Trauma and attachment: The impact of domestic violence on preschool children.

Bridget Boulwood
B.A. (Hons), M.App.Psych. (Clinical)

This thesis is presented for the degree of Doctor of Philosophy of Murdoch University,
2002.
I declare that this thesis is my own account of my research and contains as its main content work, which has not previously been submitted for a degree at any tertiary education institution.

----------------------------------------
(Bridget Boulwood)
2.2.1. Interview – Background Questionnaire 44
2.2.2. Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995) 45
2.2.3. The State-Trait Anxiety Inventory (STAI; Spielberger, 1983) 47
2.2.4. The Dissociative Experiences Scale (DES; Carlson & Putnam, 1993) 48
2.2.5. The Adapted Conflict Tactics Scale (ACTS; Mathias, et al., 1995) 50

2.3. Assessment of the mother-child relationship 51
2.3.1. Measurement of Attachment 51
2.3.2. Assessment of maternal caregiving behaviour 54

2.4. Assessment of the child 56
2.4.1. Children’s Drawings 56
2.4.2. Assessment of the child by his/her mother 62

2.5. Summary 65

Chapter 3
Methodology

3.1. Participants 67
3.1.1. Refuge Group 68
3.1.2. Outreach Group 69

3.2. Measures 73
3.2.1. Assessment of the mother 73
3.2.2. Assessment of the mother-child caregiving-attachment relationship 73
3.2.3. Assessment of the child 74
3.2.4. Specialised equipment used in the assessment process 75

3.3. Procedure 75
Appendix C: Children’s Human Figure Drawings 156
1. Drawing test 157
2. Child Drawings - Outreach raw scores 160
3. Child Drawings – Refuge raw scores 161
4. Koppitz Developmental Items 162
5. Koppitz Emotional Indicators 163
6. Examples of Children’s Drawings and verbatim responses 165

Appendix D: Pilot Study 170

Appendix E: Examples of verbatim responses from the background interviews with the mothers from both the Refuge and outreach groups 174

Appendix F: Women’s Refuges 179
1. Description of S.A.A.P. services – Australia 180
2. Description of Nardine Wimmin’s Refuge – Western Australia 181

BIBLIOGRAPHY 183
ACKNOWLEDGEMENTS

I am indebted to the many people who have provided practical and moral support during the course of this research. Specifically, I wish to thank my supervisor, Dr Pia Broderick for her patience and diligence. I would also like to thank Dr Paul Roberts and Dr Sue Byrne for their guidance and moral support. My dear friend and fellow PhD candidate, Robin Jones who has worked beside me and has been invaluable in her encouragement, and with whom I have spent the past few years discussing life after study. To the coordinators and staff at the women’s refuges, my thanks for their interest, time and patience. My thanks also to Gemma Paley and Carmen Puki for their hours of work behind the video camera, and Paul Bowen for designing and building the special equipment needed for this research. Thanks also to my colleagues in USA, who patiently assisted me with the scoring of my data. I would like to acknowledge and thank Mary Sue Moore in particular for her patience, guidance and encouragement.

Most importantly, I thank two great teachers, Nancy P. Stewart, Child and Adolescent Psychoanalyst, and Lynette Clayton, Clinical Psychologist. This research was inspired by Nancy’s teachings, and could not have been completed without the encouragement and guidance from Lynette.
CHAPTER 1

Introduction

1.1. Overview

In 1995, while working as a clinical psychologist in Child and Adolescent Mental Health Services, I was approached by the coordinator of a local women's refuge. She raised the question about how her staff could assist the preschool aged children of women who were receiving services from the refuge. The enquiry was prompted by the coordinator’s observations of the women who were receiving both residential and outreach community based services following domestic violence. She reported that the women with school aged children expressed relief that their children had the continuity of a structured school environment while they addressed the issues associated with the enormous disruption caused by the family break-up. Their children attended school while the mothers attended to many of the complex housing, financial, legal and medical issues. The women with infants appreciated the practical support and assistance provided by the refuge staff who cared for their infants whilst they attended to the important practical and legal issues they were faced with. On the other hand, the women with toddlers and preschoolers often expressed frustration, exhaustion and despair about their need to attend to the increased behavioural and emotional demands of their young children aged 2 – 5 years, whilst at the same time attempting to address the practical and legal issues they faced. The coordinator readily admitted that the refuge staff were untrained and ill equipped to assist these children, who at times had to remain at the refuge while their mother attended court or medical appointments.
The enquiry about how to assist these preschool children and their mothers was made within the context of an emerging national trend for women’s refuges in Australia to incorporate services for the children accompanying their mothers into programs following domestic violence. At the time, there was no information about the prevalence of children under five years of age who accompanied their mothers into the services provided by women’s refuges in Australia. Neither were there treatment interventions available for preschool aged children exposed to domestic violence, and little was known about the experiences of these children or their needs.

Before considering how to assist this particular sample group of children, it was necessary to understand the experiences of these children who had been exposed to the domestic violence that had occurred between their caregivers. Accessing the mothers who sought assistance from women’s refuges in Western Australia provided the means for gaining access to this particular age group of children. Because of their age and their dependency on their caregivers, the assessment of preschool children includes not only what these children are able to convey of their experience, but also how they function within the context of their relationship with their primary caregiver, in this instance their mothers. The assumption behind the design of this research is the stance presented by D.W. Winnicott. Winnicott (1965) coined the phrase that “there is no such thing as an infant…(w)herever one finds an infant one finds maternal care, and without maternal care there would be no infant” (p.39). This applies to all young children who are dependent upon a primary caregiver. Hence both the mothers and their preschool children became the central focus of this study.
In order to begin this project it was necessary to gain some clarity and understanding of the broader general context of domestic violence. Finding out what research and knowledge was already available about the effect of domestic violence on the lives of young children involved a need to also understand how these young children were affected by their mothers’ exposure to domestic violence. The literature illustrates that there is a growing body of research that has described the psychological effects of domestic violence on women (Dutton, 1992) and on their children (McAlister Groves, 1996) from within the trauma response framework. The view presented from this framework is that a large proportion of women who have experienced domestic violence experience trauma related symptomatology (Astin, Lawrence, & Foy, 1993; Gleason, 1993). There is also the view that young children who witness domestic violence, due to their dependency on their parents, are at a high risk of developing traumatic stress disorder (Zeanah & Scheeringa, 1996). This is not only because these children are often caught amidst the conflict in the home, but also because they perceive a threat to the existence of one or both of their primary caregivers.

The question arises about how best to explore the experiences of young children exposed to domestic violence. There is an emerging body of attachment literature that has provided a useful framework from which researchers have been able to inform practitioners of the experiences and needs of infants, toddlers and preschool aged children who have experienced traumatic events. Most noteworthy from this body of literature, have been the findings of a prominent researcher who has presented the view that the impact of a trauma on a young child is not determined by the trauma itself but by the caregiver’s ongoing way of being with the child (Stern, 1994). This view argues for the need to consider the experiences of preschool children, not in isolation, but within the context of their primary attachment relationship, in this case the child’s attachment relationship with his/her mother.
It is from this understanding that both service providers and clinicians can be informed on how to proceed with developing effective interventions for these children, either within a refuge setting or more generally through community based services.

It therefore became the aim of the study to produce information about how preschool aged children are affected by domestic violence. In order to do this preschool children were examined within the context of their relationship with their mothers. Children aged between 2 and 5 years of age were accessed from women’s refuges in Western Australia. The mothers of these children were examined in terms of trauma resulting from domestic violence. The mother’s caregiving capacity was assessed and the child’s attachment in relation to the mother was also assessed. As the children were not of an age to communicate their experience verbally, these children were asked to produce drawings from which their emotional and developmental functioning was assessed. In addition the mother was asked to describe her perception of her child’s behavioural and emotional functioning. Each child’s behavioural and emotional functioning was considered in light of whether the child would require clinical intervention.

Specifically, the current research examines both the experiences of the mother and the experiences of her preschool aged child in order to explore how the trauma of domestic violence on a mother impacts upon her functioning, and how this affects her relationship with her child. In turn, it explores the experience of the child in terms of the child’s attachment relationship to the mother and the child’s behavioural, emotional and developmental functioning. The research considers what, if any, links occur between the mother’s functioning, her child’s relationship to her, and his/her developmental functioning. The dyadic relationship is investigated as a mediating factor in the child’s tendency to experience developmental difficulties.
The present study fills a gap in the research in that it produces information about preschool children whose mothers access women’s refuges. This is the first study of its kind focusing on this age group of children exposed to domestic violence in Australia. It is also the first study that has examined children exposed to domestic violence, in terms of the child’s attachment relationship with his/her mother, and in turn, how the mothers’ functioning affects their children.

1.2. Structure of the thesis

To set the scene for an examination of the preschool child’s experience of domestic violence and how the mother’s experience of domestic violence affects her child’s functioning, chapter 1 begins with an overview of what is currently known about preschool children exposed to domestic violence. As the sample of mothers and children in this study came from women’s refuges, this chapter describes women’s refuges in Western Australia and the services they provide. The selection of two samples of children and their mothers is also described.

Domestic violence is considered to be traumatic for both mothers and their children. The evidence for this point of view is discussed. In order to establish the theoretical framework for the research, an overview of attachment theory is presented with the emerging emphasis on the mother-child dyadic relationship and its functioning within the context of trauma. As such, the literature on the dynamic interplay of the mother’s experience and how this affects her child is examined. A description of maternal caregiving and disabled maternal caregiving is also included.
There is very little international research that directly relates to the present study. However, research findings in other fields that link a mother’s functioning to her relationship with her child, her child’s attachment to her and the child’s subsequent functioning is reviewed and critiqued. At the conclusion of chapter 1, the rationale for the present research is presented, and the major research questions are outlined.

In chapter 2 the various assessment instruments used in the research are described, justified and critiqued. This is necessary because a number of the assessment instruments have been developed recently, as is the case of the measure of adult trauma and maternal caregiving. Other measures such as the use of drawings have not been used previously with children as young as the sample of children used in the present study. In this chapter all the measures will be described, and their psychometric properties presented.

Chapter 3 presents the methodology of the research. As a rationale for the use of the tests selected, and a critique of the usefulness and validity of the tests is covered in chapter 2, chapter 3 focuses on a description of the subjects and the procedure.

Chapter 4 presents the results of the research. These results address the research questions and explore whether or not the mothers are traumatized following their experience of domestic violence. The results also examine the effect of any trauma experienced by the mother on her caregiving capacity, and on the child’s attachment relationship to his/her mother. They also examine the child’s emotional and developmental functioning from the child’s drawings, as well as examining the information provided by the mother on her child’s behaviour.
In chapter 5 the conclusions drawn from the findings of the research are presented and discussed. The implications of these findings are considered in terms of the development of effective, age appropriate interventions for preschool aged children exposed to domestic violence. Recommendations for future research are also considered.

1.3. The prevalence of children exposed to domestic violence

Recent Australian data describe the extent of the problem of children witnessing domestic violence. Surveys that focus on victimisation ask women about the violence they have experienced and in some cases also ask women whether, to their knowledge, their children had witnessed the violence (Indermaur, 2001). The largest survey of adult women’s victimisation experiences in Australia, the Women’s Safety Survey (ABS 1996) received completed responses from 6,300 women with a response rate of 78%. The Women’s Safety Survey found that one in 12 women who were married or in de facto relationships had experienced some violence from their current partner. Further, 7 in 10 women who reported violence by a previous partner also reported that they had children in their care at some time during the relationship and almost half (46%) said that these children had witnessed the violence. In terms of those women who had experienced violence from their current partners, almost 4 in 10 reported that children in their care had witnessed the violence.

Australian data on the prevalence of children under five years of age witnessing domestic violence varies between studies. However, in Australia in 1997/98, 46% of the children and young people accompanying victims of domestic violence to Supported Accommodation Assistance Program (S.A.A.P.) services were children under five years of age (Women’s Services Network 2000, p.11, in Laing, 2000). Furthermore, Fantuzzo and Mohr (1999) presented the finding that “children aged five years and under were more likely than older children to be exposed to multiple incidents of domestic violence over a six month period”

7
(p. 25). These data illustrate the large number of children under five years of age that have been exposed to domestic violence.

1.4. Children’s experiences of domestic violence

At present very little is known specifically about how preschool children are affected by domestic violence. However, there is a growing body of research reflecting the complexities of issues surrounding children’s experiences of domestic violence. Research studies have explored the range of children’s experiences from direct physical harm to the observation of domestic violence (Laing, 2000). For example, children who were hit by their fathers while trying to defend their mother, or to stop the violence (Blanchard, Molloy, & Brown, 1992); children who live with the effects of violence on the health of their mothers (Clark & Foy, 2000; Stark & Flitcraft, 1995); and children who are used by abusers to coerce their mothers to return home (Blanchard, Molloy, & Brown, 1992).

Reviewing the empirical literature that explores the impact of domestic violence on children raises a number of methodological issues that will be discussed in this thesis. There are a number of criticisms about the research, and as a result, “a great deal of work lies ahead in the development of a more sophisticated understanding of how children are affected by their exposure to adult domestic violence” (Edleson, 1999a, p. 866). There has, however, been an effort in the research to identify factors which mediate the extent to which children are affected by exposure to domestic violence (Laing, 2000). The present research explores whether the mother-child dyadic relationship is a mediating factor for the children in this sample.
There has been a claim that for children who have been exposed to domestic violence, this experience impacts on each stage of their development in different ways (Laing, 2000). Furthermore, Jaffe, Wolfe, Wilson, and Zak (1986) have found that there are significant gender differences between girls and boys exposed to domestic violence. They describe findings in which 34% of boys and 20% of girls who are exposed to domestic violence warrant significant clinical intervention (Jaffe et al., 1986). Furthermore they illustrate that boys demonstrate a high level of externalising and internalising behaviour problems as well as deficits in social competence compared to boys from non-violent homes. Whereas, they illustrate that girls exposed to domestic violence are more likely to experience significant internalising behaviour problems related to anxiety and depression (Jaffe et al., 1986).

Researchers have also found evidence to support the view that some of the negative effects on children of being exposed to domestic violence are mediated by means of the deleterious effect of the violence on their mother (Jaffe, Sudermann & Reitzel, 1992). There is also the assumption that the development of the mother/child relationship may be compromised by exposure to domestic violence (Irwin & Wilkinson, 1997). As described earlier, there are only a few studies that include preschool aged children in their sample (Alessi & Hearn, 1984; Hughes, 1988), with some recent studies arguing for the need to assess the child’s attachment relationship when examining how these young children experience domestic violence (Zeanah, Danis, Hirshberg, Benoit, Miller & Heller, 1999).

Despite these claims, there have been no Australian studies and no known international studies that have examined the effects of domestic violence specifically on preschoolers and that include an examination of the two-way mother-child dyadic relationship within this context. There is also no information about differences between the preschool aged
children who enter refuges with their mothers as opposed to those children who remain with their mothers in the community after having left the domestic violence setting.

1.5. Selection of the sample from services provided by women’s refuges in Western Australia

In the past few years women’s refuges in Australia have incorporated services specifically aimed at addressing the needs of children (Kneale, 1999). Staff in these refuges have begun to acknowledge the need not only to assist the women and their children, but also to work on building positive mother/child relationships within the refuge setting (Rendell, 2000).

It is timely that children under the age of five are the focus of this research study. The aim of the study is to produce information about how children of this age are affected by domestic violence.

Women’s refuges in Western Australia provide safe and secure accommodation for women, with and without children, who are fleeing domestic violence. The women and their children who access accommodation from the women’s refuges do so in crisis, and are able to reside at the refuge for a period of up to three months. During this time staff at the refuge assist the women to access financial, legal and medical services. In addition, future accommodation is sought for these women. Once the women move out of the refuge, they are able to continue to access outreach services, which include support, counselling and emergency childcare. The refuges also provide a range of services that include ‘outreach’ support for women with and without children who have left a domestic violence setting and have moved into independent, safe accommodation within the community.
There is a large proportion of women who do not access women’s refuges for accommodation, but request assistance and support for themselves and their children from the outreach program provided by the refuges. Some of these women have not left the domestic violence setting. Others have removed themselves and their children either on their own, or with help from the police. These women can access outreach services from women’s refuges for an extended period of time while staff at the refuges link them into other community based services such as community mental health services and community child support services.

