7	14.6	73.6	13.5	3.94	0.025			*
Passive/Aggressive	44.6	28.6	39.4	24.6	24.4	14.2	5.57	0.006		**	
Pathalogical Personality Disorders											
Schizotypal	54.1	14.0	46.9	13.7	43.8	13.1	3.11	0.052		*	
Borderline	62.4	17.5	46.3	16.6	42.3	15.0	8.51	0.001	*	**	
Paranoid	53.4	20.9	48.5	18.9	52.4	19.3	0.27	0.764			
Clinical Symptom Syndrome											
Anxiety	74.0	20.9	60.1	16.4	60.6	14.7	3.84	0.027		*	
Somatoform	71.8	13.8	59.5	12.1	59.6	12.1	5.60	0.006	*	**	
Hypomanic	42.9	35.9	39.9	27.1	28.3	24.9	1.69	0.194			
Dysthymic	72.9	21.1	55.9	21.2	52.9	15.5	6.42	0.003	*	**	
Alcohol Abuse	49.2	20.4	32.7	20.6	30.1	16.4	5.84	0.005	*	**	
Drug Abuse	48.8	24.6	50.4	19.1	40.1	21.1	1.50	0.231			
Psychotic Thinking	53.5	16.4	46.1	16.0	40.1	13.9	4.24	0.019		*	
Psychotic Depression	50.8	17.7	38.9	20.8	31.2	16.5	6.36	0.003		**	
Psychotic Delusion	46.5	21.8	42.9	22.4	42.5	20.0	0.20	0.819			
Note * $p < 0.05$, ** $p < 0.01$											

Significant differences between the Low Trauma group and the Nonabused group were found only on the Basic Personality Pattern measure of Compulsive (Conforming) ($p<.05$), with Nonabused mothers showing a more conforming, conscientious pattern.

In an effort to make these results more readily comprehensible, scales that were significantly different between groups, and appeared to be clinically related, were combined to form general factors. A mean score was calculated for each of these 'factors'. Mean group scores for each factor are presented in graph form in Figure 1.

The Schizoid (Asocial) measure and the Schizotypal personality disorder measure were considered to measure a general Withdrawal factor, characterized by affectivity deficit, interpersonal indifference and detachment, behavioural apathy and a sense of estrangement and dissociation. The correlation between these measures was highly significant ($r=0.64, p<.01$). The HT group differed significantly ($p<.05$) from the NA group on this factor.

The Basic Personality Pattern measures, Avoidant, Dependent, and Passive - Aggressive, were combined to form a general Dependence/Low Self Esteem factor. The correlations between these measures were: Avoidant-Dependent ($r=0.55, p<.01$), Avoidant-Passive-aggressive ($r=0.55, p<.01$) and Dependent-Passive-aggressive ($r=0.12$,not significant). This factor is characterized by: affective dysphoria or lability, with confusing undercurrents of tension, sadness, and anger; docility and noncompetitiveness, avoidance of social tension and interpersonal conflicts: or interpersonal ambivalence with dependent acquiescence and assertive independence and sulking behaviour. Self-image is alienated (eg. describes life as one of social isolation and rejection; devalues self and reports periodic feelings of emptiness and depersonalization), inadequate (eg. perceives self as weak, fragile and ineffectual; exhibits lack of confidence by belittling own aptitudes and competencies) and discontented (eg. reports feeling misunderstood, unappreciated and demeaned by others; is characteristically pessimistic, disgruntled and disillusioned with life). The HT group differed from the NA group at the $p<.01$ level, and the LT group differed from the NA group at the $p<.05$ level.

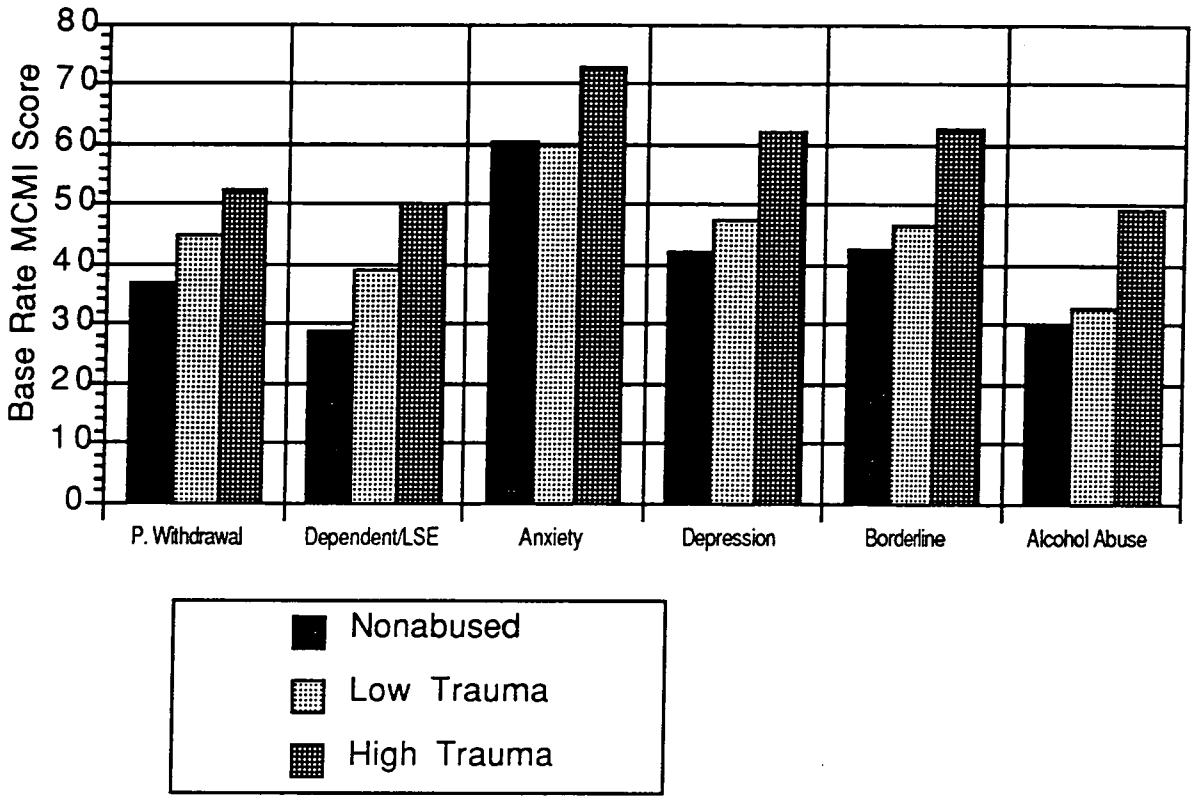

Figure 1. Mean group scores for 'factors' of MCMI (n = 62).

The Clinical Symptom Syndrome measures, Anxiety and Somatoform, correlated at a highly significant level ($r=0.54, p<.01$). They were combined to form a more general Anxiety factor, characterized by feelings of apprehension or specific phobias, tension, indecisiveness, complaints of physical discomforts associated with tension, expression of psychological difficulties through somatic channels reporting fatigue, weakness, and a variety of non-specific pains. The HT group differed from the NA group at the $p<.01$ level, and also from the LT group at the $p<.05$ level.

The Clinical Symptom Syndrome measures of Dysthymia and Psychotic Depression correlated at a highly significant level ($r=0.56, p<.01$). They were combined to form a general Depression factor characterized by downheartedness and depressed mood, a preoccupation with feelings of discouragement or guilt, a lack of initiative and behavioural apathy, and a sense of futility and hopeless resignation. The HT group differed from the NA group at the $p<.01$ level.

The mean score of the LT group was closer to that of the NA group than that of the HT group on all these `factors' except the Dependent/Low self-esteem `factor'.

Discussion

(a) Relationship between perceived trauma of abuse and actual features of the abuse experience.

The relationship between perceived trauma of childhood sexual abuse and actual features of the abuse experience is a complex one.

The number of offenders was not strongly related to perception of trauma, 81.25% of the High Trauma group had been abused by one person only. Thus it appears that while abuse by multiple offenders may lead to perception of severe trauma, abuse by one offender is also sufficient to produce the perception of severe trauma.

Relationship of offender was a strong determinant of perception of trauma, correlating more strongly than any other variable (r=.593), with the Total Perceived Trauma of Abuse Score. This finding is consistent with empirical research finding more trauma resulting from abuse by relatives than by non-relatives (Browne & Finkelhor,1986). However 40% of the LT mothers had been the victims of familial abuse, thus if relationship to offender had been the criterion used to assess likely trauma these mothers would have been considered more severely traumatized. Abuse involving biological fathers appears to be associated with greater trauma, with 56.25% of the HT group experiencing abuse by fathers and only 6.67% of the LT group. This is again consistent with the literature. However if familial/nonfamilial abuse is to be used as a distinguishing criterion it is unclear whether 'familial' should mean fathers only, or other family members. Not all studies using this criterion have been clear as to what relationships were in fact included under the rubric of 'familial'. Relationship to offender correlated highly with, and appeared a strong contributor to, the traumagenic dynamics of Betrayal and Guilt. It is likely that the manipulation of trust and vulnerability by a family member, the violation of the child's expectation that significant others will provide care and protection, and the disregard of the child's well-being by a family member, are all likely to contribute towards a sense of betrayal.

It is perhaps more likely that in familial abuse situations, the offender and others pressure the child for secrecy and infer attitudes of shame about the activities, thus greatly adding to the victim's sense of guilt and stigmatization.

Previous research has shown little clear relationship between age of onset and trauma but the trend has suggested abuse at younger ages to be more traumatic. This trend is evident in this study by the negative correlation between age of onset and Total Perceived Trauma of Abuse Score, but the relationship was not a strong one.

Frequency of abuse was positively correlated with the overall effect on one's life and the Total Perceived Trauma of Abuse Score, but was not as strongly linked as Duration of Abuse. Perhaps the continuation of vulnerability to invasion over a long period of time is more injurious than frequency of invasion.