As described earlier, the women and their preschool children that participated in the present research were accessed from women’s refuges. Two different sample groups were selected. One group consisted of women with preschool aged children who had recently entered a women’s refuge seeking crisis accommodation (this sample group is referred to as the Refuge group). The second group consisted of women with preschool aged children who were accessing the outreach program provided by the refuge. The women and children in this second sample group were no longer residing in a domestic violence setting but had been exposed to domestic violence within the previous 12 months (this sample group is referred to as the Outreach group).

The purpose of selecting these two different sample groups is to explore what, if any, differences are found between the children and their mothers currently residing in crisis accommodation as opposed to the children and their mothers residing in the community. The main differentiating features of these two groups relate to the recency of their last exposure to domestic violence and the degree of support and type of services that they have access to, from the women’s refuges. Selecting these two groups and defining their differences came about because of an interest in determining whether there would be a need
to develop different types of interventions for the preschool aged children residing in crisis accommodation as opposed to the preschool children living in the community. Depending on the outcome of this research, the timing of the implementation of interventions for the children in crisis accommodation may be an important issue. It may be that the children and their mothers in the Refuge group would be better able to participate in an intervention program once they are settled in the community and are receiving community outreach services from their local women's refuge. However, the reverse may be true, with mothers and their children better able to participate in an intervention whilst residing in the safety of a women's refuge. Without knowing whether differences are present between these two groups of children and their mothers, it is difficult to inform practitioners on how best to proceed with developing timely and effective interventions.

Other factors affecting the selection of these 2-5 year old preschool children include the fact that the women and their children who had been subject to domestic violence were easily identifiable and accessible from women's refuges. The mothers of these preschool children had already identified that there was a need to stop the domestic violence in their home and take action to remove themselves from this context either by accessing crisis accommodation or by finding alternative accommodation in the community.

A review of the literature on the impact of domestic violence on children highlights the issue of sampling (Hughes, 1988; Wolf, Zak, Wilson & Jaffe, 1986). The argument is that only a small proportion of women experiencing domestic violence use the residential services therefore this group of children is not representative of children exposed to domestic violence (Office of the Status of Women, 1998, in Laing, 2000, p.4). This argument is acknowledged hence the inclusion of the Outreach sample group of women and their children in the current research. However, the current research was unable to include
preschool aged children and their mothers who were still living in a domestic violence setting, because of a lack of accessibility. Furthermore, this research was not designed to include preschool children who were involved in legal proceedings related to child sexual abuse allegations, because of the complications of research data being misused in criminal proceedings.

Because the present research is exploring how best to inform the process of building positive mother/child relationships within the refuge setting, a sound theoretical framework is needed. Attachment theory provides the framework to understand the experiences of these young children in the context of their primary relationships.

1.6. Domestic violence as trauma – the mother’s experience and its effect on her child

There is growing evidence that women who live with domestic violence may suffer from symptoms associated with Posttraumatic Stress Disorder (DSM-IV; American Psychiatric Association, 1994) such as anxiety, dissociative responses or depression (Carmen et al, 1984, in McAlister Groves & Zuckerman, 1997; Jones, Hughes & Understaller, 2001; Streeck-Fischer & van der Kolk, 2000). Hence many current mental health researchers and practitioners are conceptualising the psychological effects of domestic violence within a traumatic response framework (Dutton, 1992). So far research has provided evidence that higher rates (31%- 84%) of PTSD have been documented in battered women in refuges than in non-battered women (Astin, Lawrence & Foy, 1993; Gleason, 1993; Saunders, 1992; Woods & Campbell, 1993). The prevalence of PTSD that has been found in battered women in the general population has been less than would be expected, but still considered to be substantial (1.7% - 12.3%) (Kessler, McGonagle, Nelson, Hughes, Swartz & Blazer, 1994). So far the research indicates that the strongest predictor of PTSD in battered women has been the severity of current abuse (Astin et al., 1993). Herman's (1992) research
suggests that a complex or chronic traumatic stress response, where the person is subjected to ongoing control and terror, may be more adequate to explain the responses seen in battered women than a single traumatic event.

If a woman has been traumatized and meets the DSM-IV (American Psychiatric Association, 1994) diagnostic criteria for Posttraumatic Stress Disorder, research has shown that there are particular characteristics in her behaviour that significantly impact on her daily functioning (Gleason, 1993). It is thought that exposure to traumatic events is associated with the development of multiple forms of comorbid psychopathology, such as: substance misuse, depression, anxiety states, somatization, eating disorders, dissociative states, antisocial and aggressive behaviours, marital problems and multiple personality disorders co-occurring with PTSD (Turnbull, 1997).

Van der Kolk and his colleagues have described the presentation of women suffering PTSD (van der Kolk, 1996). He describes how women who suffer from anxiety disorders experience a combination of fear and avoidance, and has suggested that when fear predominates this leads primarily to internalizing symptoms, and when avoidance predominates then this leads primarily to externalizing symptoms (van der Kolk, 1996). Furthermore, in terms of a mother who may suffer from dissociative disorders, she is characterised by a dissociation of parts of the self that are usually integrated. Dissociation therefore, involves turning away, presumably not volitionally, from some aspect of the environment (van der Kolk, 1996). Dissociation clearly has an adaptive function, in that it allows a person to avoid becoming overwhelmed in the face of trauma (Perry, Pollard, Blakely, Baker & Vigilante, 1995). A mother who experiences dissociative disorders displays behaviours of heightened arousal as well as states of freezing, which, for her child, can constitute confusing and conflicting signals (Main & Hesse, 1990). These confusing
and conflicting signals are thought to be frightening for the child, in that when the mother is frozen she looks frightened, which in turn causes the child to feel frightened too (Main & Hesse, 1990).

Research indicates that one of the many manifestations of posttraumatic stress disorder is the desensitisation of women to violence within the home, and their subsequent difficulty in being emotionally available to their children (Augustyn, Parker, Groves & Zuckerman, 1995). It seems that the mothers’ threshold of acceptance of violence is lowered; the mothers are desensitised to violence exposure and this interferes with their judgement of what is appropriate for their children to see and hear. From Augustyn et al.’s (1995) research, they found that the mothers often did not know how to talk to their children about the violence, nor did they explain why the violence had occurred. Often the entire subject was avoided in families (McAlister Groves & Zuckerman, 1997). Furthermore, mothers with PTSD often fail to recognize the potentially traumatic effects on their infants or toddlers of witnessing family violence (Zeanah & Scheeringa, 1997), and often underestimate the violence their children have been exposed to (Leiberman, 2001).

Leiberman (1997) has reinforced the importance of the mother’s contextual requirements for adequate caregiving, in so far as she believes that the quality of care the mother is able to provide is greatly influenced by the quality of marital or other family support available to her in raising her child. Furthermore, the responsiveness of an effective caregiver not only protects the child from the effects of stressful situations by providing soothing when appropriate, it also enables the child to develop the necessary biological framework for dealing with future stress (Leiberman, 1997). If children are exposed to unmanageable stress (such as domestic violence), and if the caregiver does not assist, or is disabled and unable to take over the function of modulating the child’s arousal level, then the child will
be unable to organize and categorise his/her experiences in a coherent fashion (Streeck-Fischer & van der Kolk, 2000).

By linking a mother’s caregiving style to her child’s attachment and her child’s emotional and behavioural expressions, it follows that sensitive and emotionally available and responsive mothers have secure children with expressive emotional responses and adaptive behavioural responses. Rejecting and undependable mothers tend to have insecure children with maladaptive strategies for coping with their distress (Schore, 2001). These strategies by the child include attempts to minimise or maximise the expression of their attachment needs (Sroufe, 2000). One such circumstance that may block a mother’s capacity to provide adequate care for her infant or young child is considered to be linked to the mother’s unresolved experiences of trauma (Lyons-Ruth & Block, 1996).

1.7. Domestic violence as trauma – the child’s experience and its effect on the child’s attachment to the mother

McAlister Groves, (1996) found that children who witness violence are at risk of developing traumatic stress disorder, particularly if they are in close proximity to the violence; they have a close relationship to the victim or the perpetrator; or if they perceive themselves to be vulnerable to injury. Young children who live within the context of domestic violence fulfil all these criteria (McAlister Groves, 1996; Zeanah & Scheeringa, 1996).

The current thesis explores the view that depending upon the specific trauma experienced by a mother, her ways of responding to her child may determine if her child also experiences trauma, or is shielded from the experience. Stern’s (1994) view that the impact
of a trauma on a young child is not determined by the trauma itself but the caregiver’s ongoing ways of being with the child, is particularly relevant here, specifically since younger children are more dependent on their caregivers than older children are. In addition, there is the view in the literature that younger children are more affected by their mothers’ experience of trauma because often they have witnessed the traumatic event themselves (Zeanah & Scheeringa, 1996). This is because of the young child’s dependence on the mother and hence the presumed close proximity to the mother during the traumatic event.

In considering the child trauma literature, a distinction is made in the research between a child being the target of a single event that results in traumatization, and a child experiencing trauma due to indirect and/or chronic circumstances, such as domestic violence. In either instance however, there is evidence to support the view that the child’s experience of trauma can have serious and lasting effects on the child’s later developmental functioning (Perry, 1993). For example, in recent years there has been a shift in research in the area of childhood trauma from exploring how traumatic experiences affect development using descriptive, clinical or psychological formulations (eg: Eth & Pynoos, 1985; Terr, 1991), to research exploring the impact of traumatic life experiences on the development of the brain (eg: Perry, 1993; Streeck-Fischer & van der Kolk, 2000; Schore, 2001). Perry (1993) states:

Understanding the traumatized child requires recognition of a key principle of developmental neurobiology: the brain develops and organizes as a reflection of developmental experience, organizing in response to the pattern, intensity and nature of sensory and perceptual experience. The experience of the traumatized child is fear, threat, unpredictability, frustration, chaos, hunger, and pain. Therefore, the traumatized child’s template for brain organization is the stress response. (p. 2).
It is from this research on brain development that the impact of acute stress can be
differentiated from the impact of chronic stress upon a child. This is particularly useful in
differentiating between how acute, single episode traumas are experienced by a child as
opposed to how chronic traumas, such as domestic violence are experienced.

Determining how trauma is experienced by a child, particularly a child in their preschool
years, is a complex task. One way of capturing a glimpse of a child’s personal experience is
through an examination of the drawings a child produces. The analysis of children’s
drawings has been used for some time now to provide a means of understanding children’s
cognitive and emotional functioning, attitudes towards their families, and traumatic
occurrences in their environment (Lewis, Osofsky & Moore, 1997). Moore (1994), who has
carried out extensive studies of the drawings of traumatized children in a variety of settings,
notes that these drawings may be used as an effective means of communication of a child’s
mental state, quality and accessibility of memories, and likely degree of traumatization.
Drawings simultaneously express – graphically and symbolically – multiple levels of self-
experience and self-knowledge (Moore, 1994). It has been considered that the search for
solutions to address the issue of children exposed to violence must include an examination
of not only the context of the violent event, but also the child’s perception of that context
(Lewis, et al., 1997). The drawings produced by the children in this research offer the
opportunity to gain insight into the children’s perception of their environmental context.

Furthermore, there is now extensive evidence that trauma in early life impairs the
development of the capacities of maintaining interpersonal relationships, coping with
stressful stimuli, and regulating emotion (Schore, 2001). In addition, responses to trauma

18
are seen to be greatly influenced by the level of emotional, social, and cognitive
development of the individual at the time of the trauma, particularly in the case of children,
when development is not yet complete. In general it is thought that children at earlier stages
of development, such as preschoolers, will have more severe responses to traumatic
stressors (Carlson & Dalenberg, 2000).

The type of trauma and violence that young children may encounter from exposure to
domestic violence may be broad ranging from mild to severe, and may represent a single
incident or events of a sustained and repeated nature. In any event, the resulting impact has
been found to affect children on three levels: as an individual, in terms of their family
functioning, and in terms of the child’s interaction with the community (Herman, Mowder,
Moy & Sadler, 1995). Furthermore, the trauma research supports the view that a sensitive,
responsive and protective caregiver is the most effective shield for an infant exposed to
traumatic events (eg: Gaensbauer & Siegel, 1995; Schore, 2001; Streeck-Fischer & van der
Kolk, 2000). Studies have shown that having a caregiver who makes a deep commitment to
the welfare of a child is probably the greatest source of resilience for the child (Laucht,
Esser & Schmidt, 1997; Streeck-Fischer & van der Kolk, 2000), and that a child will
continue to cope with difficult environments and maintain reservoirs of resilience as long as
the parent is not pushed beyond their capacity to absorb and deflect stress from the child
(Garbarino, 1997).
1.8. The effect of the trauma of domestic violence on the dyadic relationship

In terms of the effect of trauma on the child’s primary relationships, attachment theory indicates that a child who has developed a secure attachment or emotional bond with a caregiver is expected to show a more positive adjustment to trauma than a child who has an insecure attachment (Carlson & Dalenberg, 2000). This section will provide an overview of the dyadic relationship as it is conceptualised in attachment theory. It will then explore the relevant research on domestic violence and its impact on the mother-child relationship.

One of the central themes in the field of healthy child development is the understanding of the dyadic relationship between an infant and his/her caregiver. Many researchers such as Bowlby, Mahler and Winnicott have argued that human infants can only function properly within a supportive caregiving relationship. Young human infants require a supportive caregiving relationship in order to regulate their own arousal or emotional states (Sroufe, 2000). In order to develop as competent and well-regulated infants they require sensitive, responsive caregivers (Ainsworth & Bell, 1974). Winnicott (1971) described what he believed to be the “good enough mother” as one who makes active adaptations to the infant’s needs (p.13). These adaptations start off as almost complete adaptations to the infant’s needs, and then gradually lessen according to the infant’s growing ability to account for failures of adaptation, and ability to tolerate the results of frustration (Winnicott, 1971).

The intricate dyadic patterns of behaviour between a caregiver and an infant form the foundations from which the infant develops healthy emotional self-regulation, and healthy patterns of behaviour in social interactions (Stern, 1985; Sroufe, 2000 & Tronick, 1989).
A parallel view that has taken up a prominent position in the area of infant mental health is the framework provided by Bowlby’s (1969/1982) attachment theory. Bowlby’s stages of attachment describe the progressive and more active role of the infant in the dyadic relationship with the caregiver.

Bowlby illustrated what he saw as the most fundamental aspect of attachment theory, that is its focus on the biological bases of attachment behaviour (Bowlby, 1958/1980). His formulation of attachment behaviour was that it had the predictable outcome of increasing proximity of the child to the attachment figure (usually the mother). Some of these attachment behaviours (smiling, vocalising) are signalling behaviours that alert the mother to the child’s interest in interaction, and thus serve to bring her to the child. Other behaviours (crying) are aversive, and bring the mother to the child to terminate them. Some (approaching and following) are active behaviours that move the child to the mother.

Attachment behaviours were described as being organized into an attachment behavioural system (Bowlby, 1980), the organization of which occurs within the individual in response to internal and external cues. Whereas attachment behaviour is seen as the behaviour that promotes proximity to the attachment figure, and the attachment behavioural system is described as the organization of attachment behaviours within the individual, an attachment bond refers to an affectional tie (Ainsworth, 1989).

As described by Cassidy (1999) “the child’s desired degree of proximity to the parent is thought to vary under differing circumstances” (p. 6). Bowlby (1969) wanted to understand which circumstances contributed to increasing the activation of the attachment system, and which circumstances contributed to the deactivation of the attachment system. He found that two different factors contributed to the activation of the attachment system, and both
conditions indicated danger or stress. One of the factors related to the internal conditions of the child, such as hunger, pain or fatigue, and the other related to the conditions of the child’s environment, such as the presence of a physical danger. The location and behaviour of the mother (eg; her absence, withdrawal or rejection of the child) was emphasised as particularly important in terms of the activation of the attachment system (Cassidy, 1999).

Bowlby (1969) also described how the attachment behavioural system functions in relation to other biologically based behavioural systems, incorporated in the infant’s development in the latter part of his first year. The behavioural systems that become prominent for the infant at this time are the exploratory system, the fear system and the infant’s sociable system.