Duration of abuse has not consistently been shown to be strongly associated with trauma in previous studies (Browne & Finkelhor,1986) however it was strongly associated in the FitzGerald and Slaghuis (1989) study. In this study it correlated strongly with perceived trauma, and appeared to be one of the greatest contributors to trauma, with the majority of the HT group experiencing abuse lasting more than one year, compared to only 13.33% of the LT group. Duration was strongly correlated with the traumagenic dynamic of Powerlessness, suggesting that prolonged vulnerability may increase feelings of powerlessness. It was also strongly correlated with the traumagenic dynamic of Guilt or stigmatization. It is likely that an offender who is able to maintain such an abusive relationship over several years may have blamed or denigrated the victim, pressured the child for secrecy, and inferred attitudes of shame about the activity, to ensure the child's continuing nondisclosure.

The correlation between Type of Abuse and How often one reflects on the abuse experience suggests that more invasive forms of abuse resulted in greater subsequent reflection. The lack of correlation between Type of Abuse and Total Perceived Trauma of Abuse was surprising in light of previous literature suggesting that the type of sexual activity is related to the degree of trauma in victims.

Consistent findings concerning an association between trauma and the presence of force have not been reported in the literature. The weak correlations and mixture of positive and negative correlations found in this study suggest, that for these victims, violence was not strongly related to the perception of trauma.

The significant correlations between Disclosure and trauma indicate that nondisclosure was more harmful than disclosure. Some victims did not disclose the abuse because of their firm conviction that no-one, and especially significant others, would believe them. These beliefs are likely to have contributed to their perception of trauma. However this is confounded to some extent by the fact that reaction to the disclosure for some victims was extremely negative. This is born out by the highly significant correlations found between Reaction to Disclosure and trauma. Negative reactions of disbelief and blame were strongly associated with increased trauma. A negative reaction to disclosure was highly associated with increased feelings of betrayal and guilt or stigmatization. It appears then that nondisclosure is injurious, perhaps because of the beliefs underlying the reluctance to disclose. Disclosure is helpful if the reaction is positive and the victim is aided in stopping the abuse, but is extremely injurious if the reaction is negative, further adding to the sense of betrayal and stigmatization.

This study suggests that many of the actual features of the abuse experience, particularly Relationship of the Offender, Duration of Abuse, and Reaction to Disclosure, are closely related to the perception of trauma, and each have a highly significant impact. Because of the additive effects of these actual features of the abuse experience, it seems difficult to attempt any differentiation between victims of childhood sexual abuse based solely on a single feature of the abuse experience. If multiple actual features of the abuse are to be used to form the basis of a differentiation it is difficult to determine the loadings that should be applied to each individual factor in a composite score.

(b) Relationship between perceived trauma of abuse and subsequent psychological functioning.

A major aim of the study was to determine whether there were differences in subsequent psychological functioning between victims of childhood sexual abuse with high scores on a Perceived Trauma of Abuse Questionnaire, victims with lower scores, and nonabused women.

Significant differences between High Trauma and Nonabused mothers were found on 12 of the 20 scales. When those scales that appeared to be related were combined to form general factors differences were also found.

Significant differences on the 'withdrawal' factor, a combination of the Schizoid and Schizotypal measures, suggests that the High Trauma women were more likely to: exhibit some emotional blandness, report weaker affectional needs and less ability to display enthusiasm or experience pleasure, display interpersonal indifference, social detachment, and behavioural apathy, and report periods of some depersonalization, derealization and dissociation. Whilst the High Trauma women reported a greater degree of withdrawal than Nonabused women, this was not at a severity level indicative of the presence of a schizophrenic disorder. These findings are consistent with Harter, Alexander, and Neimeyer's (1988) study reporting higher levels of chronic dissociation, but also with Burnam et al's (1988) study that found that a history of sexual abuse was not related to later onset of schizophrenic disorder.

The HT group scored significantly higher than the NA group on the personality measures, Avoidant, Dependent, and Passive-Aggressive which were combined to form the Dependent/Low Self-Esteem factor described above. This finding of increased dependence and decreased self-esteem is consistent with previous research. Low-self esteem was particularly evident in the extra comments about feelings of worthlessness that many victims made when asked about the ways in which they thought their abuse experiences had affected their life.

One of the most consistent findings reported in the literature is that adult victims of childhood sexual abuse are more likely to manifest anxiety than nonabused women. The HT differed significantly from the NA group ($p<.01$) and the LT group ($p<.05$). on the general anxiety factor. The significant difference found on the anxiety scale is thus consistent with the literature for those women who considered themselves to have been severely traumatized but not for those who did not consider themselves to have been severely traumatized. It should be noted that the High Trauma group's mean score on Anxiety, 74.00, was close to the 75 base rate level indicative of an anxiety disorder at a clinical level.

The significant difference ($p>.01$) between the High Trauma group and the Nonabused group on the somatization scale is consistent with Briere and Runtz's (1988) finding . The High Trauma group's mean score was 71.48, again approaching the 75 base rate level indicative of the presence of a somatization disorder. It should be noted that the High Trauma and Low Trauma groups differed at the .05 level, and in fact the mean score of the Low Trauma group was marginally lower than that of the Nonabused group. Few researchers have investigated this aspect of the subsequent

functioning of adult victims of childhood sexual abuse. This may be an important area for future research. If a consistent relationship is found between somatization and highly traumatic childhood sexual abuse, psychological intervention may be an important adjunct to medical intervention for such women.

Subsequent depression in the victims of childhood sexual abuse has been one of the most consistent findings of previous research. The significant differences ($p>.01$) between the High Trauma group and the Nonabused group on the Dysthymia and Psychotic Depression measures, in this study are thus consistent with the literature. It should also be noted that the Low Trauma group differed significantly ($p>.05$) to the High Trauma group on the Dysthymic measure but was not significantly different to the Nonabused group. Thus the Low Trauma group was more similar to the Nonabused group on this measure.

The highly significant difference ($p>.01$) found on the Borderline Personality measure suggests that women in the High Trauma group were more likely to experience intense endogenous moods, dysregulated activation (e.g. experiencing desultory energy level and irregular sleep-wake cycle), self-condemnatory conscience, dependency anxiety (eg. preoccupation with securing affection and maintaining emotional support; intense reaction to separation and haunting fear of isolation and loss), cognitive-affective imbalance (eg. simultaneously experiencing conflicting emotions and thoughts towards others, notably love, rage and guilt). Weston, Ludolph, Misle, Ruffins, and Block (1990) suggested that the symptom constellation frequently reported in victims of childhood sexual abuse, ie. depression, self-destructive behaviour, anxiety, feelings of isolation and stigma, poor self-esteem, a tendency toward revictimization, and substance abuse, is similar to aspects of borderline pathology. They reported on recent research that has begun to document links between history of abuse and borderline personality disorder. It must be noted that whilst differences in this study were highly significant ($p=.001$) the mean score of the High Trauma group on this measure (62.4) did not approach the base rate of 75, considered indicative of the presence of a disorder. The Low Trauma group differed from the the High Trauma group at the .05 level, and did not differ from the the Nonabused group, thus their functioning on this measure was more similar to that of Nonabused women.

The highly significant difference ($p>.01$) between the High Trauma group and Nonabused group on the Alcohol Abuse measure is also consistent with the literature.

Again The Low Trauma group differed from the High Trauma group at the .05 level on this measure, but did not differ from the Nonabused group.

Thus the overall findings on the psychological functioning of the High Trauma group are consistent with the frequently reported constellation of symptoms found in childhood sexual abuse victims.

What is of particular importance in this study is that significant differences were found between the High Trauma group and the Low Trauma group on several measures. Significant differences were found between the two abused groups on the Borderline measure, the Somatoform measure, the Dysthymia measure and the Alcohol Abuse measure. However significant differences were found between the Low Trauma group and the Nonabused group on only one measure, that of Conforming personality pattern. On 14 of the 20 measures, group means of the Low Trauma group were closer to those of the Nonabused group than those of the High Trauma group.

Thus it can be seen that the subsequent psychological functioning of women with low scores on the Perceived Trauma of Abuse questionnaire is more similar to that of nonabused women, than that of women with high scores on the questionnaire. Mean scores on most measures show an increasing level of psychological distress with increased perception of trauma. The Nonabused group mean scores on most measures are lowest, there is some increase in the Low Trauma group mean, and a larger increase in the High Trauma group mean. This finding supports FitzGerald and Slaghuis's (1989) suggestion that, because of the wide definitions used in sexual abuse research, there is a need to differentiate in some way between abuse experiences, and that a differentiation based on the victim's perception of trauma may be a useful one.

These findings support the hypothesis that women, who were victims of childhood sexual abuse, with high Perceived Trauma of Abuse Scores will suffer higher levels of subsequent psychological distress than women with lower Perceived Trauma of Abuse Scores, and that they, in turn, will suffer higher levels of psychological distress than nonabused women.

It is unknown to what extent these results, showing more reported problems for the High Trauma group than the Low Trauma group, may be accounted for by differences between the groups in retrospective recall of trauma associated with abuse experiences. Recall of trauma associated with the abuse could well be effected by Briere's (1988) 'third variables', eg. conflict within the family of origin, life events since the abuse experience etc..However the strong significant correlations between some features of the abuse experience and perceived trauma do suggest that perceived trauma is closely related to actual features of the abuse experience and may be relatively unaffected by differential recall.

It should be noted that subjects were drawn from a community sample. Whilst it was not determined whether any of these women had sought mental health services it is possible that the elevated scores of the High Trauma group lend some support to Briere and Runtz's (1988) suggestion of the presence of a large body of "silent" abuse victims, who despite their psychological symptoms, have not sought mental health services.

Chapter 5

Perception of Trauma of Childhood Sexual Abuse Related to Subsequent Parental Functioning in a Community Sample.

Introduction

Clinical experience and research evidence reviewed in Chapter 3 does suggest a link between childhood sexual abuse and subsequent difficulties in parental functioning. However little research on the parental functioning of women who were sexually abused as children, using sensitive measures of parental functioning, has been reported.

The findings of the previous study showed that sexually abused women experienced higher levels of psychological distress than nonabused women, and that psychological distress increased with increased perception of trauma of abuse. This second section of the study seeks to explore whether the perceived trauma of childhood sexual abuse translates into specific, measurable behaviour, in this case parental functioning. It seeks to determine whether increased perception of trauma associated with childhood sexual abuse is also associated with increased levels of difficulty in subsequent parental functioning.

Thus the specific aims of the second section of this thesis are to investigate the following:

1. The relationship between the perception of trauma of childhood sexual abuse and subsequent parental functioning in terms of stress in the mother-child relationship. It is hypothesized that women with high Perceived Trauma of Abuse Scores will experience higher levels of

parenting stress than women with lower Perceived Trauma of Abuse Scores, and they in turn will experience higher levels of parenting stress than nonabused women.

2. The parenting styles and attitudes of women with high Perceived Trauma of Abuse Scores, women with lower Perceived Trauma of Abuse Scores, and nonabused women.

Method

Subjects

Subjects were the same as those in Chapter 4.

Materials

In addition to the questionnaires described in the previous chapter the following measures were used:

1. Parenting Stress Index (Abiden 1983) measuring the level of stress present in the parent/child relationship. The Total Parenting Stress score sums a Child Characteristics Score made up of subscales: Child adaptability/plasticity, Acceptability of child to parents, Child demandingness/degree of bother, Child mood, Child distractability/activity, and Child reinforces parent; with a Parent Characteristics Domain Score made up of subscales: Parent depression, Parent attachment, Restriction imposed by parental role, Parent's sense of competence, Social isolation, Relationship with spouse, and Parental health. A Total Parenting Stress Score of 260 and above is indicative of dysfunctional parent/child relationships. Abiden (1983) suggests that some form of intervention is required at this level.

2. Child Rearing Practices Report (Block, 1965), producing 21 child-rearing factors describing parental socialization attitudes, values, and practices.

Procedure

The procedure was the same as that described in Chapter 4, except that the tests mentioned above were administered.

Results

(a) Parenting Stress

The Parenting Stress Index comprises a Child Domain Score, the total of subscales related to stress emanating from the child, a Parent Domain Score, the total of

subscales related to stress emanating from the parent, and a Total Parenting Stress Index, the total of all subscale scores. Again because of the large number of comparisons being made a multivariate analysis of variance was performed on the subscale scores. It was found that there were significant global differences between the groups across the various parenting measures (Wilks' Lambda = .389, F (26,94) = 2.183, p=.0034).

The initial multivariate analysis was followed by individual analyses of variance to assess differences on each of the parenting measures, and post-hoc tests to determine differences between the three groups. Analysis of variance and Tukey-Kramer tests of Parenting Stress Index (PSI) scores appear in Table 4.

Significant differences between High Trauma mothers and Nonabused mothers were found on the following measures:
1) Child Domain Score ($p<.01$), and subscales, Child Adaptability ($p<.01$), Child Acceptability ($p<.05$).
2) Parent Domain Score ($p<.01$), and subscales, Parental depression ($p<.05$), Restriction of Role ($p<.05$), Sense of competence ($p<.01$), Social Isolation ($p<.01$).
3) Total Parenting Stress Index ($p<.01$).
High Trauma mothers registered higher levels of stress on all measures.

Significant differences between High Trauma and Low Trauma mothers were found on the Child Adaptability measure ($p<.05$), and the Social Isolation measure ($p<.01$). High Trauma mothers registered higher levels of stress on both measures.

Table 4 Analysis of Variance of Parenting Stress Index Scores (n=62).

PSI Subscales			Group				Anova		Tukey-Kramer		
	1 = HT, n =16		2 = LT, n = 15		3 = NA, n = 31		df=2.59		1 vs. 2	1 vs. 3	2 vs. 3
	Mean	SD	Mean	SD	Mean	SD	F	P			
Child Adaptability	32.4	8.6	26.7	5.7	24.6	4.5	8.76	0.001	*	**	
Child Acceptability	15.9	4.9	13.3	4.6	12.2	3.8	3.88	0.026		*	
Child Demandingness	23.5	7.2	20.7	5.3	20.1	5.1	1.86	0.165			
Child Mood	12.6	4.1	10.1	1.9	10.7	3.2	2.59	0.083			
Child Distractability	26.3	5.6	28.3	4.6	23.6	4.3	5.19	0.009			**
Child Reinforces Parent	12.8	6.0	11.7	2.8	10.8	2.9	1.33	0.273			
Child Domain Score	**123.4**	**28.6**	**110.7**	**18.4**	**102.2**	**17.1**	**5.46**	**0.007**		**	
Parental Depression	25.1	7.2	22.0	4.7	20.2	4.4	4.51	0.015		*	
Parental Attachment	16.1	5.5	14.6	3.9	13.6	3.2	2.07	0.135			
Restriction of Role	21.1	6.7	18.6	4.5	16.5	4.3	4.39	0.017		*	
Sense of Competence	37.8	8.2	32.6	6.3	29.5	5.6	8.75	<0.001		**	
Social Isolation	16.3	2.9	12.6	3.5	11.8	2.6	12.42	<0.001	**	**	
Relationship with Spouse	21.0	4.7	21.7	6.0	18.4	4.3	3.09	0.055			
Parental Health	14.0	4.8	13.1	2.2	12.1	2.7	1.85	0.166			
Parent Domain Score	**151.4**	**28.9**	**135.2**	**18.5**	**118.0**	**26.4**	**9.36**	**<0.001**		**	
Total Parenting Stress	**274.8**	**54.8**	**245.5**	**27.4**	**224.5**	**30.7**	**9.43**	**<0.001**		**	
Note * $p < 0.05$, ** $p < 0.01$											

Significant differences between Low Trauma and Nonabused mothers were found only on the measure of Child Distractability ($p<.05$). Low Trauma mothers registered greater stress emanating from perceived distractability on the part of the child.

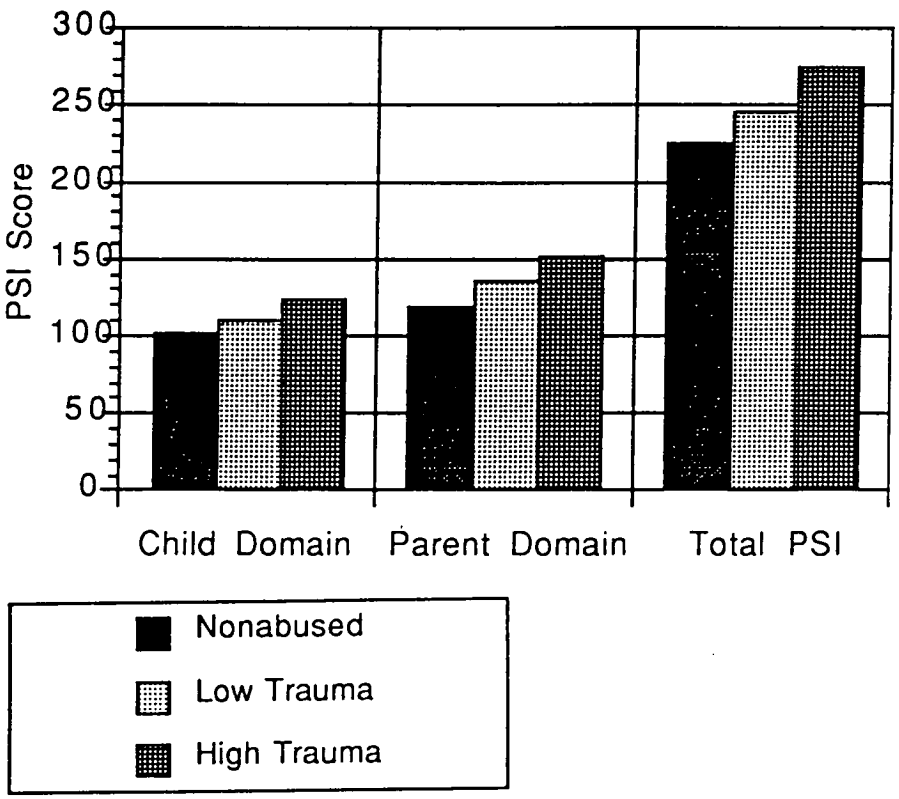

Figure 2. Mean Child Domain, Parent Domain and total Parenting Stress Index Scores (n = 62).

Mean Child Domain, Parent Domain and Total Parenting Stress Index scores appear in Figure 2.

The Mean Child Domain score, Parent Domain score, and Total Parenting Stress Index scores were expressed as percentiles according to Abiden's 1983 norms to allow comparison with the normative data. These appear in Figure 3.

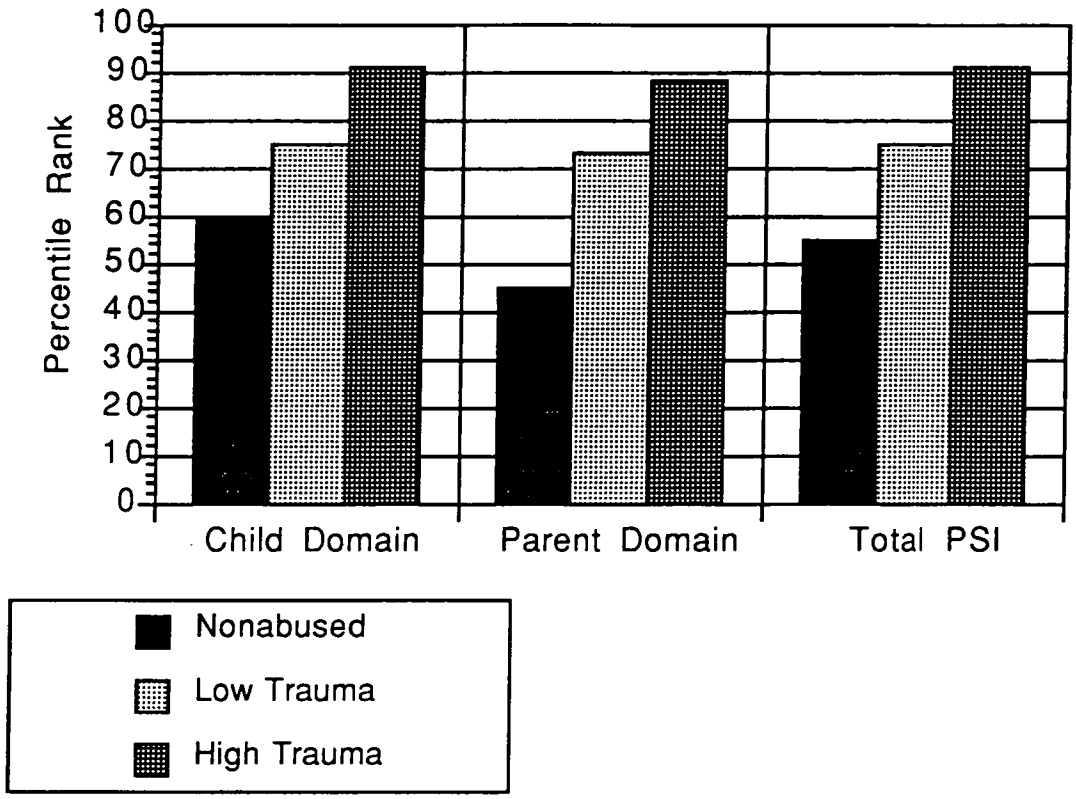

Figure 3. Mean Child Domain, Parent Domain, and total Parenting Stress Index expressed as percentiles (n = 62).