The attachment and fear behavioural systems are intricately intertwined so that frightened infants increase their attachment behaviour. The presence or absence of the attachment figure is thought to play an important role in the activation of an infant’s fear system such that an available and accessible attachment figure makes the infant much less susceptible to fear (Morgan & Ricciuti, 1969; Sorce & Emde, 1981).

Understanding the functioning and the inter-play between the attachment, fear and exploratory behavioural systems in early child development, lead to Ainsworth and her colleagues developing a procedure called the “Strange Situation” (Ainsworth, Blehar, Waters & Wall, 1978.). The Strange Situation enabled researchers to understand the goals of the attachment system as being the regulation and maintenance of physical proximity to the parent, and the child’s cognitive appraisals of the attachment figure’s availability and responsiveness (Kobak, 1999).
The Strange Situation has evolved as an assessment tool, and remains the primary method of assessing the attachment strategies of infants, preschoolers and 6-year-olds today. The details of the Strange Situation procedure are provided in Appendix A3. In the present research, the Cassidy and Marvin 3- and 4-year-old attachment classification system (1992) was the assessment used to measure the current sample of preschool aged children’s attachment behaviour, using the Strange Situation procedure. This assessment is described in more detail in chapter 2. Brief summary descriptions of the preschool attachment categories are presented as follows:

Secure (B) – the child uses the parent as a secure base for exploration, and their reunion behaviour is smooth, open, warm and positive; Avoidant (A) – the child is detached, neutral nonchalance, but does not avoid interaction, avoids physical or psychological intimacy; Ambivalent/Dependent (C) – the child protests separation strongly and reunion is characterised by strong proximity-seeking, babyish and coy behaviour; Controlling/Disorganized (D) – characterised by controlling behaviour or behaviours associated with infant disorganization; and Insecure/other (IO) – mixtures of insecure indices that do not fit into any of the other groups (p. 297, Solomon & George, 1999).

1.9. Attachment security

The expanse of mother-infant research that has evolved from Bowlby’s and Ainsworth’s early work focused on the exploration of the nature of a secure, healthy attachment; the importance of this secure attachment to the normal development of the child; and how this mother-infant attachment develops. John Bowlby addressed these questions in his work in the 1960s where he described how a secure attachment relationship has far-reaching enabling and protective qualities that promote and enhance the child’s development.
Bowlby argued that a secure attachment between the mother and child served a general organizing function, providing the child with a secure and dependable base in circumstances of stress; fostering positive engagement with the child’s environment; predisposing the child to positive interpersonal relationships; and nurturing a positive sense of self and trust in others (Radke-Yarrow, McCann, DeMulder, Belmont, Martinez & Richardson, 1995, see also Bowlby, 1969 & 1973).

Infants who have developed a secure attachment to their caregivers expect that when a need arises, help will be available. If they become frightened or distressed then the caregiver will help them to regain equilibrium (Bowlby, 1969; Sroufe, 2000). Simply put, this attachment security supports the infant in confident exploration of the environment and ease of settling when distressed.

However, not all attachment relationships are secure. When the care from a caregiver is inconsistent, neglectful, chaotic or rejecting, or where the caregiver behaves in an incoherent or frightening manner towards the infant, then an anxious attachment relationship is likely to develop (Lyons- Ruth & Block, 1996; Main & Hesse, 1990). Longitudinal research has demonstrated that the patterns of anxious attachment in infancy lead to later developmental dysregulation and emotional disturbance (Sroufe, 2000). The assumption from the literature is that sensitive and dependable caregiving provides not only the foundations for secure attachment behaviour, but also healthy child development. One of the central questions that is being explored in this thesis is whether domestic violence significantly disrupts maternal caregiving, and if so, how does this affect not only the nature of the child’s attachment to his/her mother, but also the child’s developmental functioning.
1.10. Factors which allow for the provision of adequate caregiving

The goal of attachment behaviour is to seek protection by maintaining proximity to the attachment figure or parent in response to real or perceived stress or danger (Bowlby, 1969/1982). Although the actual behaviour may vary according to context and age, the goal of that behaviour remains the same across the lifespan (George & Solomon, 1999b). In addition to the attachment system that utilises child behaviours to maintain proximity to the parent in times of threat, Bowlby (1969) hypothesised a complementary system in the parent, which has been termed the “caregiving system” (p. 651, George & Solomon, 1999b). Both the attachment and the protective caregiving systems function together as a self-regulating dyadic system in order to keep the child safe from harm (Pianta, Marvin, Britner & Borowitz, 1996).

As Pianta et al. (1996) describe, the attachment and caregiving systems are each represented in two subsystems comprising patterns of behaviours, and internal representations held by each of the partners in the relationship. The representational subsystem includes “inferences, attitudes, goals, plans, feelings, and defences that organize and regulate the smooth functioning of the behavioural system(s)” (p. 240). It is understood that psychological processes such as cognition and emotion, and the behavioural processes involved in social interaction are directly linked to this regulated, smooth functioning caregiving system (Pianta et al., 1996), and one’s attachment experience in infancy is believed to form the core of the adult’s caregiving system (Sroufe & Fleeson, 1986). As such, a caregiver’s beliefs and expectations about their child are cognitions, which affect the caregiver’s behaviour toward the child (Bugenthal et al., 1989; Melson et al., 1993). The caregiver’s emotional state (eg: depression, anger, etc) and their representations of their emotional experience also affect their behaviour toward their child (Field, 1989). Likewise,
processes of social interaction such as sensitivity, synchrony and reciprocity are qualities that play important roles in the caregiving system (Ainsworth et al., 1978; Cohn & Tronick, 1989). Hence, the caregiving system is an organized system (Pianta et al., 1996), with parents and children integrating each other’s attachment styles in relationships into stable interaction patterns (Britner, Marvin & Pianta, in press).

George and Solomon (1999b) have asked the questions “What are the origins of the attachment figure’s sensitivity? What indeed causes parents to provide care for their infants – care that sometimes requires costly personal sacrifices on the part of the parents?” (p.651)

These questions have lead researchers into a new domain shifting the focus from understanding the needs of the infant to exploring the needs of the parent so that the parent may be able to meet the infant’s needs adequately. As George and Solomon (1999b) describe:

One unique contribution of our approach is noting the importance for the parent of making the shift away from the perspective of being protected (the goal of the child) to the perspective of providing protection (the goal of the parent). In our view, consideration of this shift is fundamental to understanding the meaning of, and motivation underlying, critical aspects of parental behaviour; cultural differences in providing care; the development of the infant’s attachment; and the mechanisms of intergenerational transmission. We propose that understanding this shift will also contribute to intervention with parents of children “at risk”. (p. 651)

By considering George and Solomon’s views the argument appears to be that if sensitive, dependable caregiving provides the foundations for healthy, secure attachment behaviour and general mental health in the child later in life, then any significant disruptions to
care-giving partnership by not placing other conflicting demands on the mother or drawing her attention away from the child. They also allowed the mother to take care of other competing needs, and they participated to some degree in caring directly for the child (p. 660).

George and Solomon’s argument illustrates the need to consider the father’s role in the mother’s caregiving behaviour. As such, when exploring the variables that enable the mother to be able to provide the caregiving that her child requires to grow in a healthy manner, the role of the mother’s partner/child’s father should be examined. Although this is not possible in the current study, it is a valuable consideration for future studies.

1.11. The disabled maternal caregiving system

In considering the factors that are thought to disable the maternal caregiving system, George and Solomon found specific characteristics such as abdicated caregiving to characterise mothers of disorganized and controlling children (George & Solomon, 1996; Solomon & George, 1996). They found that these mothers evaluated themselves as helpless to protect their children and often themselves, from threats and danger. These mothers linked their perceptions of their caregiving to feelings of inadequacy, helplessness, and losing control. The majority of these mothers stated that they lacked effective and appropriate resources to handle caregiving situations. As described by George and Solomon (1996), “in some instances, this was due to their perception of themselves as totally ineffective or unable to find or utilise resources. In other instances, they described attempts to provide care that they felt were blocked by other individuals or by the circumstances at hand” (p. 662).
Domestic violence is an example of a situation that not only has a profound impact on mothers but may also disable the maternal caregiving behavioural system. The present study explores if this is so and if it is so, how this disabled maternal caregiving may affect the child.

In the present research the Marvin and Britner maternal caregiving behaviour classification system (MB; Marvin & Britner, 1996) was the assessment procedure used to measure the maternal behaviour patterns in the preschool Strange Situation. This assessment is described in more detail in chapter 2 and Appendix A5. A brief summary description of the maternal behaviour patterns are presented as follows:

Secure – Beta – these parents display an easy, relaxed, intimate pattern of behaviour in the Strange Situation with their preschool children; Insecure – Alpha – these parents are avoidant or dismissing of attachment/caregiving interactions with their children; Gamma – these parents are overly-encouraging of their children’s attachment behaviour, their children’s intimacy with and dependency upon themselves; Delta – these parents are disorganised in their caregiving/attachment interactions with their children. They seem not to take the executive role with their children and accept the child’s control of the reunions; Iota – these parents do not display an easy, relaxed and intimate pattern of behaviour, but they display either a unique pattern not included among the Alpha, Gamma or Delta groups, or they display a combination of identified patterns in their behaviour (p. 3, Britner, 1998).
It is useful firstly to explore the central hypothesis that Main and Hesse (1990) developed. They presented the hypothesis that the traumatized adult’s continuing fear, together with his or her frightened or frightening behaviour, is the mechanism linking unresolved trauma in the mother to the infant’s display of disorganized/disoriented behaviour (D infant attachment classification category). This hypothesis was developed as a result of research (Main & Hesse, 1990) linking a mother’s past history of attachment related trauma either of her own childhood abuse or trauma from unresolved losses (measured by the Adult Attachment Interview), to the child’s attachment classification of D – disorganized/disoriented behaviour. This hypothesis is continually referred to throughout the attachment literature, and is referred to regularly in subsequent research (Lyons-Ruth & Block, 1996). However, this is a hypothesis referring to a broad link between the mother’s and her infant’s behaviour. This link however, does not occur in all cases. The reasons for when the link occurs and when it does not are as yet not fully understood, and have not been fully explored. In addition to this, the hypothesis does not necessarily address the issue of the mother’s behaviour due to current trauma, as measured in the present study. A more thorough review of the trauma literature illuminates a developing body of research that has begun to formulate links between the mother’s experience of domestic violence and what is known about the child’s experience of witnessing domestic violence (Zeanah & Scheeringa, 1996).

A number of researchers in the attachment field have investigated the effect of trauma on the child’s attachment relationship with their mother. Specifically, in terms of the effect of trauma on the dyadic relationship, studies conducted with maltreated infants and toddlers have documented that these infants and toddlers are significantly more likely than matched controls to have insecure attachment relationships with their primary caregivers.
(Crittenden, 1992; Schneider-Rosen, Braunwald, Carlson & Cicchetti, 1985). For example, Carlson et al., (1989) in studying maltreated infants (18 months old) found as high as 82% of these infants had an insecure attachment classification of combined ‘C – ambivalent’ & ‘D - disorganized/disoriented’, compared to 38% of infants in a demographically matched control group. This research was conducted on a small sample group (22 maltreated infants and 21 matched controls) using the traditional Strange Situation procedure (Ainsworth et al., 1978) and utilising the Main and Solomon (1990) scoring procedure for the disorganized/disorientated (D type) attachment classification. Cicchetti and Barnett (1991) examining preschool aged children conducted further research in the field of child maltreatment. In their study, Cicchetti and Barnett (1991) utilised the same definition of maltreatment used by Carlson et al. (1989) and examined a group of 65 maltreated preschoolers and 60 demographically matched non-maltreated preschoolers, in a comparison group. They used the Strange Situation with the Cassidy and Marvin 3- and 4-year-old attachment classification system (1989) scoring procedure. The attachment scores for 65 maltreated preschoolers were compared against the control sample of 60 non-maltreated preschoolers. Cicchetti and Barnett (1991) found that a greater proportion of maltreated preschoolers in each of the three age groups studied (30 months – 70.4%; 36 months – 79.5% & 48 months – 69.4%), were insecurely attached to their mothers compared to corresponding age groups of non-maltreated children (30 months – 35%; 36 months – 28.9% & 48 months – 30%). However, they found a far smaller percentage of the insecurely attached children were jointly classified ‘C - ambivalent’ & ‘D - disorganised/disoriented’ compared to the study by Carlson et al (1989), (30 months – 15.9%; 36 months – 27.3%; 48 months – 25%).
Cicchetti and Barnett (1991) raised the question of why their sample of maltreated preschool aged children had a far lower than expected combined ‘C’ and ‘D’ type of insecurely attached children. In reference to the high percentages of disorganized/disorientated patterns of attachment found in maltreated children over the first two years of life (Carlson et al., 1989; Lyons-Ruth, Repacholi, McLeod and Silva, 1991), Cicchetti and Barnett (1991) were surprised not to find similar results with preschool children. One of the explanations provided by Cicchetti and Barnett (1991) regarding their findings was related to the sensitivity of the Cassidy and Marvin 3- and 4-year-old attachment classification system (1989). Cicchetti and Barnett (1991) presented the argument that developmentally, preschoolers use a range of different attachment strategies to those used when they are infants. Furthermore, they argue that the Cassidy and Marvin (1989) preschool coding system has more conservative criteria than the Main and Solomon (1990) system for identifying type D attachments.

Furthermore, Cicchetti and Barnett (1991) posed the question of why it was that still almost a third of the maltreated children in their preschool sample produced a secure attachment score, as opposed to the finding by Carlson et al (1989) with 18 month old maltreated children, where only 13.7% produced a secure attachment score. They proposed the hypothesis that a maltreated child could manifest a secure attachment relationship with a caregiver because of other factors that may have protected the child. What specifically these factors are remains unanswered. This research however, indicates the need to continue to explore different sample groups of children exposed to traumatic life situations in terms of their attachment relationships.

The present study considers two different sample groups of preschoolers exposed to trauma in the form of domestic violence. The understanding of the trauma experience of these
preschoolers exposed to domestic violence, and the impact of this experience on the child's attachment relationship to the mother will provide valuable information. Not only will it assist in informing clinicians on how to develop effective interventions for this sample group, but it will also continue the examination of the experience of traumatized preschoolers in terms of their attachment relationships.

A number of researchers in the attachment field have investigated the mother's functioning and the effect of this on the child's attachment relationship with her. Lyons-Ruth and Block (1996) studied 45 low-income mothers and their 18-month-old infants exploring the interrelations among maternal childhood experiences of physical or sexual abuse, adult trauma-related symptoms, adult caregiving behaviour, and infant affect and attachment. The mothers were assessed using the Adult Attachment Interview (Main & Goldwyn, in press), and self-report measures including the Dissociative Experiences Scale (DES; Carlson & Putnam, 1993). The results from this research were discussed in relation to both Main and Hesse's (1990) concept of frightened or frightening behaviour, and the current trauma literature (Lyons-Ruth & Block, 1996). They found that the severity of trauma experienced by the mother was not related to secure versus insecure attachment in the infant. They also found that the self-reported violence or abuse in the mother's childhood did not predict whether the infant displayed a secure strategy or not. However, if insecure attachment was found, violence or abuse was significantly associated with the particular insecure attachment pattern displayed by the infant.

This research further highlights the lack of direct links, as originally hypothesised by Main and Hesse (1990), between the mother's past experience of trauma and her infant's current attachment status. Although Lyons-Ruth and Block's (1996) research does not dispute Main and Hesse's hypothesis, the results do not fully support it. It should be noted that this
research also raises the issue that 42% of the mothers, who had experienced childhood violence and abuse, had infants with a secure attachment. This finding corresponds with the unexplained, higher than expected proportion of secure attachments found in Cicchetti and Barnett’s (1991) sample of maltreated preschool aged children. Lyons-Ruth and Block (1996) suggest that this higher than expected proportion of infants with secure attachments may have been related to a robust process of recovery by the mothers, from their early trauma. Again this research illustrates the difficulty in formulating a specific understanding of what occurs between a mother’s functioning and the effect that it may have on her child’s functioning.