Abiden (1983) considered scores falling within the 15th to 75th percentile range to be normal, and those falling outside this range to be abnormal. Abiden (1983) suggested that a Total Parenting Stress Index score of 260 or above was indicative of a parent-child system under abnormal stress and thus at risk for the development of dysfunctional parenting behaviours or behaviour problems in the children. He recommended some form of intervention and professional consultation for parents who scored 260 or more on the PSI.

It can be seen from Figure 3 that High Trauma group's mean aggregate scores all fell at or beyond the 90th percentile, suggesting abnormal levels of parenting stress in all domains. Their mean Total Parenting Stress Index of 274.8 was well beyond the 260 level where Abiden suggested intervention.

The Low Trauma group's three mean aggregate scores fell on the 75th percentile, and though elevated must be considered to be just within the normal range. Their mean total PSI score of 245.5 was well below Abiden's suggested intervention level of 260.

The Nonabused group's mean aggregate scores all fell well within the normal range. Their mean total PSI score of 224.5 also was well below Abiden's suggested 'at risk' score of 260.

(b) Parenting Styles and Attitudes.

Parenting styles and attitudes were measured using the Child Rearing Practices Report (Block,1965). Statistical analysis of scores on the Child Rearing Practices Report variables appear in Table 5. These measures provide a description of parental socialization attitudes, values and practices, rather than a measure of 'functional parenting'. High scores on a particular measure (possible maximum = 7) suggest that subjects value the concept expressed by that variable, and they wish it to form an important component of their parenting.

It can be seen from Table 5 that the only significant difference found between the three groups was on the variable, Open Expression of Affect ($p<.05$), which Nonabused mothers valued more highly than did High Trauma mothers.

Discussion

(a) Parenting Stress

Significant differences between the High Trauma group and the Nonabused group were found on many subscales of the Parenting Stress Index as reported above. Most of these differences were found on subscales comprising the Parent Domain, suggesting the increased stress emanated from the mothers rather than the children.

Significant differences between the High Trauma group and the Nonabused group on the subscales of Parental Depression ($p>.05$), Sense of Competence ($p>.001$), and Social Isolation ($p>.001$) all appear to reflect CRPR

Table 5 Analysis of Variance of Scores on CRPR Factors (n=62).

CRPR Factor			Group				Anova		Tukey-Kramer		
	1 = HT, n =16		2 = LT, n = 15		3 = NA, n = 31		df=2.59		1vs.2	1 vs. 3	2 vs. 3
	Mean	SD	Mean	SD	Mean	SD	F	P			
Encouraging opennes of expression	6.03	0.72	5.98	0.93	6.15	0.64	0.28	0.755			
Suppression of Sex	2.25	0.75	2.22	0.97	1.94	0.78	0.98	0.382			
Emphasis on Achievement	4.19	0.64	3.89	0.84	3.97	0.62	0.86	0.427			
Parental Worry about Child	4.94	1.45	5.03	1.22	4.29	0.99	2.72	0.074			
Parental Inconsistency	3.88	1.10	4.20	1.18	3.86	1.33	0.42	0.656			
Authoritarian Control	2.61	0.65	2.28	0.58	2.51	0.55	1.37	0.262			
Supervision of Child	4.81	1.11	4.57	0.90	5.02	1.01	1.01	0.370			
Negative Affect towards Child	2.98	1.58	2.80	1.00	2.40	0.93	1.54	0.223			
Open Expression of Affect	5.84	0.72	6.02	0.67	6.30	0.42	3.61	0.033		*	
Encouraging Independence	4.54	0.71	4.77	0.54	4.86	0.88	0.93	0.400			
Enjoyment of Parental Role	5.10	0.83	4.62	0.96	4.99	0.90	1.25	0.293			
Rational Guiding of Child	6.08	0.63	6.07	0.69	6.23	0.61	0.51	0.603			
Control by Anxiety Induction	2.70	1.35	2.67	0.99	2.53	1.02	0.15	0.862			
Control by Guilt Induction	2.56	1.27	2.35	1.03	2.99	0.93	2.12	0.129			
Health Orientation	5.02	0.80	5.21	0.76	5.09	0.98	0.19	0.832			
Emphasis on Early Training	1.85	1.00	2.11	0.65	1.86	0.87	0.49	0.613			
Overinvestment in Child	3.80	0.89	4.02	1.09	3.65	0.92	0.74	0.483			
Parental Maintenance of Separate Lives	5.08	0.48	4.55	0.78	4.69	0.89	2.03	0.140			
Protectiveness of Child	3.45	0.53	3.41	0.65	3.60	0.65	0.60	0.555			
Orientation to Non-punitive Punishment	4.41	1.49	4.87	1.19	4.79	1.36	0.55	0.578			
Suppression of Aggression	4.79	0.74	4.42	0.92	4.55	0.97	0.69	0.507			
Note *p < 0.05											

aspects of the psychological functioning of this group as reported above. There was a highly significant difference ($p<.001$) between the High Trauma group mean on the Total Parenting Stress Index and that of the Nonabused mothers.

The parenting stress scores of the Low Trauma group were more similar to those of the Nonabused group, than those of the High Trauma group. Significant differences were found between the two abused groups on the measures of Child Adaptability ($p>.05$) and Social Isolation ($p>.01$). A significant difference was found between the Low Trauma group and the Nonabused group on the measure of Child Distractability. On most subscales a similar pattern to that noted on the MCMI scores was evident, ie. Low Trauma mothers showed an increase over Nonabused mothers, and High Trauma Mothers showed an even greater increase over the Low Trauma mothers.

The finding that the High Trauma group's mean Total Parenting Stress Index score was in the abnormal range and well above the 260 level at which Abiden (1983) recommended intervention, is of great importance. This finding should be of great concern to all those who are involved in the welfare of families and children. The mothers making up this High Trauma group were part of a community sample and as far as is known had not received supportive intervention.

The child sexual abuse incidence figures in Australia suggest that up to 28% of women have been the victims of childhood sexual abuse, thus it is likely that some similar percentage of mothers have been victims. If these High Trauma mothers are representative of some portion of all abused mothers, these findings suggest that there may be a large number of Australian mothers experiencing very high levels of parenting stress.

The maternal functioning of victims of childhood sexual abuse has been virtually ignored by those involved in sexual abuse research, despite clinician's reports of parenting difficulties encountered by victims. These findings suggest an urgent need for further research given the importance of adequate maternal functioning to the mothers themselves, their children, and society in general. The finding that the Low Trauma mothers experienced normal levels of parenting stress adds support to the usefulness of some form of differentiation between victims of childhood sexual abuse.

These findings support the hypothesis that women, who were victims of childhood sexual abuse, and have high Perceived Trauma of Abuse

Scores, will experience higher levels of subsequent parenting stress than women with lower Perceived Trauma of Abuse Scores, and that they in turn, will experience higher levels of parenting stress than nonabused women.

The findings are similar to those on psychological functioning reported in the previous study, in that sexually abused women experienced higher levels of parenting stress than nonabused women, and that parenting stress increased with increased perception of trauma of abuse.

(b) Parental Styles and Attitudes.

The Child Rearing Practices Report (Block,1965) was used to explore differences in parenting patterns and attitudes between the groups in order to provide useful information for the formulation of intervention strategies. The only significant difference found between groups on the 21 factors was between the High Trauma group and Nonabused group on the measure, Open Expression of Affect, suggesting that the severely traumatized mothers were less open in their expression of affect.

The Child Rearing Practices Report provides a description of parental socialization attitudes, values, and practices. The lack of significant differences suggests there are few differences in parental attitudes, values and practices between the groups. Perhaps all three groups wish to parent in much the same ways, but the High Trauma group experiences abnormal stress in the performance of their parenting.

Chapter 6

Summary and Future Directions for Research.

Research into the long-term effects of childhood sexual abuse that has attempted to distinguish between victims in some manner has focused on a distinction based on actual features of the abuse experience. The distinguishing factor used in this research, the degree of perceived trauma associated with the abuse, emphasises the person's interpretation of those actual events and thus may allow the prediction of behaviour that would not be forseeable from the events themselves.

This study has demonstrated that a meaningful differentiation can be made between adult women who were sexually abused as children, on the basis of perception of trauma associated with the abuse. The psychological and parental functioning of the women who did not perceive themselves as having been severely traumatized by their abuse experiences was more similar to that of nonabused women than that of women who did perceive themselves as having been severely traumatized by childhood sexual abuse experiences.

The psychological functioning of the severely traumatized women in this study was consistent with the constellation of symptoms frequently reported in the literature, ie. they were more likely to manifest depression, anxiety, feelings of withdrawal and isolation, low self-esteem, a tendency to exhibit some features of a borderline personality disorder, and a tendency towards alcohol abuse than nonabused women. However women who did not perceive themselves as having been severely traumatized by childhood sexual abuse experiences did not differ significantly from nonabused women on these aspects of psychological functioning.

The parental functioning of women who were sexually abused as children has not been extensively researched using sensitive measures. In this study's investigation of parenting stress levels the differentiation between victims on the basis of perceived trauma associated with the abuse was a useful one. The mean Parenting Stress Index

score of women in the High Trauma group was beyond the level at which some form of intervention is recommended, whilst that of the Low Trauma group and the Nonabused group was well below that level. It is indeed a disturbing finding that women from a community sample who were severely traumatized by childhood sexual abuse, experience such abnormally high levels of subsequent parenting stress. As far as is known, these mothers were not receiving supportive intervention. Further research into the parental functioning of women who were sexually abused as children is warranted. This study has assessed parental functioning in terms of child-rearing attitudes, practices and values, and in terms of the stress experienced in the parenting role, using self-report measures. It would be useful in future research to assess parental functioning using behavioural measures of parent-child interactions.