In a more recent study Zeanah, Danis, Hirshberg, Benoit, Miller and Heller (1999), explored whether mothers’ reports of distress and partner violence were associated with disorganized attachment status in their infants. They examined 72 low-income mothers and their 15 month old infants. The 72 mothers in this study were recruited from a prenatal clinic (n = 54) or a paediatric clinic (n = 18), and only 17 percent of the mothers were in a relationship at the time of the study (Zeanah et al., 1999). Specifically, the goal was to determine whether mothers’ reports of distress and partner violence were associated with infant-mother attachment classification and infant mastery motivation.

Zeanah et al. (1999) found that in this high-risk sample, the attachment classifications for the infants to their mothers were 37.5% secure (B); 4.2% avoidant (A); 1.4% resistant (C), and 56.9% disorganized (D). Despite the high proportion of D - disorganized/disoriented attachment classifications in the infants, they did not find a link between secure and insecure attachments and mastery motivation in the infant. They also found that there was no relationship between depressed mood in the mothers and their exposure to total partner violence, violence with ex-partners nor violence with current partners. They did find that
partner violence was associated with infant attachment in that infants whose mothers reported less serious partner violence were significantly more likely to be securely attached to their mothers.

Although Zeanah et al.’s (1999) research does not specifically focus on a sample of women seeking refuge from domestic violence, and focuses on infants and not preschoolers as does the present research, it is a closely related study that illustrates the need to explore the links between attachment and domestic violence with young children.

Some criticisms of Zeanah et al.’s (1999) research are that it presents a broad brushstroke review of the links between attachment and domestic violence, but does not provide a great deal of detailed information about how domestic violence may impinge on the mother-child attachment relationship. The authors of this research themselves urge caution about interpreting their findings (Zeanah et al., 1999). The outcome from this research illustrates that still very little is really known about the links between domestic violence, the mother-child attachment relationship, and the child’s later development.

Another group of researchers, Radke-Yarrow, McCann, DeMulder, Belmont, Martinez & Richardson (1995), conducted a longitudinal research study exploring the developmental outcomes that follow early secure and insecure attachment relationships. The goal of this research was to investigate the influence of attachment and stressor conditions in combination as they related to the child’s later problematic and adaptive development. The sample consisted of 39 unipolar depressed mothers, 24 bipolar mothers and 32 normal control mothers and their preschool aged children. The stressor conditions that were considered as part of the research were defined in terms of the relationships and conditions
within the family that impinged on the mother-child interaction. These included for
example, the mothers’ affective illness, marital discord, other harsh or abusive interactions
within the family, and recent losses of significant persons.

Radke-Yarrow et al. (1995) considered some of the questions that are central to the present
research study, which have also been raised by other researchers (Crittenden, 1988; Carlson
et al., 1989). They considered the “ways in which pervasive and enduring maternal
characteristics (competencies as well as impairments) may modify the nature of secure and
insecure attachment, and the role that attachment plays in the child’s developing patterns of
behaviour and sense of self.” (p. 249). Their research found that maternal psychopathology
in interaction with the attachment relationship was linked to later developmental outcomes
in the child, at 6 years and 9 years of age. In particular, they found that the early attachment
relationship, together with the ways in which the mother’s depression is expressed with her
child, and the child’s style of coping with the mother’s functioning, establish patterns of
behaviour that influence the child’s vulnerability to later problems, such as anxiety and
depressed affect.

The relevance of Radke-Yarrow et al.’s (1995) findings to the present research is that the
researchers were able to show a link between maternal functioning, the child’s attachment
to the mother, and the child’s functioning at a later age. However, they found that
attachment did not have a direct effect on clinical aspects of children’s functioning, but
played a role in interaction with maternal psychopathology. At the conclusion of the
research, the question of the direct effects of the mother’s diagnosis on her offspring, or of
indirect or interacting effects from stressful conditions, remained an unresolved issue.
Radke-Yarrow et al.’s (1995) research provides support for the need to continue to explore
the links between maternal functioning, child attachment and child functioning in alternative areas. The present research study sets out to accomplish this in the area of trauma relating to domestic violence.

1.13. Summary and research questions

Trauma literature describes the devastating effects of a significant trauma in the life of a young child. The position of Daniel Stern (1994), that the impact of a trauma on a young child is not determined by the trauma itself but by the caregiver’s ongoing way of being with the child, has provided the impetus for the current exploration of the mother-child relationship within the context of the trauma of domestic violence.

This study is based on the assumption that 2 to 5 year old children cannot be studied independently of the caregiving relationship. A review of the literature shows that there is a need to explore the influence of maternal functioning and its effect not only on the child’s attachment to the mother, but also on the child’s functioning (Radke-Yarrow et al., 1995).

The literature has also shown that unexpected findings have resulted from studies that have attempted to explore maternal functioning, in terms of the child’s attachment to the mother and the child’s functioning, under differing circumstances (Cicchetti & Barnett, 1991; Lyons-Ruth & Block, 1996).

This study aims to clarify both the experiences of the mother and the experiences of her preschool aged child in order to explore how the trauma of domestic violence impacts upon the mother’s functioning, and how this affects her caregiving relationship with her child. In
turn, it explores the experience of the preschool child in terms of the child’s attachment relationship to their mother. It also explores the child’s behavioural, emotional and developmental functioning, from both the child’s expressions through drawings, and in terms of the mother’s report of her child’s behaviour.

A number of research questions were developed from a review of the background literature. With each of the following research questions the two sample groups were considered separately in order to explore whether there were any significant differences between these two groups.

Firstly, the current research poses the question of whether the mothers of the preschool aged children in this study are traumatized following their experience of domestic violence. Embedded in this is the assumption is that both the women in the Refuge and Outreach sample groups are traumatized following their experiences of domestic violence, and that the women in the Refuge group are more likely to be more traumatized because of their need to access crisis accommodation.

The next research question explores whether the mother’s maternal caregiving capacity is related to her experience of trauma. The assumption is that the mothers who are categorised as having insecure strategies of maternal caregiving behaviour are more likely to exhibit higher levels of symptomatology associated with trauma.

The current research goes on to examine the mother’s maternal caregiving behaviour in relation to the child’s attachment behaviour in order to confirm the view presented by Britner et al. (in press) that maternal caregiving and child attachment behaviour are
complementary patterns of behavioural interaction. The research question considers the relationship between the mother’s maternal caregiving behaviour and the child’s attachment behaviour. The assumption is that the mothers with a secure pattern of maternal caregiving behaviour will have preschool children who exhibit a secure pattern of attachment behaviour. Similarly, the mothers with an insecure pattern of maternal caregiving behaviour will have preschool children who exhibit an insecure pattern of attachment behaviour. This assumption will confirm that a complementary pattern of maternal caregiving and child attachment behaviour will be found in these two sample groups.

The current research goes on to explore the question of whether the child’s security of attachment to the mother is related to the mother’s experience of trauma. The assumption is that the children with an insecure attachment relationship, will have mothers who are more traumatized than the mothers whose children have a secure attachment relationship.

The next aspect of the research explores the child’s emotional, behavioural and developmental functioning. The research question that is posed is whether the preschool children in the two sample groups are negatively affected by their exposure to domestic violence. The assumption is that the children in this research will have been negatively affected by exposure to domestic violence, and that their drawings will show evidence of this. Specifically, it was expected that the Emotional Indicators for the children in the sample groups would be higher than children in a control group, who had not been exposed to domestic violence. It was also expected that the children exposed to domestic violence would show a discrepancy in their developmental age score compared to their chronological age because developmental delays have been associated with trauma in young children (Moore, 1990). Furthermore, the assumption is that the mother’s reports of
her child’s behaviour will show evidence of behavioural disturbance following the child’s exposure to domestic violence, with the children in the Refuge group fairing worse than the children in the Outreach group.

The research question that follows considers whether the child’s behavioural functioning is related to the mother’s trauma. The assumption is that the child’s behavioural functioning will be negatively influenced by the mother’s experience of trauma.

The final research questions posed are firstly, whether the security of the child’s attachment behaviour is associated to the mother’s perception of her child’s behavioural problems. The assumption is that the preschool children with an insecure attachment classification will display more behavioural problems, as perceived by their mothers than the preschool children with a secure attachment classification. Secondly, gender differences between the preschool children are explored in terms of the child’s attachment to his/her mother, and the mother’s perception of her child’s behaviour. The assumption is that the child’s attachment relationship with his/her mother will influence the behavioural problems displayed by the child, and that these will differ between girls and boys.

The current research compares and explores the differences between the two groups of mothers and their children, aged 2 to 5 years of age, who have accessed women’s refuge services in Western Australia. A sample group of mothers and their children who access crisis accommodation from the women’s refuges is compared with a sample group of mothers and their children who reside in the community but access outreach support services from the same women’s refuges. The two sample groups were chosen to represent
groups that varied in terms of the recency of the last domestic violence episode and the type of support and services they accessed.

All of the mothers and their children who participated in the current research were assessed on site at a women’s refuge. A pilot study was conducted in order to design and test out specialised equipment needed to ensure that the Strange Situation procedure was adhered to according to the guidelines set out by Cassidy and Marvin (1992). This pilot study (see Appendix D) also enabled a process whereby the selection of appropriate measures of both the mothers and their children occurred. Chapter 2 describes and critiques the various measures used in the current research.
CHAPTER 2

2.1. Justification and discussion of the assessment instruments

In this chapter all the measures used in the current research will be presented and justified, including any specific limitations that have been found from other research studies. The psychometric properties of the testing instruments will also be included in this chapter.

Prior to beginning the assessment process of the present research, a pilot study was conducted. The purpose of the pilot study was twofold. Firstly, the goal was to try to elicit and resolve any problems with the project at a practical, political and legal level. This process focused upon clarifying what testing was needed and which assessment tools would be most appropriate, and why. The second aspect of the process was designed to predict and address any practical difficulties that could arise as part of the testing process.

The pilot study involved an initial survey of 13 women’s refuges in Western Australia to ascertain whether or not a sufficient number of children aged between 2 and 5 years old accessed services with their mothers. The second function of the pilot study was to assess mother-child dyads fitting the criteria for the research, in order to explore and address the practical issues involved in testing these dyads on site, at the refuges. Five dyads were partially assessed, and both specialised materials (i.e., a portable screen) and assessment instruments were selected for the main study (see Appendix D for a detailed description of the pilot study).
2.2. Assessment of the mother

The experiences of the mothers following episodes of domestic violence were examined from within the trauma framework. As described in chapter 1, many current mental health researchers are conceptualising the psychological effects of domestic violence within a traumatic response framework (Dutton, 1992). The women in the current research were assessed on trauma symptomatology, such as anxiety and dissociative experiences, associated with the Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition, DSM-IV; American Psychiatric Association, 1994) diagnosis of Posttraumatic Stress Disorder (PTSD). The women were also assessed on the number of severe domestic violence episodes they had experienced over the previous 12 months.

All the mothers in the current research were also interviewed using a simple background questionnaire in order to obtain demographic information and information about both their own experience and their children’s experience of witnessing domestic violence.

2.2.1. Interview – Background Questionnaire.

The background questionnaire was developed during the pilot study (see Appendix B3 & B4 for a copy of the questionnaire). The purpose of using an interview format was to record the mother’s responses about her own and her child’s experiences. From the pilot study, it was found that more information was elicited from the mothers when they were asked to tell their stories, compared to being asked to fill out a questionnaire. More detail about this process is provided in the procedure section of chapter 3.
Some examples of the descriptive data obtained from the mothers during the interviews are presented in the results in chapter 4 of this thesis. Examples of verbatim responses from the interviews are presented in Appendix E.

2.2.2. Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995).
The mothers were assessed for evidence of a DSM-IV diagnosis of PTSD using the Posttraumatic Stress Diagnostic scale (PDS; Foa, 1995). This scale provides information on two important aspects of a subject’s experience of trauma. It provides information on the level of the severity of the traumatic experience, and the level of impairment experienced by the subject due to trauma symptomatology. The PDS also provides a clinical diagnosis of PTSD for each subject as well as the number of symptoms experienced by each subject. In addition, a significant link has been found between scores on the PDS, and depression (Foa, 1995), with higher PDS scale scores associated with greater depression on the BDI (Beck Depression Inventory; Beck & Steer, 1987).

Description and psychometric properties
The Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995) was chosen as an aid to exploring how many of the women in this sample had actually been ‘traumatised’ by their experiences of domestic violence. The PDS is a 49-item self-report instrument designed to aid in the diagnosis of posttraumatic stress disorder. The structure and content of the PDS mirror the DSM-IV diagnostic criteria for Posttraumatic Stress Disorder.

The PDS was developed specifically to fill the need for a brief self-report instrument that would help provide a reliable diagnosis of PTSD (see Appendix B6 for a copy of the scoring profile). In addition, the PDS quantifies severity of PTSD symptoms, as mild,
moderate and severe. Furthermore, a symptom severity rating is provided in this assessment. The symptom severity rating is based upon the author’s clinical judgement and experience, and as such these scores should be used with caution, as explained by the author (Foa, 1995), because their reliability and validity have not yet been examined carefully using independent data.

The test-retest reliability of PTSD diagnoses obtained from the PDS was assessed using kappa, a chance – corrected measure of agreement between assessors (kappa = 0.74 indicating good agreement). Percent agreement between diagnoses for two administrations was 87.3%, indicating a high degree of reliability. The Pearson correlation coefficient between Symptom Severity Scores for two administrations was 0.83. A Cronbach alpha of 0.92 was calculated for the 17 items on which the Symptom Severity Score is based, indicating that the Symptom Severity Score is internally consistent (Foa, 1995).

The diagnostic performance of the PDS was assessed by comparing a PDS diagnosis with the SCID (Structured Clinical Interview for DSM-III-R; Williams et al., 1992). A kappa of 0.59 between the PDS and the SCID was obtained, with 79.4% agreement between the two measures. The sensitivity of the PDS was 82.0%, and its specificity was 76.7%. These results suggest that the PDS provide a good overall level of diagnostic agreement with the SCID. In addition, higher PDS scale scores were found to be associated with greater depression on the BDI (Beck Depression Inventory; Beck & Steer, 1987), higher state and trait anxiety on the STAI (Spielberger, 1983) and the Impact of Event Scale (Horowitz, 1992), supporting convergent validity (Foa, 1995).
2.2.3. The State-Trait Anxiety Inventory (STAI; Spielberger, 1983).

PTSD is an anxiety disorder, and therefore anxiety, both state and trait anxiety, were measured in the assessment process. The anxiety measure used in this research was the State-Trait Anxiety Inventory (STAI; Spielberger, 1983), which provided both state and trait anxiety scores.

The use of the Beck Depression Inventory (BDI; Beck & Steer, 1987) was considered for inclusion as part of the assessment battery because of the knowledge that depression is thought to be an associated disorder of risk with subjects with a PTSD diagnosis (DSM-IV; American Psychiatric Association, 1994). However, the BDI was omitted for three reasons. The BDI has a high correlation to both the PDS (Foa, 1995) and trait anxiety as measured by the STAI (Spielberger, 1983). Therefore, administering the BDI was considered to be redundant in this study. Secondly, the BDI was omitted due to time restrictions, and thirdly to minimise the number of assessment instruments given to the mothers in this sample.

Description and psychometric properties

The State-Trait Anxiety Inventory (STAI; Spielberger, 1983) comprises separate self-report scales for measuring state (S-Anxiety) and trait anxiety (T-Anxiety). Scores on the S-Anxiety scale increase in response to physical danger and psychological stress and decrease as a result of relaxation training; depressed patients generally have high scores on the T-Anxiety scale. Scores for both the S-Anxiety and the T-Anxiety scales can vary from a minimum score of 20 to a maximum score of 80, describing the subject’s presence of either state or trait anxiety. A score of approximately 36 is considered to be an average functioning level of anxiety for a working adult (Spielberger, 1983).
The test-retest correlations for the T-Anxiety scale were reasonably high (0.73 – 0.86 for 6 subgroups, with college students); however, they were relatively low for the S-Anxiety scale. Given the transitory nature of anxiety states, measures of internal consistency provide a more meaningful index of the reliability of S-Anxiety scales than test-retest correlations (Alpha coefficient median = 0.93 for S-Anxiety and alpha coefficient median = 0.90 for T-Anxiety). These reported correlations are considered acceptable, consequently the STAI is a widely used instrument in anxiety research (Speilberger, 1983).

In summary, stability, as measured by test-retest coefficients, is relatively high for the STAI T-Anxiety scale and low for the S-Anxiety scale, as would be expected for a measure assessing changes in anxiety resulting from situational stress. The internal consistency for both the S-Anxiety and T-Anxiety scales are quite high as measured by alpha coefficients and item-remainder correlations. Correlations of the STAI scales and other measures of personality have provided evidence of the convergent and divergent validity of the STAI (Speilberger, 1983).

2.2.4. The Dissociative Experiences Scale (DES: Carlson & Putnam, 1993).

As described in chapter 1, dissociative states are considered to be linked to a diagnosis of PTSD (Foaw, 1995), therefore the mothers in this sample were assessed for dissociative experiences using the Dissociative Experiences Scale (Carlson & Putnam, 1993; see Appendix B7). There is also research supporting dissociative experiences as being frequently exhibited by traumatized samples (Carlson & Putnam, 1993).

One of the major criticisms of this measure is related to the extent to which trauma survivors are aware of dissociative processes or experiences. Lyons-Ruth and Block (1996)
unexpectedly found a tendency toward non-report of symptoms among mothers of infants displaying disorganized attachment strategies, and among physically abused mothers. This issue is taken into consideration in the present study, and as recommended by researchers such as Lyons-Ruth and Block (1996), other measures such as measures of anxiety (STAI) and a diagnosis of PTSD (PDS), are used to supplement this assessment.

Description and psychometric properties

The Dissociative Experiences Scale (DES; Carlson & Putnam, 1993) is a brief, self-report measure of the frequency of dissociative experiences. The scale was conceptualised as a trait measure and it inquires about the frequency of dissociative experiences in the daily lives of subjects. The scale was developed to provide a reliable, valid, and convenient way to quantify dissociative experiences. It was designed to determine the contribution of dissociation to various psychiatric disorders and as a screening instrument for dissociative disorders or disorders with a significant dissociative component such as PTSD (Carlson & Putnam, 1993).

The results of reliability studies show that the DES has good test-retest reliability ($r = 0.79$ at 6-8 weeks, Pitblado & Sanders, 1991, and $r = 0.96$ at 4 weeks, Frischholz et al., 1990) and internal reliability ($r = 0.83$ – Bernstein & Putnam, 1986; $r = 0.93$ – Pitblado & Sanders, 1991).

Studies of the DES scores for different diagnostic groups and studies of the convergent and discriminate validity of the DES all provide evidence for the construct validity of the scale. Numerous studies indicate that the DES has good concurrent and criterion-related validity (ie: Frischholz et al., 1990; Steinberg, Rounsaville & Cicchetti, 1991).
A review of the studies using the DES indicates that a ‘clinical range’ from the raw scores would probably be a score between 20 – 30 (Carlson, Putnam, Ross, Torem, Coons, Dill, Loewenstein & Braun, 1993). Furthermore, Carlson et. al. (1993) identify a cut-off raw score point of 30, which indicates those subjects who would have a disorder with a considerable dissociative component, such as PTSD and Multiple Personality Disorder.

2.2.5. The Adapted Conflict Tactics Scale (ACTS; Mathias, et al., 1995).
All the mothers in this study were assessed on the 9-item Violence sub-scale of the Conflict Tactics Scale, now relabelled ACTS. This is in keeping with recent research in Australia exploring the prevalence of the incidents of domestic violence episodes described by sample populations (Indermaur, 2000; Mathias et al., 1995).

The Adapted Conflict Tactics Scale (ACTS) selects the 9-item Violence sub-scale of the Conflict Tactics Scale (Straus, 1979 in Mathias, et al., 1995) which is designed to assess the level of minor and severe physical violence experienced by families. This sub-scale was later extended to an 18-item scale, which additionally assessed verbal, sexual, and financial abuse (Mertin, 1992 in Mathias et al., 1995). The ACTS was, therefore, designed to provide an overall index of the level of violence experienced by women (Mathias et al., 1995). The original 9-item Violence sub-scale of the Conflict Tactics Scale was used in the current study to provide a baseline of the mother’s exposure and experience of violence within the family. Over a period of 12 months scores indicating the number of minor and severe violent episodes, can range from 0 to more than 180.
Description and psychometric properties

The Conflict Tactics Scales (CTS, Straus, M., 1979) were designed to measure the use of reasoning, verbal aggression, and violence within the family. The internal consistency reliability of the CTS was examined and found to have an adequate level of reliability ($r = 0.70 – 0.88$) (Straus, 1979). Bulcroft and Straus (1975) report evidence of concurrent validity in their study. The results of a number of analyses using the CTS measure of violence may be taken as providing at least some evidence of construct validity (Straus, 1979). However, there is no separate psychometric data available regarding the ACTS.

2.3. Assessment of the mother-child relationship

In the present study both the attachment behaviour of preschool age children, and the maternal caregiving behaviour of their mothers was measured.

2.3.1. Measurement of Attachment.

The measurement of a young child’s attachment classification is based on the Ainsworth & Wittig’s (1969) Strange Situation procedure for separations and reunions with infants. The Strange Situation (SS) is a laboratory procedure that was designed to capture the balance of attachment and exploratory behaviour under conditions of increasing though moderate stress (Ainsworth, et.al., 1978).

The Cassidy and Marvin 3- and 4-year-old attachment classification system (1992) was the assessment used to measure the preschool aged child’s attachment behaviour in the present research. The preschool Strange Situation procedure is a modification of Ainsworth and Wittig’s (1969) Strange Situation procedure developed for infants. Each mother and her
preschool aged child undergoes a series of episodes, consisting of play together, a separation and reunion, play together, and a second separation and reunion (see Appendix A3). This process is in keeping with the authors’ recommendations (Cassidy & Marvin, 1992).

The preschool Strange Situation procedure is video recorded and then coded by trained coders according to the major classification groups described in the Cassidy and Marvin (1992) procedure manual (see Appendix A2).

Intercoder agreement.
Coders are required to be trained in the Cassidy and Marvin preschool system (1992) and achieve a minimum of 75% intercoder agreement on a series of 20 test Strange Situation video tapes for certification. Certified coders assessed all the video taped preschool Strange Situations for the present research (see Appendix A6).

As part of the procedure of coding each of the preschool Strange Situation assessments, the certified coders present the following. First, a major classification group rating (A, B, C, D or IO, see Appendix A2). Then each assessment is given a subgroup classification (see Appendix A2). The assessment is based on 5 modalities including Proximity/Contact; Body Orientation; Speech; Gaze and Affect (see Appendix A9). There are two rating scales associated with the Cassidy and Marvin (1992) preschool Strange Situation: a 9-point scale of security of attachment and a 7-point scale of avoidance (see Appendix A4). Classifying a child within a particular subgroup, and assigning the child a rating on each of the scales, provides a more refined distinction of the allocated code within a given subgroup (Cassidy & Marvin, 1992).
Description and psychometric properties

The Cassidy and Marvin system (Cassidy & Marvin, 1992) for preschool age children provides guidelines for a “secure” group (B) and four “insecure” groups as follows: “avoidant” (A), “ambivalent/dependant” (C), “controlling/disorganised” (D), and “insecure/other” (IO) (Appendix A2).

Intercoder agreement.

The range of training reliability scores reported in published studies ranges between 75-92% (Solomon & George, 1999). There are no known published studies of short-term stability of intercoder agreement (Solomon & George, 1999).

There are a limited number of studies demonstrating the validity of the Cassidy and Marvin (1992) system classifications with respect to core theoretical predictions of attachment behaviour. In terms of coherence, a few studies report differences between secure and insecure children in other developmental domains. There is only one report addressing continuity of classification. Cassidy et al., 1990, reported 66% stability of A-B-C classification groups from infancy to age 3 for a sample of 53 children. Regarding cross-cultural studies, the Cassidy and Marvin (1992) system has been used to study attachment in the USA and England. There were no published data on preschooler attachment in other countries as of 1999 (Solomon & George, 1999). At present there are no known published studies on preschool attachment in Australia using the Cassidy and Marvin (1992) system.
2.3.2. Assessment of maternal caregiving behaviour.

The Marvin and Britner maternal caregiving behaviour classification system (MB; Marvin & Britner, 1996) was used with this sample. The MB is an observational measure that provides a system for classifying maternal behaviour patterns in the preschool Strange Situation, and complements the Cassidy and Marvin (1992) child system. As described by the authors, the Marvin and Britner (MB) maternal caregiving behaviour classification system was designed to measure parents’ patterns of behaviour in a separation-reunion procedure.

The preschool Strange Situation and the MB maternal caregiving behaviour classification systems correspond in the following pattern: Secure attachment behaviour in the child corresponds to Beta caregiving in the mother; Avoidant attachment to Alpha caregiving; Resistant/Ambivalent attachment to Gamma caregiving; Disorganised/Controlling attachment to Delta caregiving; and Insecure-Other attachment to Iota caregiving (see Appendix A5 for detailed description of each category). Brief summary descriptions of the maternal behaviour patterns are presented as follows:

Secure – Beta – these parents display an easy, relaxed, intimate pattern of behaviour in the Strange Situation with their preschool children; Insecure – Alpha – these parents are avoidant or dismissing of attachment/caregiving interactions with their children; Gamma – these parents are overly-encouraging of their children’s attachment behaviour, their children’s intimacy with and dependency upon themselves; Delta – these parents are disorganised in their caregiving/attachment interactions with their children. They seem not to take the executive role with their
children and accept the child’s control of the reunions; Iota – these parents do not display an easy, relaxed and intimate pattern of behaviour, but they display either a unique pattern not included among the Alpha, Gamma or Delta groups, or they display a combination of identified patterns in their behaviour (p.3, Britner, 1998).

There are 10 Parental Behaviour Scales which are rated as part of the assessment process, based on the parents’ behaviour and interactions with their children in the Strange Situation: Affection, Rejection, Overinvolving, Role-reversing, Neglect, Pressuring to achieve; Sensitivity and Maternal Delight; Negative Affect and Parental Support for Competent Exploration (Britner, 1998). This set of 10 scales were adopted in an attempt to tease apart the many characteristics that are often lumped together as good parenting (Britner, 1998).

Description and psychometric properties

The Marvin and Britner maternal caregiving behaviour classification system (MB; Marvin & Britner, 1996) is a relatively new assessment procedure. There are no known international studies that have reported research findings using this assessment. However, this assessment was selected because it specifically measures the observable behaviour of the mother interacting with her child. This assessment also provides an examination of the dyadic pattern of interaction between the mothers and their children for the purposes of this research.

In the development of the Marvin and Britner maternal caregiving behaviour classification system, inter-rater reliability of 86% was obtained for exact agreement on the 5-category system across risk and control samples (Britner, 1998). Furthermore, as described by
Britner (1998) here is a high level of concordance between maternal and child classifications (crosstabs Chi-Square, p<.00001). Predicted relationships between MB classifications and 10 rating scale dimensions of caregiving were confirmed by univariate ANOVAs. Cluster analyses confirmed that the MB system provided a parsimonious description of the rating scale patterns. Mothers classified as secure were rated as more sensitive, but also showed greater delight and were more supportive of their children’s exploration. Combinations of scales were useful in discriminating among the 4 insecure MB and child attachment classification patterns. Findings were consistent with established patterns of child classifications, especially with respect to preschool shifts to a goal-corrected, dyadic partnership (Britner, 1998).

2.4. Assessment of the child

The preschool children who participated in the current research were assessed using two measures. Drawings were obtained from each child and provided information on the child’s emotional expression and developmental functioning. In addition, the mother of each child was asked to complete the Child Behaviour Checklist (Achenbach, 1991, 1992), from which the child’s behavioural functioning was assessed.

2.4.1. Children’s Drawings.

Research has suggested that children exposed to domestic violence may be at risk of cognitive delays (Jaffe, Wolfe & Wilson, 1990). Human figure drawings have been used to assess cognitive functioning in children for many years (Harris, 1963).

Support for the use of drawings as the child’s expression of its experience, and as the assessment tool of choice for this study, can be gained from many quarters in the literature.
It has been argued that the search for solutions to address the issue of children exposed to violence must include an examination of not only the context of the violent event, but also of the child’s perception of that context (Lewis et al., 1997). The assessment of drawings produced by the children in this sample offers the opportunity to gain insight into the child’s perception of his/her environmental context.

Of all the types of drawings created by children, the human figure is the child’s favourite subject (Griffith, 1935) and is also closest to being the child’s inner self-portrait. According to Hammer (1980), “drawing a person can elicit a youngster’s feelings about the self, the ideal self, and perceptions of significant individuals in his or her life, such as a mother, father, sister, or brother. In addition, a child’s personality traits, attitudes, concerns, and interpersonal skills are represented through this vehicle” (p.11).

Hammer (1980) goes on to argue that the projective drawing process can be conceptualised as a process whereby the drawing page serves as a canvas upon which a child may project a glimpse of their inner world, their behavioural characteristics and their personality strengths and weaknesses. Specifically, projective drawings are useful in gathering information about an individual’s cognitive and developmental levels, degree of flexibility, and overall personality integration (Hammer, 1980).

Research studies have demonstrated that children progress through an ordered sequence of developmental stages in drawing, from as young as 2 years of age (Groves & Fried, 1991; Moore, 1990). In general, it is found that the scoring of the developmental items in Human Figure Drawings (hereafter, HFDs) such as those developed by Koppitz (1968) are universal indicators of a child’s developmental progress. Groves and Fried’s (1991)
research showed that despite their sample showing many differences in comparison to Koppitz’s original sample, their results were strikingly similar. The differences in the two samples included a 20 year difference in time frame, different nationality of subjects, use of different instructions to illicit drawings from young children, a relatively small sample compared to Koppitz’s earlier work, and children who were drawn from a subpopulation characterised as above-average income and cognitive ability. This research, along with many other research studies (eg. Harris, 1963; Moore, 1990; Yama, 1990) demonstrate the robust nature of the results obtained from the drawings of children universally.

Description and psychometric properties - Developmental Items on HFDs

Goodenough-Harris & Koppitz developed their standardised developmental scales as a means of estimating a child’s general intelligence using a non-verbal measure. The reliability of the Goodenough Draw a Man Test has been subject to many investigations. For example, McCarthy (1944) found reliability scores of 0.94 for correlations in self-scoring; 0.90 for correlations between different scorers; split-half reliability of 0.89 and test-retest reliability of 0.68. With the Koppitz scale (1967), an IQ range can be estimated by comparing the developmental score of the drawing to the child’s chronological age at the time the drawing was completed. Koppitz (1967) tested the hypothesis that expected and exceptional items on HFDs would reveal the level of a child’s mental maturity. Koppitz (1967) described how for each age level, product moment correlations were computed between HFD scores and the WISC and Standford-Binet IQ scores respectively. The level of significance of the correlations was determined by t test, with all nine correlations showing statistical significance at the .005 level (Koppitz, 1967). These results support the view presented by Koppitz (1967) that “expected and exceptional items on
HFDs are diagnostically significant and can be used as a quick and easy way of assessing a child’s mental maturity” (p.82).

The developmental progression in children’s HFDs is clearly illustrated by Koppitz (1968) and later, Groves and Fried (1991). For example, with advancing age the number of expected details increased and the number of exceptional details decreased, with girls showing superiority in this process until approximately age 7 years, at which time the sex difference was found to even out. In addition, Groves and Fried (1991) found evidence to support the extension of Koppitz’s scales, for 3 and 4 year old children. Groves and Fried’s (1991) conclusions from their research support the continued use of Koppitz’s developmental scoring procedure with children from different backgrounds.