This study was limited by small subject numbers and a low participation rate. It is not known how representative the women who agreed to participate in this research are of the community at large. The child care centres from which many were drawn were considered by their principals to be representative of the larger community. However the participation rate was very low and it is possible that some self-selection occurred, a higher proportion of severely traumatized women may have participated, and women who did not feel severely traumatized by childhood sexual abuse experiences and were coping well with their role as mothers may have declined to participate.

It is important that future research aims for much higher participation rates, to enable more valid generalizations to be made to the community at large. Such research must be generously funded. Mothers are very busy people and participation in such research is time consuming. In order to encourage the high participation rates needed, funding must be of a level that allows realistic payment for time involved.

It would be useful for future research to pursue the development of a more sophisticated and comprehensive measure of perceived trauma of abuse. The one used in this study was extremely brief and simple, however it did appear to be able to differentiate in a useful manner between victims of childhood sexual abuse. A more comprehensive measure that more fully explores the sources of trauma associated with each individual's abuse experience could be useful in clinical settings as it may indicate the specific sources of trauma eg. powerlessness, that should be addressed. The fact that women in the Low Trauma group in this study functioned in a manner more similar to the Nonabused women than those in the High Trauma group, demonstrates the usefulness of such a measure in research. Such a measure may also be useful in the

wider social arena. The research on the incidence of childhood sexual abuse suggests that many thousands of Australian women were the victims of childhood sexual abuse. If support is to be given to these women by a system beset by limited budgets, it is important that support goes where it is needed most critically. A comprehensive measure of the impact of childhood sexual abuse could be useful in this regard.

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Appendices

Appendix A **Questionnaire 1**

Appendix B **Questionnaire 2**

Appendix C **Expanded Perceived Trauma of Abuse Questionnaire**

Appendix D **Raw Data**

Appendix A

THE LONG-TERM OUTCOME OF SEXUAL ABUSE

This research project attempts to discover the long-term consequences of child sexual abuse.Little is known about the long-term effects of childhood sexual abuse and we would be most grateful if you could help us so that we may put your experience to some use in helping to prevent this major problem, and to help develop support strategies for women who were abused. We need information from women who were sexually abused as children and from women who were not.

For the purpose of this research we are defining childhood sexual abuse as 'any forced or coerced sexual activity imposed on you as a child or any sexual experiences with a person 5 or more years older than you, before the age of 15.' If you had such experiences please fill in all the questionnaires, if you did not please leave questionnaire number 2 blank but fill out all the others.

We do not ask for names, addresses, or any identification, all questionnaires will simply have a number on them and no-one will know to whom that number refers. You can be sure that all information you give will be anonymous and confidential. If you wish to talk about any issues or problems these questions may have raised the Sexual Assault Support Service, ph 311811 provide a free and confidential counselling service, or you may contact us on ph 202051.

We thank you for your time and help and if you would like to know any details of the study once it is completed we will be happy to provide them.

We do not need your name or address but would be pleased to know the following details.

1. Age

2. What ages are your children?
   1st child girl/boy age 2nd child girl/boy age
   3rd child girl/boy age 4th child girl/boy age
   5th child girl/boy age

3. Are you married/ divorced/ single/ separated/ remarried?

4. Are you currently living with the father of your children? yes/ no.

Appendix B

QUESTIONNAIRE 2

This is a questionnaire in which we would like you to estimate the impact of your sexual abuse experience. You might want to tick more than one answer to each question. If the answers provided aren't exactly right for you please tick the closest answer.

1. Were you abused by one person, or several? ___

2. Who were they?
   - a stranger ___
   - a neighbour or family friend ___
   - other family member e.g. uncle, brother, grandfather ___
   - your stepfather ___
   - your real father ___

3. What age were you when it began?
   - 0-4 years ___
   - 5-9 years ___
   - 10-14 years ___

4. How frequently did this occur?
   - only once ___
   - about once a month ___
   - about once a week ___
   - every day ___

5. How long did it last?
   - less than a week ___
   - less than a month ___
   - 1-5 months ___
   - 6-12 months ___
   - 1-3 years ___
   - more than 3 years ___

6. Did it involve
   - non-contact e.g. someone exposing or masturbating in front of you ___
   - contact e.g. fondling of breasts or genitals ___
   - penetration other than penis ___
   - intercourse ___

7. Was violence used? yes/no ___
   Was the threat of violence or punishment used? yes/no ___

8. Did you ever tell anyone about it? yes/no ___

   who? _____

9. What was their reaction?
   - didn't believe me, or blamed me ___
   - believed me but didn't do anything to stop it ___
   - believed me and helped me to stop it ___

For the following questions please write the number which best matches how you feel.

1	2	3	4	5
not at all	very little	some	quite a bit	very much

10. Did you feel betrayed by the person who abused you or by people who did not help __

11. To what extent did you feel powerless to stop it happening?__

12. Did you feel any badness, shame or guilt about your experiences?__

13. How often do you reflect on your abuse experience?__

14. Could you estimate how much the abuse experience has affected your life?__

15. Could you briefly explain in what ways you think it has affected your life.

Appendix C

This is an extra questionnaire, it is not part of the kit. It is aimed at trying to understand more fully the psychological trauma that may result for some people as a result of abuse. In further research we will use it to replace questions 10 - 15 of questionnaire 2. If you had abuse experiences as a child we would greatly appreciate you filling it in and letting us know any problems you see with it.

For the following questions please write the number which best matches how you feel

1	2	3	4	5
not at all	very little	some	quite a bit	very much

1. Did you feel guilt or shame about your experiences?____

2. Did this lower your feelings of self worth?____

3. Did it make you feel different from other people?____

4. Did you feel betrayed by the person who abused you or by people who did not help you?____

5. Did you find it harder to trust other people after that?____

6. Did you feel you really needed other people to depend on, or swing the other other way and not let yourself depend on anyone?____

7. Did you feel powerless to prevent the abuse?____

8. Did you lose confidence in your ability to look after yourself?____

9. Did the abuse make you feel anxious or fearful?____

10. Did you feel confused about sexual activities and what other people considered normal?____

11. Do you think that your enjoyment of sexual intimacy has been affected by your abuse experience?____

12. Do you think that confused sexual feelings block or interfere with your ability to form close relationships with your children?____

13. Could you briefly explain in what other ways you think it has affected your life?

Appendix D

TABLE 3: RAW SCORES ON MCMI

1 = Schizoid (Asocial)

2 = Avoidant

3 = Dependent (Submissive)

4 = Histrionic (Gregarious)

5 = Narcissistic

6 = Antisocial (Aggressive)

7 = Compulsive (Conforming)

8 = Passive Aggressive (Negativistic)

S = Schizotypal

C = Borderline

P = Paranoid

A = Anxiety

H = Somatoform

N = Hypomanic

D = Dysthymic

B = Alcohol abuse

T = Drug abuse

SS = Psychotic thinking

CC = Psychotic depression

PP = Psychotic delusions

TABLE 4: RAW SCORES ON PSI

P1 = Child adaptability

P2 = Acceptability of child to parent

P3 = Child demandingness

P4 = Child mood

P5 = Child distractability

P6 = Child reinforces parent

P7 = CHILD DOMAIN SCORE

P8 = Parent depression

P9 = Parent attachment

P10 = Restriction imposed by parental role

P11 = Paren'ts sense of competence

P12 = Social isolation

P13 = Relationship with spouse

P14 = Parental health

P15 = PARENT DOMAIN SCORE

P16 = TOTAL STRESS SCORE

TABLE 5: RAW SCORES ON CRPR

B1 = Encouraging openness of expression

B2 = Suppression of sex

B3 = Emphasis on achievement

B4 = Parental worry about child

B5 = Parental inconsistency

B6 = Authoritarian control

B7 = Supervision of child

B8 = Negative affect toward child

B9 = Open expression of affect

B10 = Encouraging independence

B11 = Enjoyment of parental role

B12 = Rational guiding of child

B13 = Control by anxiety induction

B14 = Control by guilt induction

B15 = Health orientation

B16 = Emphasis on early training

B17 = Over-investment in child

B18 = Parental maintenance of seperate lives

B19 = Protectiveness of child

B20 = Orientation to non-punitive punishment

B21 = Suppression of aggression

SUBNO	GP	NCH	AC1	AC2	AC3	AC4	AC5	MSTAT	LWF	A1	A2	A3	A4	A5	A6	A7	A8
70	1	4	25	23	21	18	.	4	2	2	5	3	3	3	3	1	2
5	1	2	13	9	.	.	.	1	1	2	3	2	2	5	3	1	2
44	1	1	2	.	.	.	.	1	1	1	5	2	3	6	2	1	2
71	1	4	18	16	12	11	.	4	2	1	5	2	2	3	4	1	2
26	1	5	16	15	10	9	9	2	2	1	5	3	1	1	2	1	2
72	1	3	26	24	15	.	.	5	1	1	3	2	2	6	3	1	1
61	1	3	17	15	14	.	.	2	2	1	5	2	3	6	2	1	2
73	1	3	9	6	.	.	.	1	1	1	2	3	1	1	4	2	2
95	1	2	20	17	.	.	.	2	2	1	5	1	2	6	2	2	2
93	1	2	3	3	.	.	.	3	2	1	2	2	1	1	2	2	2
206	1	2	24	20	.	.	.	5	2	2	2	2	3	5	2	1	2
398	1	2	13	8	.	.	.	1	1	1	5	2	2	5	4	1	1
222	1	3	26	23	4	.	.	5	2	1	5	2	3	6	2	1	2
101	1	4	19	16	14	12	.	1	1	1	5	1	2	5	2	1	1
87	1	1	4	.	.	.	.	1	1	1	3	1	2	6	2	1	1
90	1	1	7	.	.	.	.	1	1	1	3	2	3	6	2	1	2
1	2	2	17	13	.	.	.	1	1	1	3	2	1	1	2	1	2
43	2	2	8	5	.	.	.	1	1	1	1	4	1	1	2	1	1
29	2	3	17	15	13	.	.	5	2	1	1	2	1	1	1	1	2
30	2	3	15	13	9	.	.	1	1	2	1	3	1	1	4	2	1
37	2	4	11	9	6	4	.	5	2	1	3	2	2	5	3	1	2
76	2	3	26	25	24	.	.	4	2	1	3	3	1	1	2	1	1
75	2	5	28	26	19	17	15	5	2	2	3	2	2	6	2	1	1
21	2	1	3	.	.	.	.	2	2	1	3	2	1	1	2	1	1
81	2	2	19	15	.	.	.	1	1	1	2	3	1	1	2	2	2
210	2	1	5	.	.	.	.	1	1	1	1	3	1	1	1	1	1
102	2	3	8	6	2	.	.	1	1	1	2	2	1	1	2	1	2
91	2	2	6	2	.	.	.	1	1	1	2	2	2	4	2	1	2
301	2	1	2	.	.	.	.	1	1	1	2	1	4	1	3	1	1
97	2	4	21	18	15	8	.	1	1	1	5	3	2	4	2	2	2
28	2	2	15	6	.	.	.	5	2	1	2	2	1	1	2	1	1
50	3	2	18	16	.	.	.	1	1	.	.	.	.	.	.	.	.