Emotional Indicators on Children’s HFDs

Koppitz (1984) grouped emotional indicators into five categories of behaviours/emotions. These categories and their indicators are described as:

- impulsivity (poor integration of parts, gross asymmetry of limbs, transparencies, big figure, and omission of neck); insecurity/inadequacy (slanting figure, tiny head, hands cut off, monster or grotesque figure, and omission of arms, legs and feet; anxiety (shading of face, shading of body/limbs, shading of hands/neck, legs pressed together, omission of eyes, and clouds); shyness/timidity (tiny figure, short arms, arms clinging to body, and omission of nose or mouth); and anger/aggressive (crossed eyes, teeth, long arms, big hands, and genitals) (p.211, Hibbard & Hartman, 1990).
As described by Moore (1990) the analysis of particular features of a child’s drawings can be very helpful in understanding the child’s perceptions of the world. However, the most statistically useful information, and information that will be used in the present study, can be obtained from the total number of indicators present on a child’s Emotional Indicator Score (see Appendix C5 for a list of possible Emotional Indicators). Research has found that when the total number of emotional indicators is two or greater, the score is indicative of current emotional stress, and is highly predictive of later behavioural and learning difficulties at school (Moore, 1990).

Used as a screening measure, the Koppitz Emotional Indicators Scale yields some indication that a child may be having emotional difficulties, and it increases knowledge of the child’s current level of emotional functioning (Moore, 1990). Koppitz (1968) developed her Emotional Indicator Scale from the study of 1856 drawings collected from children. She describes that an Emotional Indicator is defined as a sign on HFDs which meet the following three criteria:

   It must have clinical validity, ie, it must be able to differentiate between HFDs of children with and without emotional problems; It must be unusual and occur frequently on the HFDs of normal children who are not psychiatric patients, ie, the sign must be present on less than 16% of the HFDs of children at a given age level; It must not be related to age and maturation, ie, its frequency of occurrence on HFDs must not increase solely on the basis of the children’s increase in age (p. 35).

In the present study, both Developmental items and Emotional Indicators were obtained for each child. Developmental items are related to a child’s age and maturation (see Appendix C6), while Emotional Indicators reflect the child’s anxieties, concerns and attitudes. Three
trained coders scored all the drawings, and discrepancies were resolved by conferencing. (see the results section, chapter 4).

Clinical Interpretations of HFDs

When analysing a child’s HFDs clinically, Koppitz (1968) illustrated the 3 aspects to this process that she felt laid the foundations for interpretation and understanding of the child’s expression. These were the questions of how the child drew his/her figure; whom did the child draw on his/her picture, and what was the child trying to say? Koppitz believed that how a child draws a figure, regardless of whom he/she draws, reflects his/her own self-concept. The person whom the child draws is the person who is of greatest concern and importance to the child at the time he/she is making the drawing; however, sometimes the child indicates that the figure in his/her HFD is a drawing of the examiner. In these cases Koppitz (1968) stated “children who draw the examiner are very lonely and unhappy youngsters who do not consider themselves worthy of concern and who have no-one at home with whom they are involved or preoccupied” (p 76-77). In the present study, a substantial proportion of the children who drew HFDs indicated that their initial human figure drawing was the examiner (see results section, chapter 4).

The final aspect of interpreting the child’s drawings is related to understanding what the child is trying to say. As Koppitz describes, it is important for any examiner to ask the child his/her meaning of their drawing to ensure that the examiner does not presume or infer interpretations incorrectly. In the present study, verbatim descriptions were obtained from some children during the process of obtaining the HFDs. Although this information could not be included in the scoring of the drawings because the scoring process was blind for the
scorers, this information provided rich descriptive data from the children. Verbatim responses are presented in brief in the results section, and in more detail in Appendix C6.

2.4.2. Assessment of the child by his/her mother.

The mother's perception of her child's behaviour and emotional problems was assessed. The Child Behaviour Checklist (hereafter CBCL, Achenbach, 1991 & 1992) profiles were used as they provide information about the child's current emotional and behavioural functioning, as well as valuable information about the mother's perception of her child.

There have been numerous concerns expressed throughout the research literature about difficulties in using the information provided by mothers in reporting the emotional and behavioural problems of their children within the context of research on domestic violence (eg. Jaffe et al., 1990). The mother completing the checklist could be seen as biased and reflecting more her emotional state, or as denying or not wanting to see the actual emotional and behavioural state of her child.

Reviewing the empirical literature that explores the impact of domestic violence on children raises common methodological issues. One issue involves the use of the CBCL (Achenbach, 1991 & 1992) as the standardised measurement tool used to assess behavioural and emotional functioning (Edleson, 1999a). The difficulties presented relating to the use of this assessment are, as stated earlier, that mothers have most frequently been the only source of data about the impact of domestic violence on their children and this may present a distorted view of the child's experience (Edleson, 1999a). Secondly, as a measure the CBCL measures general functioning of children and may not assess the unique impacts of the child's exposure to domestic violence (Edleson, 1999a).
While acknowledging these concerns and taking previous findings into consideration, it was still considered valuable for the mother to complete the CBCL. This decision was made because in most instances there were no other adults in the child’s life who were accessible at the time of testing, who had a comprehensive view of the child’s behaviour.

Description and psychometric properties

The CBCL/2-3 and CBCL/4-18 were chosen as assessment tools in this research because they provided the only external perception of the child’s behavioural/emotional problems at the time. The format, procedure and psychometric properties of the two instruments are similar. These two assessments were used to cover the age range of the children in the present research sample group. At the commencement of this study the more recent CBCL/1.5-5 (Achenbach & Rescorla, 2000) had not been developed.

The Child Behaviour Checklist/2-3 and 1992 Profile: The CBCL (Achenbach, 1992) is a 100-item checklist which is completed by parents, and designed to measure the emotional and behavioural problems of children aged 2 and 3 years. In addition to describing children in terms of specific items, the CBCL/2-3 is designed to identify syndromes of problems. Six statistically robust syndromes are identified. These are anxious/depressed, withdrawn, sleep problems, somatic problems, aggressive behaviour and destructive behaviour. Internalising and externalising groups of behavioural/emotional problems were identified. The internalising grouping is operationally defined as the sum of scores on the problem items of the anxious/depressed and withdrawn scales. The externalising grouping is defined as the sum of scores on the problem items of the aggressive behaviour and destructive behaviour scales.
Richman, Stevenson and Graham (1982) describe the test-retest reliability of the CBCL/2-3 scale scores as supported by a mean test-retest score of .85 for the problem scales over a period averaging 7.7 days. Inter-parent agreement was indicated by a mean correlation of .63 across the nine problem scales at age 2 and a mean correlation of .60 at age 3. Over a 1-year period, the stability correlations ranged from .50 - .78 with a mean correlation of .64. Content validity is supported by the ability of most CBCL items to discriminate significantly between demographically matched referred and non-referred children. Significant associations between the CBCL/2-3 and the Richman Behaviour Checklist in 3 studies (Richman, et al., 1982) support construct validity.

The CBCL/2-3 (1992 profile) provides scores for every problem item, as well as raw scores and T scores for the syndrome scales, internalising, externalising, and total problem score. Normal (a score of less than 60), borderline (a score between 60 – 63), and clinical ranges (a score of greater than 63) are also designated for the scale scores.

Child Behaviour Checklist/4-18 and 1991 Profile: The CBCL (Achenbach, 1991) is a 113-item checklist which is completed by parents, and as with the CBCL/2-3 is designed to measure the emotional and behavioural problems of children aged between 4 and 18 years. There are eight cross-informant syndromes which are scored on the CBCL/4-18 (1991 profile). These are withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behaviour, and aggressive behaviour.

The CBCL/4-18 (1991 profile), provides scores for every problem item, as well as raw scores and T scores for the syndrome scales, internalising, externalising, and total problem
score. Normal (score of less than 60), borderline (score of 60 – 63), and clinical ranges (score greater than 63) are also designated for the scale scores. When a child’s score falls within the clinical range, it means that the child’s behaviour closely resembles that of children treated in clinical/mental health settings (Mathias et al, 1995).

The test-retest reliability of the CBCL/4-18 scale scores was supported by a mean test-retest correlation of .89 for the problem scales over a 7-day period. Over 1- and 2-year periods, changes in mean scores did not exceed chance expectations, indicating the CBCL/4-18 is stable. Inter-parent agreement was indicated by a mean correlation of .87 across the four groups on the School scale, showing very good agreement between parents. Content validity is supported by the ability of nearly all CBCL items to discriminate significantly between demographically matched referred and non-referred children. Construct validity is supported by numerous correlates of CBCL/4-18 scales (Achenbach, 1991).

2.5. Summary

The instruments used in the current research to assess the mother’s level of trauma following her exposure to domestic violence are: the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995); the State-Trait Anxiety Inventory (STAI; Spielberger, 1983); the Dissociative Experiences Scale (DES; Carlson & Putnam, 1993), and the Adapted Conflict Tactics Scale (ACTS; Mathias, et al., 1995). The instruments used to assess the mother-child caregiving-attachment relationship are the Cassidy and Marvin 3- and 4-year-old attachment classification system (1992), and the Marvin and Britner maternal care-giving behaviour classification system (MB; Marvin & Britner, 1996). The instruments used to
assessed the children aged between 2 and 5 years of age in the current research are children’s drawings and the Child Behaviour Checklist (CBCL, Achenbach, 1991 & 1992 profiles).

The data obtained from these measures are compared for the two sample groups of mothers and their children. Those residing in a women’s refuge and those living in the community. This information and an analysis of the results are presented in the result section, chapter 4.

A description of the two sample groups follows in chapter 3, with a description of the procedure detailing the implementation of the assessment instruments.
CHAPTER 3
Methodology

This chapter describes the children and mothers who participated in the current research. A description of the two sample groups is presented. As the assessment instruments have already been described in detail in chapter 2, they will only be summarised here. Following this a description of the procedure, detailing the conduct of the assessment is presented.

3.1. Participants
The total number of participants consisted of 42 children and 32 mothers. Ten of the mothers had two children participating in the study. The participants were divided into two groups, Refuge and Outreach. The children and their mothers in the Refuge group were assessed soon after accessing crisis accommodation and whilst residing in a women’s refuge. The children and their mothers in the Outreach group were residing independently in accommodation within the community, and were assessed at the women’s refuge where they were accessing outreach support. None of the children and mothers were residing with the perpetrator of the domestic violence.

Demographic details were obtained from the mothers about their background and their experiences associated with their exposure to domestic violence. Details were also obtained from the mothers about what they knew of their child’s experience of exposure to domestic violence. This information was obtained on the mothers and their children for each of the two groups, Refuge and Outreach.
3.1.1. Refuge Group.

There were 21 children in this sample (11 girls and 10 boys), and 15 mothers. Of these mothers, 9 mothers had 1 child and 6 mothers had 2 children participating in the study. At the time of the assessment, all of the children were residing with their mothers in short-term crisis accommodation at one of three women’s refuges used in the present study.

The mothers in this sample group (n = 15) ranged in age from 21 years to 42 years (mean age = 31.65 years, SD= 6.25 years). The mothers had recently left their abusive partners and had been separated for a mean period of 7 days (SD = 0.6 days), with the most recent incident of domestic violence resulting in this separation. All but one of the Refuge mothers (95.2%) had experienced their most recent episode of domestic violence within the last 2 weeks. In the vast majority of cases (90.5%), the perpetrator of the domestic violence was the woman’s husband (52.4%) or de-facto partner (38.1%). The majority of these women reported that they had sought help from the refuge because they were scared for their own safety (81%), rather than being scared for the safety of their children (14.3%). Most (81%) had stayed in a refuge on at least one previous occasion, and nearly one-third (28.6%) had stayed in a refuge on more than three occasions over the past 2 years.

All but one of these mothers reported that their child had witnessed the domestic violence, and in the majority of cases (66.7%), the child had actually been the target of the violence. Surprisingly, in most cases (61.9%), no legal actions involving the child were pending, and Family and Children’s Services (FACS) had been involved with less than half (42.9%) of these families regarding the welfare and safety of the child. More than one quarter of the Refuge mothers (28.6%) reported having no social support, but the remainder were able to nominate at least one family member or friend as a source of support. One woman nominated the refuge staff as her main source of social support.
The Refuge children ranged in age between 2 and 5 years (mean age = 3.39 years, SD = 0.79 years). These children came from families of up to 8 siblings (mean number of siblings = 3) between the ages of 0 and 18 years.

For almost all of these children (90.5%), the perpetrator of the domestic violence was their biological father, and as previously mentioned, most of these children (95.2%) had witnessed episodes of domestic violence, and had been the target of the domestic violence.

3.1.2. Outreach Group

There were 21 children in this sample (9 girls and 12 boys), and 17 mothers. Of these mothers, 12 mothers had 1 child and 4 mothers had 2 children participating in the study. At the time of assessment, all of the children were residing with their mothers independently in accommodation within the community.

The mothers in this sample group (n = 17) ranged in age from 21 years to 43 years (mean age = 30.17 years, SD = 5.63 years). The mothers had been separated from their abusive partners for a mean period of 5 months (SD = 4.07 months). Almost half of the Outreach mothers had experienced episodes of domestic violence within the last 20 weeks (47.6%). As with the Refuge mothers, in the vast majority of cases (95.2%), the perpetrator of the domestic violence was the woman’s husband (52.4%) or de-facto (42.9%). Most of the Outreach women had contacted the refuge for counselling and support (43% of cases) within the last year. About half of these women (47.6%) had stayed in a refuge before, usually on only one previous occasion within the last 2 years.
As for the Refuge women, all but one of the Outreach mothers reported that their child had witnessed the domestic violence, and in the majority of cases (61.9%), the child had been the target. In just over half of these cases (57.9%), no legal actions involving the child were pending, however, in a substantial proportion (42.9%) access or custody disputes were current. FACS had been involved with only one third of these families. Over half of the Outreach mothers (57%) nominated family and friends as their source of support however, the remaining 43% nominated refuge staff as their main source of support. This finding illustrated the social isolation experienced by these women.

The children in the Outreach sample group ranged in age between 2 and 5 years (mean age = 3.05 years, SD = 0.95 years). These children came from families of up to 5 siblings (mean number of siblings = 3) between the ages of 0 and 18 years. For almost all of these children (95.2%), the perpetrator of the domestic violence was their biological father, and most (95.2%) had at least witnessed episodes of domestic violence, or had been the target of the violence (61.9%).

The descriptive data illustrate that whereas all the Refuge group mothers had accessed help from a women’s refuge, more than half of the Outreach group mothers had never accessed help from a refuge before. However, of the Outreach mothers who had not accessed help from a refuge before, a quarter (24%) of these women nominated a refuge staff member as their only social support. These data highlight the isolation experienced by women living in the community who attempt to extract themselves and their children from a domestically violent home without formal assistance. It also illustrates the lack of social networks available to women in violent homes, thus amplifying the secrecy associated with domestic violence.
A summary of the descriptive data obtained from interviewing the mothers using the background questionnaire is presented in Appendix B5. The two groups, Refuge and Outreach, were chosen to represent groups that varied in terms of the recency of the last domestic violence episode, and the type of support they received from women’s refuges. The data show that the average time period since the last episode of domestic violence for the Refuge group is 7 days (SD = 0.6 days), and for the Outreach group is 5 months (SD = 4.07 months). These data, and the fact that the women and their children in the Refuge group were residing in crisis accommodation at the time of testing, whilst the women and their children in the Outreach group were residing in the community, differentiate the two groups.

The number of violent episodes experienced by the mothers over the previous 12 months was measured in order to provide descriptive data about the mothers’ experiences of domestic violence. The Adapted Conflict Tactics Scale (ACTS) was used to measure the mothers reported experiences over the previous 12 months. The mothers’ average scores on the violence sub-scale of the Conflict Tactics Scale (ACTS) was 29.8 (SD = 33.8) for the Refuge group, and 14.2 (SD = 11.7) for the Outreach group. These scores compare with 2.5 (SD = 2.7) from a reported non-domestic violence control group used in a recent Australian domestic violence study (Mathias et al.,1995). These scores indicate that the average number of domestic violence episodes over the previous 12 months reported by the mothers, were considerably higher for the Refuge group compared to the Outreach group. However, these data need to be considered cautiously because of the average time spent with the perpetrator in the previous 12 months. The Outreach mothers reported the last episode of domestic violence as occurring on average, 5 months previously.
The violence sub-scale of the CTS (ACTS) provided information on the distribution of the number of incidents of domestic violence for each woman, against the level of the severity of each incident. The following table illustrates the means for each level of severity, for the Refuge and Outreach groups (See Figure 1).

Figure 1: Histogram of the violence sub-scale of the CTS (ACTS).

These data illustrate the range of experiences (mean scores) that were reported by the mothers from the two sample groups, Refuge group and Outreach group.
3.2. Measures

All of the mother-child dyads in the Refuge and Outreach groups were assessed using the following assessment tools.

3.2.1. Assessment of the mother.

All the mothers in the study participated in an interview, from which background and demographic information was obtained (see Appendix B3 and B4). The mothers also completed the following formal assessments:

The Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995)

The State-Trait Anxiety Inventory (STAI; Speilberger, 1983)

The Dissociative Experiences Scale (DES; Carlson & Putnam, 1993)

The Adapted Conflict Tactics Scale (ACTS; Mathias, et al., 1995).

3.2.2. Assessment of the mother-child caregiving-attachment relationship.

All of the mother-child dyads were assessed using observational measures of maternal caregiving behaviour and child attachment behaviour. The following measures were used in this study:

The Marvin and Britner maternal caregiving behaviour classification system (MB; Marvin & Britner, 1996)

The Cassidy and Marvin 3- and 4-year-old attachment classification system (1992).

All of the videotapes of the mother-child dyads were double coded for maternal behaviour. Initially, a trained and certified post-doctoral student coded the videotapes. They were all subsequently re-coded by one of the authors of the system. Inter-rater reliability was 92% at the 5-category (Alpha-Beta-Gamma-Delta-Iota) level. There was 81% exact agreement on rating scales and 91% within-1 point on the 9-point scales.
All of the 42 videotapes of the mother-child dyads were also coded for child attachment behaviour by a certified coder trained by the author, Robert Marvin. A second certified coder, also trained by Marvin, coded 13 (~30%) randomly selected tapes for the purposes of obtaining inter-rater reliability. Inter-rater reliability was 85% at the 5-category (A-B-C-D-I-O) level, with 77% exact agreement on rating scales, and 92% within-1 point on the 7- or 9-point scales (see Appendix A6).

3.2.3. Assessment of the child.

Two assessments were carried out on each child. Human Figure Drawings (HFDs) were obtained from each child, and the mother of each child completed the Child Behaviour Checklist (CBCL – parent version).

The Human Figure Drawings provide information about the child’s current developmental functioning (Developmental Items) and the child’s emotional expression (Emotional Indicators). Developmental Items are related to a child’s age and maturation, while Emotional Indicators reflect the child’s anxieties, concerns and attitudes. These results were compared against an Australian normative sample of children of similar ages. This normative sample was made up of preschool children who had not been exposed to domestic violence and were living in their home with both parents present. Three trained coders scored each of the drawings. Discrepancies were resolved by conferencing (these discrepancies occurred primarily with the children aged 2 – 2.11 years, because of a lack of available norms).

The CBCL provides information on a child’s competencies as well as a child’s behavioural/emotional problems. In the current study the mother completed either the CBCL 2-3 or the CBCL 4-18, depending on the age of the child.
3.2.4. Specialised equipment used in the assessment process.

A portable screen with one-way glass, through which the cameraperson could film the mother-child interaction, was constructed for the present study. This was required because all testing occurred on site in women’s refuges, and three refuges were used in this study. The screen was specifically designed to be portable, robust, unobtrusive, and yet fit one person (cameraperson) behind it in order to film the Strange Situation test. The right light differential was essential, so that the cameraperson could film the participants in the room without capturing her own reflection. Other equipment such as a portable video camera, microphones, lights, toys, paper and pencils, and a stopwatch were all required.

3.3. Procedure

The samples of children and their mothers used in this research were referred by staff from women’s refuges, as well as by staff working in outreach programs attached to these same refuges. The only two exclusion criteria from the testing process were children who were currently involved in criminal legal proceedings involving child abuse allegations, and Aboriginal children who were excluded due to cultural sensitivity with regard to the limitations and biases of the testing procedures. In all 13 children were excluded prior to the testing process due to the exclusion criteria.

All of the mothers and their children were assessed on site at one of three women’s refuges in Western Australia. All three of the refuges have residential units as well as a communal laundry; childcare room and one counselling room. The Strange Situation was conducted in the counselling room at each of the three refuges, where the portable screen was set up. The cameraperson filming the episodes of the Strange Situation from behind the portable screen inside the room.
The collection of data was divided into three sections. The data were collected within the same day for each of the mother-child dyads. Initially, the mothers of the children participating in the research were given information about the study (see Appendix B2). Each mother then signed a consent form (see Appendix B1). The mothers were then interviewed to obtain demographic and background information regarding their own exposure to domestic violence, as well as what they knew about their child’s exposure to domestic violence (see Appendix B3 and B4).

The interview lasted approximately 30 minutes and gave the mothers an opportunity to clarify any concerns they had about the assessment process. Each mother was told that at any point during the assessment process she could withdraw if she found the process too difficult. Whilst the mothers were being interviewed, their children were playing with other children in the child care facility within the refuge.

The Strange Situation assessment procedure was carried out first (see Appendix A3). Following this assessment, the mothers were found a quiet space in the refuge where they were asked to complete all of the self-report measures (PDS; STAI; DES and ACTS). All of the mothers were provided with any assistance they required so that they could complete the instruments. In some instances this assistance was with the content and the meaning of the language used in the instruments. Following the completion of the self-report measures, the mothers were asked to complete a CBCL (parent version) for each child participating in the study.

Drawings were then obtained from each child. Each child was asked to complete 3 HFDs (see Appendix C1). These included the drawing of a person, self and self with mother.
The entire assessment process took approximately two hours to complete. When the refuges were full, and when staff were occupied with other crises, the testing process sometimes took longer because mothers were required to attend to their children. A number of issues arose throughout the collection of data, which illustrate the difficulties with data collection on site at a women’s refuge. Some of these issues included the eviction of a resident using illicit drugs on site; destructive behaviour by an adolescent resident; staff shortages; overcrowding; and the homicide of a past resident from one refuge. Despite these difficulties, no women withdrew from the study. Finally, each of the women who participated in the study was debriefed and provided with any additional information they required regarding the research.

Following the completion of the data collection on mother-child dyads exposed to domestic violence, a separate set of data on children’s drawings was collected for comparison purposes. Because there is no local or international normative data available for preschool aged children’s drawings for the purposes of comparison, it seemed prudent to collect this separate set of data. This then allowed for a comparison in the children’s drawings between preschool aged children who had been exposed to domestic violence and preschool children of similar ages who had not been exposed to domestic violence and lived in two parent homes. The sample group was selected from a community-based mothers’ playgroup. The preschool children selected were similarly matched in gender and age groups. Consent was obtained from all of the mothers of these children, for participation in this study. None of the mothers approached declined to participate in the study.
CHAPTER 4

Results

Throughout this chapter, the results will be presented for the two sample groups, Refuge and Outreach. The results from these two groups will be compared to examine if any differences are found on any of the measures. In the event that differences between the two groups are not found, the data will be collapsed to form one sample group, and these results will be compared to available normative data and data from other relevant research.

Results pertaining to the mothers in this research will be examined in terms of whether they were traumatized following their experience of domestic violence. The results will then be examined in terms of whether the mother’s caregiving capacity is related to her experience of trauma. The dyadic relationship in terms of maternal caregiving and the child’s attachment to the mother is then examined, followed by an examination of the results of the child’s particular attachment category and whether this is related to the mother’s experience of trauma. The child’s emotional and developmental functioning will be examined using the child’s drawings, as well as information provided by the mothers on her child’s behaviour. Finally, the child’s emotional, developmental and behavioural functioning will be examined in relation to the mother’s trauma and the child’s attachment.

The following research questions were posed at the end of chapter 1:

- Are the mothers of the preschool aged children traumatized following their experience of domestic violence?
- Is the mother’s maternal caregiving capacity related to her experience of trauma?
• What is the relationship between the mother’s maternal caregiving behaviour and the child’s attachment behaviour?

• Is the child’s security of attachment to the mother related to the mother’s experience of trauma?

• Are the preschool aged children in this research negatively affected by their exposure to domestic violence?

• Is the child’s behavioural functioning related to the mother’s trauma?

• Is the security of the child’s attachment behaviour related to the mother’s perception of her child’s behavioural problems?

• Are gender differences found between the child’s attachment to his/her mother, and the mother’s perception of her child’s behaviour?

Each research question will be addressed in this chapter.

4.1. The mother’s trauma in relation to domestic violence

4.1.1. Research question 1: Are the mothers of the preschool aged children traumatized following their experience of domestic violence?

The assumption is that both the women in the Refuge and Outreach sample groups are traumatized following their experiences of domestic violence, and that the women in the Refuge group are more likely to be more traumatized because of their need to access crisis accommodation.

The mother’s trauma was measured using the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995); the State-Trait Anxiety Inventory (STAI; Speilberger, 1983), and the Dissociative Experiences Scale (DES; Carlson & Putnam, 1993).
The results from the PDS provided information on whether the mother's scores resulted in her receiving a Posttraumatic Stress Disorder diagnosis (PTSD; yes, no, or incomplete diagnosis). Results were also obtained for the symptom severity score and the level of impairment in functioning (see Appendix B6 for scoring information on the PDS). The results for the mothers in the Refuge group (n=15) showed that 66.7% of the mothers received a PTSD diagnosis, 23.8% did not, and 9.5% had an incomplete diagnosis because their symptoms did not meet the minimum onset requirement of one month or more. The results for the mothers in the Outreach group (n=17) showed that 85.7% of the mothers received a PTSD diagnosis and 14.3% did not. Chi-square analyses revealed no significant differences between the two groups of mothers in terms of the mothers with or without a PTSD diagnosis, $\chi^2(5) = 1.2$, p = .28.

The results of the symptom severity score and the level of impairment in functioning for the mothers in the two groups were similar. The symptom severity score provides a score that quantifies the severity of PTSD symptoms as mild (10 or less), moderate (11 - 20), moderate to severe (21 - 35) and severe (36+). These scores range from 0 to a maximum score of 51. The symptom severity rating has been based on the author's clinical judgement and experience and as such these scores should be used with caution because their reliability and validity have not been carefully tested using independent data (Foa, 1995). On this scale, Foa (1995) reports USA non-PTSD subjects as providing a mean score of 12.5 (SD = 10.5). The Refuge group mothers in the current research produced a mean score of 26.6 (SD= 12.5), and the Outreach mothers produced a mean score of 28.8 (SD= 11.2). The level of impairment scores range from no impairment, mild, moderate to severe impairment. The results revealed that 80.9% of the Refuge group mothers had a moderate to severe level of impairment in their functioning due to their reported PTSD symptoms. Of the Outreach group, 85.7% of the mothers had a moderate to severe level of
impairment in their functioning due to their reported PTSD symptoms. Although no significant difference was found between the two sample groups for symptom severity (t (30) = -0.45, p=.65), the results for symptom severity were considerably higher than the normative data.

The results from the STAI provided information on the mother’s State anxiety (S-anxiety) and on her Trait anxiety (T-anxiety). Scores for both the S-Anxiety and the T-Anxiety scales can vary from a minimum score of 20 to a maximum score of 80, describing the subject’s presence of either state or trait anxiety. A score of approximately 36 is considered to be an average functioning level of anxiety for a working adult (Speilberger, 1983). Normative USA data of working adults in a corresponding age group to the present sample, show mean scores for S-anxiety as 35.0 (SD =10.0), and T-anxiety as 35.7 (SD = 8.9); and depressive reaction in psychiatric patients show mean scores for S-anxiety as 54.4 (SD=13.0) and T-anxiety as 53.4 (SD=12.9) (Speilberger, 1983).

The mean score for S-anxiety for the Refuge group was 47.6 (SD=13.3), and for T-anxiety was 51.0 (SD=14.7). The mean score for S-anxiety for the Outreach group was 53.4 (SD=11.1), and for T-anxiety was 56.8 (SD=9.8). The mean scores from the current sample groups corresponded most closely to USA normative data of psychiatric (depressive reaction) subjects (Speilberger, 1983). However, no significant differences were found between the two sample groups for scores on either S-anxiety (t (30) =-1.3, p=.18), or T-anxiety (t (30) =-1.3, p=.19).

The results from the DES provided information about the number of dissociative experiences reported by the mothers. The mean range of scores for the general population is reported as 3.7 - 7.8, the clinical range is considered to be a score of 20 – 30, with scores
over 30 suggesting chronic PTSD or Dissociative Identity Disorder (Carlson & Putnam, 1993). The results from the Refuge group showed a mean score of 17.3 (SD=11.6), and for the Outreach group showed a mean score of 26.8 (SD=14.4).

Differences between the Refuge group and the Outreach group of mothers were revealed on the scores from the DES, with Outreach mothers producing significantly higher scores on this scale than the Refuge mothers (t (30) = -2.1, p = .04). More than a quarter (28.5%) of the Outreach group of mothers had scores on the DES that were above the 30-point cut-off level, indicating an extraordinarily high score on this scale.

In answer to research question 1, three quarters of all of the mothers tested received a diagnosis of PTSD as measured on the PDS. The average scores for the mothers on State and Trait anxiety and on the DES were considerably higher than reported normative data. In comparing the results from the mothers in the two groups, the mothers in the Outreach group had significantly higher scores for dissociative experiences than the mothers in the Refuge group. No other significant differences were found between the two groups. The expectation was that the mothers in the Refuge group, because of the recency of the last domestic violence episode would have significantly elevated scores on all of the measures associated with trauma, compared to the mothers in the Outreach group. This was not found.

4.2. The mother’s trauma and maternal caregiving

4.2.1. Research question 2: Is the mother’s maternal caregiving capacity related to her experience of trauma?

The assumption is that the mothers who are categorised as having insecure strategies of maternal caregiving behaviour are more likely to exhibit higher levels of
symptomatology associated with trauma.

Categorical data for the mothers were obtained using the Marvin and Britner maternal caregiving behaviour classification system (MB; Marvin & Britner, 1996). The data for the two sample groups are presented in Table 1, and provide information on the maternal caregiving behaviour category scored for each mother-child dyad. Therefore, although there were only 15 mothers in the Refuge group and 17 mothers in the Outreach group, the mothers with two children participating in the study produced two results for caregiving behaviour. The mother’s caregiving behaviour with each child was measured.

Table 1: Maternal caregiving behaviour classification results

<table>
<thead>
<tr>
<th>Caregiving category</th>
<th>Refuge mothers (N=21)</th>
<th>Outreach mothers (N=21)</th>
<th>Total (N=42)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>1 (5%)</td>
<td>2 (9.5%)</td>
<td>3 (7%)</td>
</tr>
<tr>
<td>Beta</td>
<td>15 (71%)</td>
<td>14 (66.7%)</td>
<td>29 (69%)</td>
</tr>
<tr>
<td>Gamma</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>Delta</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>Iota</td>
<td>3 (14%)</td>
<td>3 (14%)</td>
<td>6 (14%)</td>
</tr>
</tbody>
</table>

*Note. Alpha, Gamma, Delta and Iota all represent insecure caregiving categories; Beta represents a secure caregiving category (see chapter 1, p. 30).*

Of the Refuge mothers, 71% were classified as secure caregivers, and among the Outreach mothers, 66.7% were similarly classified. However, Chi-square analyses revealed no significant differences between the Refuge and Outreach groups with regard to the distribution of the mother’s overall caregiving categories, $\chi^2(5) = 3.03$, p=.69. There currently is no available normative data for comparison purposes.

In order to answer research question 2, the mother’s caregiving behaviour classification results were considered in relation to the results obtained about the mother’s trauma, for
each sample group. Initially, the maternal caregiving classification data for the Refuge group was compared with the mother's trauma data. The maternal caregiving data were considered in terms of the mothers with a secure maternal caregiving strategy versus all insecure categories (ie, Beta category versus all other categories). These two groups were then compared, using t-tests for independent samples, on the various measures of trauma - PTSD symptom severity score (PTSDSS), PTSD level of impairment (PTSDI), state anxiety score (STATE), trait anxiety score (TRAIT) and total dissociative experiences score (DISS). The results showed no significant differences on any of these measures between the Refuge mothers classified as secure caregivers, and those classified as insecure caregivers.