25	3	2	12	8	.	.	.	1	1	.	.	.	.	.	.	.	.	
27	3	3	18	16	14	.	.	5	2	.	.	.	.	.	.	.	.	
39	3	3	15	12	10	.	.	1	1	.	.	.	.	.	.	.	.	
78	3	3	11	9	7	.	.	4	2	.	.	.	.	.	.	.	.	
83	3	2	8	3	.	.	.	1	1	.	.	.	.	.	.	.	.	
77	3	4	24	23	21	12	.	4	2	.	.	.	.	.	.	.	.	
40	3	3	12	9	6	.	.	1	1	.	.	.	.	.	.	.	.	
80	3	1	1	.	.	.	.	2	1	.	.	.	.	.	.	.	.	
79	3	3	14	11	7	.	.	5	2	.	.	.	.	.	.	.	.	
82	3	3	8	6	4	.	.	4	2	.	.	.	.	.	.	.	.	
89	3	2	5	3	.	.	.	1	1	.	.	.	.	.	.	.	.	
208	3	2	5	2	.	.	.	1	1	.	.	.	.	.	.	.	.	
96	3	3	11	9	7	.	.	1	1	.	.	.	.	.	.	.	.	
202	3	1	14	.	.	.	.	5	2	.	.	.	.	.	.	.	.	
211	3	3	10	8	5	.	.	4	2	.	.	.	.	.	.	.	.	
92	3	1	4	.	.	.	.	4	2	.	.	.	.	.	.	.	.	
88	3	2	11	4	.	.	.	5	2	.	.	.	.	.	.	.	.	
89	3	2	9	7	.	.	.	1	1	.	.	.	.	.	.	.	.	
223	3	1	9	.	.	.	.	1	1	.	.	.	.	.	.	.	.	
220	3	2	7	3	.	.	.	1	1	.	.	.	.	.	.	.	.	
231	3	2	4	3	.	.	.	1	1	.	.	.	.	.	.	.	.	
301	3	3	7	4	1	.	.	1	1	.	.	.	.	.	.	.	.	
215	3	3	9	7	7	.	.	1	1	.	.	.	.	.	.	.	.	
209	3	1	5	.	.	.	.	1	1	.	.	.	.	.	.	.	.	
201	3	2	11	9	.	.	.	1	1	.	.	.	.	.	.	.	.	
204	3	2	7	4	.	.	.	1	1	.	.	.	.	.	.	.	.	
217	3	2	18	15	.	.	.	1	1	.	.	.	.	.	.	.	.	
207	3	2	7	4	.	.	.	4	2	.	.	.	.	.	.	.	.	
213	3	1	4	.	.	.	.	1	1	.	.	.	.	.	.	.	.	
203	3	1	7	.	.	.	.	5	2	.	.	.	.	.	.	.	.	

A9	A10	A11	A12	A13	A14	A15	1	2	3	4	5	6	7	8	S	C	P
•	4	5	5	4	5	23	35	62	79	82	65	29	72	43	70	71	56
•	3	5	5	3	4	20	80	79	98	15	11	3	68	43	72	63	10
•	4	5	5	3	4	21	60	64	79	45	34	35	70	70	40	84	72
•	3	4	5	4	2	18	71	75	96	11	31	23	85	10	75	73	70
•	4	5	5	3	5	22	75	67	46	45	34	65	42	91	51	79	51
1	5	5	5	4	5	24	35	59	20	82	99	75	48	70	47	72	92
•	5	5	5	4	5	24	66	69	39	38	74	75	58	82	45	65	60
•	5	5	5	4	5	24	115	102	79	0	31	44	64	85	73	86	53
•	5	5	5	3	5	23	15	30	85	102	81	54	58	35	52	73	43
•	5	5	3	4	3	20	60	40	12	58	71	78	67	57	47	55	64
•	5	5	5	3	4	22	27	38	29	75	65	61	70	16	36	19	34
1	4	5	4	2	3	18	62	62	56	45	61	44	68	35	68	57	43
•	5	5	5	4	4	23	35	23	69	67	88	65	105	7	33	36	74
1	5	5	3	3	5	21	27	30	20	82	63	61	69	16	52	57	24
2	5	5	5	2	4	21	45	30	20	52	53	54	69	10	62	49	38
•	1	5	5	2	5	18	5	8	20	97	93	78	37	43	43	60	70
•	5	1	1	2	3	12	60	23	60	67	61	65	73	10	49	26	31
2	1	4	2	1	2	10	12	5	25	88	67	61	65	29	33	26	23
•	1	3	3	2	4	13	52	30	29	88	63	44	42	43	51	56	61
3	3	4	2	3	3	15	27	5	56	75	65	61	67	29	48	53	27
•	3	4	3	2	4	16	20	8	18	88	81	67	70	16	33	16	25
1	5	3	5	1	2	16	27	67	56	78	74	81	62	78	51	58	55
1	3	5	3	2	2	15	45	23	16	52	61	61	69	10	57	30	32
3	3	5	4	2	3	17	35	54	89	67	74	75	64	40	44	59	75
73	3	3	4	2	2	14	112	88	94	0	24	44	75	40	73	59	67
3	1	5	1	2	1	10	15	15	29	85	68	44	70	10	23	33	25
•	3	5	3	2	2	15	45	8	18	34	67	78	65	40	35	35	60
•	3	5	3	2	3	16	80	69	25	18	65	67	73	40	68	60	70
3	1	1	1	3	3	9	71	62	10	82	74	85	62	78	54	58	65
•	4	3	2	3	3	15	15	15	20	93	81	85	48	43	33	57	56
•	1	1	1	5	3	11	27	50	85	78	67	72	20	85	51	69	56
•	•	•	•	•	•	•	35	8	20	58	65	65	75	16	53	22	48

•	•	•	•	•	•	•	20	30	46	30	63	65	100	5	37	40	72
•	•	•	•	•	•	•	52	38	76	67	74	67	85	10	46	57	73
•	•	•	•	•	•	•	35	15	29	58	53	61	69	29	58	25	34
•	•	•	•	•	•	•	27	15	46	82	65	54	67	10	30	33	25
•	•	•	•	•	•	•	35	23	20	58	53	35	70	16	60	30	32
•	•	•	•	•	•	•	20	23	25	75	65	44	70	29	30	64	25
•	•	•	•	•	•	•	27	8	20	78	65	54	70	20	41	24	21
•	•	•	•	•	•	•	45	23	20	52	53	61	85	7	41	24	33
•	•	•	•	•	•	•	18	38	18	67	71	70	58	35	49	42	74
•	•	•	•	•	•	•	5	5	18	115	110	70	64	35	16	26	56
•	•	•	•	•	•	•	20	23	46	75	68	67	69	35	49	57	74
•	•	•	•	•	•	•	20	38	60	45	68	65	95	16	46	57	70
•	•	•	•	•	•	•	80	38	25	22	63	67	95	7	52	36	70
•	•	•	•	•	•	•	35	38	12	82	68	75	64	40	49	57	56
•	•	•	•	•	•	•	27	38	25	52	61	54	72	20	51	34	33
•	•	•	•	•	•	•	27	54	79	78	37	20	62	35	50	53	5
•	•	•	•	•	•	•	20	38	29	82	65	69	64	57	52	71	56
•	•	•	•	•	•	•	71	67	39	58	67	72	64	50	60	35	64
•	•	•	•	•	•	•	35	8	25	78	76	69	65	35	43	63	68
•	•	•	•	•	•	•	27	15	29	38	61	54	100	16	39	42	43
•	•	•	•	•	•	•	12	23	25	85	76	70	65	35	33	36	43
•	•	•	•	•	•	•	27	30	18	58	65	65	72	16	40	33	32
•	•	•	•	•	•	•	27	38	20	52	74	75	80	16	43	26	70
•	•	•	•	•	•	•	20	30	76	58	67	61	75	7	46	57	72
•	•	•	•	•	•	•	35	50	46	67	65	70	64	35	60	47	64
•	•	•	•	•	•	•	35	23	29	52	53	65	73	10	54	34	51
•	•	•	•	•	•	•	45	30	60	22	44	54	105	5	50	40	60
•	•	•	•	•	•	•	15	15	20	88	99	85	65	40	0	20	62
•	•	•	•	•	•	•	18	15	20	78	67	54	72	29	52	63	62
•	•	•	•	•	•	•	12	23	25	82	67	78	48	40	28	62	75

A	H	N	D	B	T	SS	CC	PP	P1	P2	P3	P4	P5	P6	P7	P8	P9
73	89	65	71	30	45	58	54	61	46	23	26	18	22	23	158	31	23
93	60	0	78	55	0	68	65	40	36	18	20	14	18	10	116	27	14
121	96	58	108	55	60	50	65	61	31	12	20	10	30	9	112	30	12
76	82	0	83	30	0	61	54	63	24	12	17	9	31	16	109	22	15
99	66	30	96	78	60	60	71	61	29	18	31	15	31	13	137	24	19
74	64	115	78	66	81	61	64	70	43	11	17	7	20	9	107	28	26
77	63	14	85	71	68	62	66	64	16	14	18	7	25	10	90	18	13
101	82	2	107	82	47	81	70	62	42	19	36	18	34	14	163	36	18
67	90	110	71	68	69	50	49	30	44	27	41	22	35	30	199	41	27
42	56	54	47	45	73	60	49	55	25	12	23	11	24	11	106	22	13
46	46	33	46	13	43	43	3	3	24	14	17	10	21	9	95	19	9
67	72	50	35	45	40	63	40	40	30	10	18	10	23	8	99	14	10
58	72	50	63	35	60	45	30	70	36	12	28	13	33	8	130	26	18
64	59	11	73	36	31	6	36	6	28	21	19	13	19	15	115	27	18
56	76	23	76	23	28	48	53	28	38	13	24	12	27	8	122	17	12
70	75	71	50	55	75	40	44	30	27	18	21	12	27	12	117	19	11
67	66	0	38	20	40	35	30	55	22	10	16	8	25	9	90	16	13
38	76	50	48	20	55	45	10	25	28	14	19	12	19	10	102	20	13
78	74	59	55	25	50	40	45	45	30	12	21	8	24	17	112	27	21
69	68	32	69	42	47	37	32	17	27	13	16	12	30	16	114	15	14
28	53	60	33	55	64	35	0	30	27	26	30	14	39	15	151	19	20
69	59	73	78	66	67	58	62	38	32	13	23	8	32	11	119	23	16
57	52	14	64	24	24	49	44	29	29	14	23	10	28	15	119	18	18
55	51	66	15	45	75	60	54	75	32	15	25	10	32	8	122	26	17
67	51	0	75	10	10	72	58	94	35	14	23	10	31	11	124	21	15
65	50	17	50	7	47	7	7	22	20	8	10	9	23	10	80	22	7
39	41	50	35	30	35	40	40	40	26	8	15	11	27	12	99	24	10
83	75	0	83	0	35	61	44	65	24	13	23	8	27	11	106	17	15
66	40	49	77	34	63	59	61	54	17	8	16	8	29	8	86	32	10
43	66	54	38	45	71	35	30	15	34	19	26	11	29	12	131	25	18
78	70	75	81	68	73	58	67	40	17	12	25	12	29	10	105	25	12
66	63	16	46	19	40	42	6	38	30	15	22	9	31	12	119	23	13

74	73	4	67	14	19	39	34	65	31	15	25	13	31	13	128	21	18
67	79	40	38	35	62	50	40	75	23	12	12	7	24	12	90	18	15
52	72	19	52	19	49	49	39	39	26	9	20	10	26	11	102	23	13
65	50	12	45	17	42	7	7	22	28	11	18	10	21	9	97	17	11
57	57	14	57	34	14	49	14	29	28	21	27	18	29	13	136	18	17
80	60	7	74	27	17	7	37	22	32	15	26	10	22	14	119	24	14
51	61	8	58	8	33	43	8	8	30	14	20	10	22	14	110	16	17
51	46	8	46	18	18	8	8	23	15	7	10	5	21	7	65	19	10
34	59	64	56	36	66	51	46	36	30	11	25	13	27	11	117	24	20
28	69	69	33	62	73	35	40	30	23	17	18	10	26	10	104	23	15
70	72	58	63	35	64	45	40	65	24	10	16	11	26	11	98	18	14
73	66	30	50	20	50	40	40	65	16	10	15	9	20	20	90	17	14
58	43	0	50	10	15	50	30	61	23	7	17	8	15	8	78	22	12
73	63	30	63	35	40	55	30	40	23	9	21	11	31	11	106	18	11
75	51	8	71	28	18	8	38	38	27	17	20	11	26	10	111	22	17
52	56	15	55	62	15	45	49	0	24	19	18	11	22	15	109	21	17
76	69	62	86	20	60	50	62	30	27	18	25	10	30	9	119	27	13
48	38	15	22	35	50	58	54	61	26	7	26	15	21	6	101	34	8
73	72	10	63	30	64	50	44	61	24	7	18	5	21	6	81	11	7
73	72	6	77	36	6	41	46	61	25	14	24	16	25	12	116	20	12
43	38	40	38	30	60	40	0	30	19	10	13	8	20	8	78	18	14
50	60	7	50	7	22	42	37	22	24	14	21	11	27	11	108	19	18
43	38	0	50	10	35	35	30	55	20	7	14	10	21	11	83	20	16
76	79	58	50	45	45	45	0	63	17	10	11	9	18	8	73	16	10
59	60	65	47	68	50	45	44	30	26	9	28	19	16	11	109	17	12
75	61	13	46	18	23	43	8	38	18	12	23	7	17	8	85	15	9
71	67	4	54	14	4	44	34	69	26	13	24	11	24	10	108	19	12
30	38	66	10	40	69	35	30	55	25	10	24	14	25	11	109	17	10
73	59	66	69	51	51	51	36	67	23	14	16	11	23	9	96	20	16
63	58	63	55	50	69	40	35	20	31	14	27	11	25	15	123	28	16

P10	P11	P12	P13	P14	P15	P16	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11
27	39	18	15	10	163	321	4.25	4	5.33	4.5	6	2.44	6	6	4.33	4.14	6
14	33	18	14	10	130	246	6.5	2.5	4	4.5	3	2.55	5	1.33	6	5.29	5.66
22	40	21	27	19	171	283	6	3.5	4.17	7	3.5	3.44	5	1.66	5.17	3	5.33
23	40	20	16	14	150	259	4.75	2.75	4.83	4	4.5	3.77	5.5	2	5.33	4.14	4.33
28	40	18	25	19	173	310	6	2	4	6	4.5	2.22	4.5	3.66	5.66	4.71	5
34	33	14	23	6	164	271	6.5	2.25	4	5.5	4	3.66	6	4	6.16	4.57	5
12	32	16	14	11	116	206	6.5	1	4	7	4	3.22	3	3	6.33	3.29	5
24	50	15	24	24	191	354	5.75	3	3.83	7	1.5	2.33	6	5	5.17	4.43	5.33
29	59	16	24	16	212	411	6.25	2	4.33	5.5	4	1.77	5	6	4.66	5.29	3
18	35	13	19	12	132	238	7	1.75	3.33	5.5	3.5	1.88	4	1.66	6.5	4.57	6.33
20	28	12	20	12	120	215	6.5	1.75	4.66	3.5	5.5	2	3	2	6.66	5.43	5.33
16	36	13	21	14	124	223	6.5	1.75	3.5	5	3.5	2.77	4.5	1	6.17	5.57	4.66
28	41	20	27	18	178	308	6	1.75	3.83	4	2.5	2.44	7	2.67	6	4.57	4.67
15	42	18	19	10	149	264	5.5	2.25	4.17	2	3.5	2.44	4	3.33	6.33	4.86	4.33
15	27	16	28	19	134	256	5.75	1.75	3.5	5	5	1.77	4	2	6.83	4.57	5.33
13	30	12	20	10	115	232	6.75	2	5.66	3	3.5	3.11	4.5	2.33	6.17	4.14	6.33
14	29	12	18	13	115	205	5	2.75	5.17	5.5	4.5	2.22	5.5	2	6.17	4.29	5.33
17	25	9	22	14	120	222	6.75	1	3.5	4	2.5	2.11	4	1.67	6.33	4.33	5
20	33	14	34	11	160	272	6.75	2.25	3.5	5.5	3	2.77	4	4	6	4.71	5.67
13	29	10	12	12	105	213	6	2	3	5.5	4.5	1.44	4.5	2	6	4.86	5.33
11	27	8	21	9	115	266	4.75	4.25	3	5.5	6.5	2.11	5	3	5.33	4.71	3.67
22	37	9	14	12	133	252	6.5	2	3.17	6	4.5	1.78	4	1.33	6.83	4.86	6.33
20	38	15	26	12	147	266	7	1.75	4.5	4.5	3	1.55	3.5	3	6.33	5.57	4.66
22	37	16	27	12	157	279	5.75	3	4.5	4.5	4	2.88	4.5	3.66	4.5	5.86	3
19	37	16	24	14	146	270	4.5	4	2.5	5.5	3	3.66	6.5	4	6	4.29	4
16	22	9	17	15	108	188	7	1.25	3.66	2.5	3.5	1.88	5.5	2	6.83	4.43	5
18	38	19	19	13	141	240	5.75	1.75	4.66	7	3.5	2.55	4.5	3	6.33	4.14	5
20	43	10	24	16	145	251	5.75	2.75	5.33	4.5	6	2.77	5.5	3	5.5	5.14	3.33
28	24	17	30	18	159	245	6.75	1.5	3.83	5.5	4	2.33	4.5	1.66	6.66	4	5.33
15	32	14	22	12	138	269	7	1.25	4.5	3	5	2.22	3	3	6.5	5.14	3.66
24	38	11	16	13	139	244	4.5	1.75	3.5	6.5	5.5	1.88	4	4.66	5	5.14	4
21	29	10	16	9	121	240	6.75	1.5	4.5	4	5	2	4	2.67	6.17	5.71	5.67

14	42	12	14	12	133	261	6	2	4	4.5	4.5	3.67	7	3.33	6.67	4	6
15	32	8	24	6	118	208	5	4.5	4.5	2.5	3	2.55	5.5	1.67	5.37	3.86	5
19	29	14	20	8	126	228	7	1.5	4	4	3	2.33	5	1.67	6.16	6.14	6.33
12	26	10	16	13	105	202	7	1.5	4.33	2.5	3.5	2.11	3.5	1.67	6.67	5.43	6.33
15	33	12	17	12	124	260	5.5	2.25	4	5.5	5	3	5	2.33	6.16	4.57	4
18	32	12	16	14	130	249	6.75	2	3.83	3	5.5	1.78	3.5	3.33	6.67	3.86	3
17	27	9	18	9	113	223	6	1.75	3.66	3	6.5	2.22	6	5	6.5	5.14	4.66
13	29	8	11	7	97	162	6	1.75	3.83	4	3	2.78	5.5	1.33	6.83	5.29	5.33
20	38	12	28	15	157	274	6.25	1	4.5	4	4	2.33	3.5	2.67	6.33	6	4.67
11	27	11	27	11	125	229	6.25	2	5.17	4.5	2	3.33	4	2.33	6.33	5	4
23	33	18	14	12	132	230	6.5	2.75	3.33	5.5	3	3.44	6.5	2	6.5	3.29	5.33
21	20	9	17	14	112	202	5.75	2.5	3.5	3.5	2	3	5.5	1	6.55	5	6.33
11	22	11	20	9	107	185	5.75	1.5	4.17	4	4	2.67	6	1.66	6.67	4.86	5.66
26	25	18	16	13	127	233	6.75	1.75	3.5	4	4	1.88	5.5	1.66	6.17	4.86	5
17	31	12	22	12	133	244	7	1.25	4.5	3.5	3.5	2.33	3	3.66	6.33	4.57	5
15	39	13	16	12	133	242	5.75	4	4.67	3.5	4	2.22	6	3.67	6.5	5.29	5
26	39	16	28	12	161	280	5	1.5	3.17	4.5	6.5	2.33	5.5	3	6.33	5	3.66
17	30	11	16	18	134	235	6	1	4.83	4	4.5	3	4	2.66	6.5	3.29	4.33
20	23	12	16	13	102	183	6.5	1.25	3.83	5	3	2.89	5	2	6.83	3.57	4.67
16	27	11	17	15	128	244	4.25	2.5	3.5	5.5	5	1.89	3.5	1.33	5.33	5.57	5.33
10	24	9	20	14	109	187	5.75	1.5	2.83	5.5	1.5	3.44	5.5	1.33	7	4.57	6
20	33	14	20	16	6	248	6.75	1.75	4	6	3.5	1.56	4.5	2	6.17	6.14	4.33
16	28	12	18	11	121	204	6	1.75	3	3	4.5	3.22	5	2	6.5	5.57	5
10	23	11	14	12	96	169	6.75	2.5	4.67	4.5	3	2.67	4.5	1.67	6.17	5.71	4.33
13	30	15	18	14	119	228	6.5	2.25	2.83	4	2	2.11	6	2.67	6.5	5.71	5.33
15	27	10	12	14	102	187	6	2.5	3.67	5.5	4.5	2.67	5.5	3	5.5	3	6.33
16	25	15	20	10	117	225	6.75	1.5	4.33	4	3	2.22	5	2	5.67	5.71	3.33
12	24	8	17	10	98	207	6	2	3.33	4.5	5	2.11	6	2.33	6	5	4
15	27	12	17	16	123	219	6	1.75	4.5	6	2	2	4.5	2.33	6.33	4	5.67
19	39	12	24	12	150	273	6.25	1	4.83	5.5	6	2.11	6	4.33	5.83	4.86	5

B12	B13	B14	B15	B16	B17	B18	B19	B20	B21	P/with	Pas/Ag	Anxiety	Depres	Group	GP	P/withdraw(ave
5	4	3	5.66	4.66	2	4.33	2.75	5	6	52.5	61.33	81	62.5		1	Group #1
6	1	1	5	3	5.25	4.33	4.25	3	5.33	76	73.33	76.5	71.5		1	52.47
6.33	6	4.67	6.33	1.33	4.75	5	3.25	2.5	4	50	71.00	108.5	86.5		1	
5.33	3	5.33	4.33	1.66	3.75	5.66	3.75	2	5.66	73	60.33	79	68.5		1	Group #2
5.33	3	1	5.66	1.66	3.75	5.66	3.75	7	4.33	63	68.00	82.5	83.5		1	44.87
6.33	1.5	2.33	3.66	1.66	3.75	5.33	3.25	4.5	4.33	41	49.67	69	71		1	
5.66	3	1.66	5.66	3.33	5.25	5	3.75	3	4.66	55.5	63.33	70	75.5		1	Group #3
6.33	3	2.33	5.67	1.33	3.25	5	3.75	4.5	3.67	94	88.67	91.5	88.5		1	36.85
7	2.2	2.33	3.66	1.66	3.5	4.66	3	5.5	5	33.5	50.00	78.5	60		1	
6.66	1	2	5.66	2	3.25	5	3.5	4.5	5.33	53.5	36.33	49	48		1	
5.33	2	1.66	5	1.66	2.5	4.33	3.25	5.5	6	31.5	27.67	46	24.5		1	
7	4.5	2.33	5.66	1	3.75	5	3.25	4	4.33	65	51.00	69.5	37.5		1	
6.67	3.5	2	4.67	1	4.5	5.33	4.5	3	4	34	33.00	65	46.5		1	
6.33	2	4.33	4	1.33	3.5	5.66	3	7	4	39.5	22.00	61.5	54.5		1	
6.33	1.5	1.66	5	1.33	4.5	5.66	3.75	5.5	5	53.5	20.00	66	64.5		1	
5.66	2	3.33	4.66	1	3.5	5.33	2.5	4	5	24	23.67	72.5	47		1	
6.67	1	2.33	5.33	2.33	2.25	5.67	2.5	4.5	3.33	54.5	31.00	66.5	34		2	
6.67	4	3	5.67	1.33	2.75	5	3.25	5.5	4.67	22.5	19.67	57	29		2	
7	2.5	1	5.33	2.33	3.5	4	2.75	4	5.67	51.5	34.00	76	50		2	
6.67	1.5	2.67	6.67	3.33	4	4	3.25	6	4.33	37.5	30.00	68.5	50.5		2	
4.33	4.5	1.33	4.5	2	5	4.33	3.33	6	5.67	26.5	14.00	40.5	16.5		2	
6	3	1.33	5	1.67	5.25	4.67	4	2.5	5.67	39	67.00	64	70		2	
5.33	1	1.33	5.33	3	4	5.33	3.25	4.5	3.33	51	16.33	54.5	54		2	
5.66	2.5	1.33	4	3	5.5	4.33	4.5	5.5	2.66	39.5	61.00	53	34.5		2	
6	3	1.66	4.66	2	6.25	4.66	3.5	4	3.66	92.5	74.00	59	66.5		2	
6.33	2.5	3.33	4.66	1.33	3.5	4.66	4.5	5	5	19	18.00	57.5	28.5		2	
6	3.5	4.33	4	1.33	3.75	5.33	3.5	3	4	40	22.00	40	37.5		2	
6	3.5	3.66	5.66	2.66	3	3	2.5	4.5	4.66	74	44.67	79	63.5		2	
6.66	2.5	2	5.66	1.66	3.25	4.33	4.25	5.5	4.66	62.5	50.00	53	69		2	
5.33	2.5	3.33	5.33	1.66	4	5.66	3	5.5	5	24	26.00	54.5	34		2	
6.33	2.5	2.66	6.33	2	4.25	3.33	3	7	4	39	73.33	74	74		2	
7	1.5	3.33	5.33	1.33	4.25	5.67	3.5	4	4.33	44	14.67	64.5	26		3	

6	2	4.33	5.67	1.67	4	3	2	2	3.33	28.5	27.00	73.5	50.5		3
6.67	4	4	6.33	2.67	2	3.33	4.75	4.5	5	49	41.33	73	39		3
7	2	2.67	5.67	2.33	4.75	4.67	3.5	5	3.33	46.5	24.33	62	45.5		3
6.33	2.5	2.33	4.33	1.33	4	4.33	3.25	5	4.33	28.5	23.67	57.5	26		3
6.66	2.5	2	3.33	1.33	5	5.33	3.5	4.4	5	47.5	19.67	57	35.5		3
4.67	3	2	5.67	4.67	4.25	7	4.25	5.5	4	25	25.67	70	55.5		3
6.66	2.5	1.33	2	2	3	4.33	2.75	6	5.66	34	16.00	56	33		3
6.67	3	1	5.33	1	3	5.33	3.75	3	4.67	43	16.67	48.5	27		3
6.67	1.5	2.67	3.67	1.33	2.75	5	4	5.5	3.67	33.5	30.33	46.5	51		3
6.67	3	3.67	5.33	1.67	2	4	3.25	5.5	4.33	10.5	19.33	48.5	36.5		3
4.66	2	2.33	5.33	1.66	3.5	5.66	4	1.5	3	34.5	34.67	71	51.5		3
6.66	1.5	4.66	5	3.33	2.5	5.66	3	5.5	3.66	33	38.00	69.5	45		3
7	1.5	3	4.33	1.33	4	4.66	3.5	5.5	5.33	66	23.33	50.5	40		3
6.33	3	4.33	6.33	1.66	4	4.33	3.25	5	4.66	42	30.00	68	46.5		3
6.33	2.5	4	5	1	3	5.66	3.66	5	3.33	39	27.67	63	54.5		3
6	2.5	2.67	6.67	2.33	5	3.67	3.5	2.5	4.67	38.5	56.00	54	52		3
6	3	2.33	5.66	2	4.5	5.33	3.25	6	3.33	36	41.33	72.5	74		3
5	1.5	3.66	3.66	2.66	4.5	4.33	4.25	5.5	4.66	65.5	52.00	43	38		3
6	4	3	5.33	2.33	4.25	4.33	5	3.5	5.33	39	22.67	72.5	53.5		3
6.33	1.5	3.33	5.33	1	3.25	3.67	3.5	7	5.67	33	20.00	72.5	61.5		3
6.33	2.5	2.33	5.67	2.67	2.75	5.67	3	3	5	22.5	27.67	40.5	19		3
6	1.5	3	4.67	1	3.5	4.67	4.5	6	5	33.5	21.33	55	43.5		3
6	1.5	2.33	5.33	1	4.25	4.66	2.75	6	5.33	35	24.67	40.5	40		3
6.33	2	3	5.33	1	4.5	4.33	3.67	3	4.67	33	37.67	77.5	25		3
6.67	1.5	3.67	4	2	3.5	3.67	4.25	5	5.67	47.5	43.67	59.5	45.5		3
6	4.5	2.33	5.33	1	4.5	4.33	2.5	5.5	7	44.5	20.67	68	27		3
6	3.5	3.67	6	1	1.75	5	3.75	5.5	5.67	47.5	31.67	69	44		3
6	3.5	4.67	6	3.33	4.75	4.67	3.5	4.5	4	7.5	25.00	34	20		3
5.67	5.5	3	5.33	2.33	2.75	3.33	4.25	6.5	4.67	35	21.33	66	52.5		3
7	2	2	4.66	1.66	3.5	5.66	4	6	2.66	20	29.33	60.5	45		3

Pas/Aggres (ave)	Anxiety (ave)	Depression (ave)
49.96	72.88	61.88
38.73	59.80	47.43
28.62	60.13	42.05