The maternal caregiving classification data for the Outreach group were compared with the mother's trauma data. Again, the maternal caregiving data were considered in terms of the mothers with a secure maternal caregiving strategy versus all insecure categories. These two groups were compared, using t-tests for independent samples, on the various measures of trauma - PTSD symptom severity score (PTSDSS), PTSD level of impairment (PTSDI), state anxiety score (STATE), trait anxiety score (TRAIT) and total dissociative experiences score (DISS). The results showed significant differences for PTSD symptom severity ($t(19)=3.40, p=.00$) and total dissociative experiences ($t(19)=2.77, p=.01$), with the mothers classified as insecure caregivers scoring higher on both measures, compared to secure caregivers.

Despite the overall prevalence of mothers with secure maternal caregiving classifications (69% in total), the question remains as to whether mothers classified with insecure maternal caregiving behaviour are more likely to exhibit higher levels of symptomatology associated with trauma. To this end the results from the Refuge and Outreach groups of mothers with
an insecure maternal caregiving classification were examined in order to explore the
differences between these two sample groups. The findings revealed that the Outreach
mothers with insecure maternal caregiving had significantly higher PTSD level of
impairment scores and PTSD symptom severity scores on the PDS, higher dissociative
experiences scores and higher Trait anxiety scores, compared to the Refuge mothers with
insecure maternal caregiving (see Table 2).

Table 2: Comparison of maternal functioning, insecure maternal caregiving and group
status

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Insecure caregivers - Refuge (n=6) Mean (SD)</th>
<th>Insecure caregivers - Outreach (n=7) Mean (SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD SS</td>
<td>18.8 (12.5)</td>
<td>38.43 (4.5)</td>
<td>3.63</td>
<td>.01*</td>
</tr>
<tr>
<td>PTSDI</td>
<td>3.30(2.3)</td>
<td>6.70(2.4)</td>
<td>2.54</td>
<td>.03*</td>
</tr>
<tr>
<td>STATE</td>
<td>41.33 (15.3)</td>
<td>54.0 (8.6)</td>
<td>1.88</td>
<td>.09</td>
</tr>
<tr>
<td>TRAIT</td>
<td>43.67 (13.6)</td>
<td>57.0 (7.4)</td>
<td>2.24</td>
<td>.04*</td>
</tr>
<tr>
<td>DISS</td>
<td>11.96 (7.9)</td>
<td>35.71 (13.5)</td>
<td>3.77</td>
<td>.00*</td>
</tr>
</tbody>
</table>

Note. PTSD symptom severity score = PTSDSS; PTSD level of impairment = PTSDI; state anxiety score = STATE; trait anxiety score = TRAIT; total dissociative experiences score = DISS.
*p < .05.

These findings relate to the comparison of groups with very small numbers of subjects, and
are highly exploratory. They illustrate that the Outreach mothers with insecure maternal
caregiving present with higher scores on all but one of the measures associated with trauma
symptomatology when compared against the Refuge mothers with insecure maternal
caregiving.

Finally, the maternal caregiving classifications were compared with the mother’s PTSD
diagnostic category. As there were no differences between the Refuge group and the
4.3. Maternal caregiving and child’s attachment

4.3.1. Research question 3: What is the relationship between the mother’s maternal caregiving behaviour and the child’s attachment behaviour?

The assumption is that the mothers with a secure pattern of maternal caregiving behaviour will have preschool children who exhibit a secure pattern of attachment behaviour. Similarly, the mothers with an insecure pattern of maternal caregiving behaviour will have preschool children who exhibit an insecure pattern of attachment behaviour. This assumption will confirm that a complementary pattern of maternal caregiving and child attachment behaviour will be found in these two sample groups.

The mothers and their preschool aged children were assessed using the Strange Situation. Categorical data for the mothers were obtained using the Marvin and Britner maternal caregiving behaviour classification system (MB; Marvin & Britner, 1996), and categorical data were obtained for the children using the Cassidy and Marvin 3- and 4-year-old attachment classification system (1992). Initially these data were examined to explore differences between the mother-child dyadic relationships in the Refuge group and the Outreach group. The data were then considered in relation to available normative data, and data obtained from other sample groups.

The maternal caregiving classification results are presented earlier in Table 1. As already stated, 71% of the Refuge mothers were classified as secure caregivers, and 66.7% of the Outreach mothers were classified as secure caregivers. However, Chi-square analyses revealed no significant differences between the Refuge and Outreach groups with regard to the distribution of the mother’s overall caregiving categories, $\chi^2 (5) = 3.03, p = .69$. There
are no known comparison data of maternal caregiving with a trauma or domestic violence sample.

Of the children’s attachment classifications, the majority of the children from both the Refuge and the Outreach groups were classified as securely attached. Among the Refuge children, 66.6% had secure attachments to their mothers, while 61% of Outreach children were securely attached (see Table 3). Chi-square analyses revealed no significant differences between Refuge and Outreach groups with regard to the distribution of attachment categories for these children, \( \chi^2(9) = 10.11, p = .34 \).

**Table 3: Attachment classification results**

<table>
<thead>
<tr>
<th>Attachment category</th>
<th>Refuge children (N=21)</th>
<th>Outreach children (N=21)</th>
<th>Total (N=42)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = Avoidant</td>
<td>2 (9.5%)</td>
<td>0</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>B = Secure</td>
<td>14 (66.6%)</td>
<td>13 (61.9%)</td>
<td>27 (64%)</td>
</tr>
<tr>
<td>C = Dependent</td>
<td>1 (4.8%)</td>
<td>2 (9.5%)</td>
<td>3 (7%)</td>
</tr>
<tr>
<td>D = Disorganised</td>
<td>0</td>
<td>1 (4.8%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>IO = Insecure Other</td>
<td>3 (14.3%)</td>
<td>5 (23.8%)</td>
<td>8 (19%)</td>
</tr>
</tbody>
</table>

In answer to research question 3, a strong relationship was found between the child’s attachment classification and the mother’s caregiving classification, where almost all of the mothers classified as secure caregivers had securely attached children (26/29 = 90%). Conversely, 12 of the 13 mothers classified as insecure caregivers had children classified as insecurely attached (92%) (see Table 4). A Chi-square analysis confirmed the significance of this relationship, \( \chi^2(1) = 26.26, p = .00 \).
Table 4: Mother’s caregiving behaviour and child’s attachment

<table>
<thead>
<tr>
<th>Child’s attachment category</th>
<th>Mother’s caregiving category</th>
<th>Secure</th>
<th>Insecure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secure</td>
<td>26</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Insecure</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29</td>
<td>13</td>
<td>42</td>
</tr>
</tbody>
</table>

The data from the children’s attachment classification scores were then considered in relation to normative data (see Table 5). The results showed that there was no significant difference between the children’s secure attachment scores in the current study and USA normative data, $\chi^2(1) = 0.39$, $p = 0.53$. This result was not expected. However, the Outreach group had significantly higher insecure D/IO classification scores compared to the USA normative data, $\chi^2(1) = 133.13$, $p = 0.00$.

Table 5: Comparison data on child attachment scores

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A = Avoidant</td>
<td>9.5%</td>
<td>0</td>
<td>5%</td>
<td>15%</td>
<td>4.2%</td>
</tr>
<tr>
<td>B = Secure</td>
<td>66.6%</td>
<td>61.9%</td>
<td>64%</td>
<td>62%</td>
<td>37.5%</td>
</tr>
<tr>
<td>C = Dependent</td>
<td>4.8%</td>
<td>9.5%</td>
<td>7%</td>
<td>9%</td>
<td>1.4%</td>
</tr>
<tr>
<td>D &amp; IO</td>
<td>14.3%</td>
<td>28.6%</td>
<td>21%</td>
<td>15%</td>
<td>56.9%</td>
</tr>
</tbody>
</table>

Note, D = Disorganized; IO = Insecure Other. D and IO scores in the present study are combined for comparison purposes against the USA normative data (van Ijzendoorn, et. al., 1999) and an 18 month old domestic violence sample group (Zeanah et. al., 1999).
In the present study, the two sample groups (Refuge and Outreach) had a higher than expected percentage of children with secure attachments to their mothers. When compared to research in the area of domestic violence with toddlers, Zeanah et. al., (1999) found that a little more than a third (37.5%) of their sample had secure attachments. In the present sample, almost two-thirds (64%) of the total sample group had secure attachments to their mothers. Of the insecure attachments found in Zeanah et. al.'s, (1999) sample, more than half (56.9%) of the sample had combined disorganised and insecure-other attachment classifications (D/IO) to their mothers accounting for 91% of the total insecure group. Interestingly, of the total number of children with an insecure attachment in the current research, 64% of these children had a D/IO insecure attachment classification. This illustrates a similar trend in the current research towards the disorganised/insecure-other attachments dominating the total insecure group.

However, the lower than expected total combined disorganised/insecure-other attachment scores for the preschool aged children in the present study (21%), compared to infants in the Zeanah et. al.'s (1999) study (56.9%), show some similarity to other attachment findings between traumatized infants and preschool aged children (eg. Carlson, et al., 1989, and Cicchetti & Barnett, 1991). From findings in the area of child maltreatment, it has been suggested that the proportion of disorganised attachment classifications may decrease significantly with increased age (Kaufman & Henrich, 2000).

In summary, almost two thirds of the children in the total sample group in the present study were found to have secure attachment relationships with their mothers. This higher than expected result did not follow research findings of a sample group of 18 month old toddlers (Zeanah et al., 1999) exposed to domestic violence. What the results do indicate is that with increased age the proportion of secure attachment classifications increased and the
proportion of the combined disorganised/insecure-other attachment classifications decreased. Despite this finding, the proportion of secure attachments for the children in the present study were still far higher than expected.

4.4. Maternal trauma and child’s attachment

4.4.1. Research question 4: Is the child’s security of attachment to the mother related to the mother’s experience of trauma?

The assumption is that the children with an insecure attachment relationship, will have mothers who are more traumatized than the mothers whose children have a secure attachment relationship.

The child’s attachment classification results were considered in relation to the results obtained about the mother’s trauma, for each sample group. Initially, the child’s attachment classification data for the Refuge group was compared with the mother’s trauma data. The child’s attachment data were considered in terms of the children with a secure attachment strategy versus all insecure categories (ie, B category versus all other categories). These two groups were then compared, using t-tests for independent samples, on the various measures of the mother’s trauma - PTSD symptom severity score (PTSDSS), PTSD level of impairment (PTSDI), State anxiety score (STATE), Trait Anxiety score (TRAIT) and Total Dissociative experiences score (DISS). The results showed no significant differences on any of these measures between the Refuge children classified with secure attachments to their mothers, and those classified as having an insecure attachment.

The child’s attachment classification data for the Outreach group were compared with the mother’s trauma data. Again, the child’s attachment data were considered in terms of the
children with a secure attachment strategy versus all insecure categories. These two groups were compared, using t-tests for independent samples, on the various measures of trauma - PTSD symptom severity score (PTSDSS), PTSD level of impairment (PTSDI), State anxiety score (STATE), Trait Anxiety score (TRAIT) and Total Dissociative experiences score (DISS). The results showed significant differences for PTSD symptom severity ($t(17.57) = 4.25, p = .00$) and Total Dissociative experiences ($t(19) = 2.21, p = .04$), with the children classified with an insecure attachment having mothers who scored higher on both measures, compared to the children classified with a secure attachment.

Finally, the child attachment classifications were compared with the mothers’ PTSD diagnostic category. As there were no differences between the Refuge group and the Outreach group for either child attachment ($\chi^2(9) = 10.11, p = .34$) or for PTSD diagnostic category ($\chi^2(5) = 1.2, p = .28$), the data for the two groups were combined. No significant difference was found between the children with secure and insecure attachment classification with respect to their mother’s PTSD diagnostic category ($\chi^2(2) = 0.21, p = .89$). Overall, 76.2% of the mothers (32/42) met the criteria for a diagnosis of PTSD. Twenty-one of these mothers had securely attached children, and 11 had insecurely attached children. Of the children with mothers with a diagnosis of PTSD, 7/11 (64%) were in the Outreach group compared to only 4/11 (36%) of the Refuge children with mothers with a diagnosis of PTSD. Although these percentages relate to very small numbers it raises further questions about the vulnerability of the preschool aged children exposed to domestic violence who live in the community. Furthermore, these results raise concern for those young children whose mothers do not access any support or assistance where there has been domestic violence.
In answer to research question 4, the results showed that the Outreach children who were classified as having an insecure attachment had mothers who scored higher on the DES and had higher symptom severity scores on the PDS compared to the children with a secure attachment to their mothers. However, with the Refuge children, no association was found between the child’s attachment classification and the mother’s scores on the measures associated with trauma. Furthermore, no association was found between the child’s attachment classification and the mother’s PTSD diagnosis.

4.5. The child’s functioning in relation to domestic violence

4.5.1. Research question 5a: Are the preschool aged children in this research negatively affected by their exposure to domestic violence?
The first assumption is that the children in this research will have been negatively affected by exposure to domestic violence, and that their drawings will show evidence of this. Specifically, it was expected that the Emotional Indicators for the children in the sample groups would be higher than children in a control group, who had not been exposed to domestic violence. It was also expected that the children exposed to domestic violence would show a discrepancy in their developmental age score compared to their chronological age because developmental delays have been associated with trauma in young children (Moore, 1990).

Human figure drawings (HFDs) were obtained from each child for the purposes of the current research. Three drawings were scored for each child. These drawings were a drawing of a person, a drawing of self, and a drawing of self and mother. For each of these drawings a score for the number of Emotional Indicators (EIs) was obtained. This score represents the degree of distress expressed by the child in each of his/her drawings.
second score was obtained for each drawing. This score provided a developmental age equivalent for each child using the Goodenough scoring procedure (1926). A comparison was then made between each child’s developmental age and his/her chronological age in order to determine if there was a difference between these two scores.

Descriptive data – Refuge group

Obtaining drawings from very young children who recently experienced domestic violence between their caregivers, and who had recently been disrupted by their move into crisis accommodation, required considerable sensitivity and care. Nearly all of the preschool aged children in the Refuge group required encouragement from their mothers to go with a stranger (the examiner) to a quiet area in the refuge, and draw a few pictures. Some of these children were difficult to engage, and yet others were overly compliant and actively sought intimacy from any available adult. Yet, all of these children managed to draw some type of drawing as part of the assessment process.

Of the 21 children in the Refuge group, only two children were unable to draw a picture of a person. The first child, a girl aged 3 years and 1 month, stated “No, I don’t want to…I can’t…..”. After a few minutes, this child drew a partial figure and then scribbled heavily over the figure, stating “that’s me….it’s a ghost…”. The second child, also a girl, aged 3 years 9 months drew a “Lion with teeth” when asked to draw a person. Neither of these drawings could be scored, but illustrated what was foremost in each child’s mind. Both of these children were able to draw a drawing of ‘self’, and ‘self and mother’. All of the other children in this group produced three drawings that were able to be scored.

Reviewing the data obtained from the children’s drawings it is evident that the number of Emotional Indicators present in all the drawings were particularly high (scores above 2 are
considered to indicate current emotional stress, Moore, 1990). Specifically, the average number of EIs on the ‘person’ drawing for this group of children was 4 EIs with a range from 1 to 8.5 EIs, compared to an average of 2.5 EIs for the non-domestic violence control group. On the ‘self’ drawings the average number of EIs were 5 EIs with a range from 3 to 8 EIs (see Appendix C2 and C3), compared to an average of 2.6 EIs for the non-domestic violence control group.

In the Refuge group only one of these children drew a picture of a sibling when asked to draw a ‘person’ in their first drawing, and 7/19 (37%) of the children drew a picture of the examiner as their ‘person’ drawing. This finding can be interpreted as representing a group of children who are both lonely and unhappy. For example, Koppitz (1968) stated “children who draw the examiner are very lonely and unhappy youngsters who do not consider themselves worthy of concern and who have no-one at home with whom they are involved or preoccupied” (pp. 76-77). Only one child in the Refuge group drew a picture of his father as the ‘person’.

With regards to the comparison between the children’s developmental age score from their drawings, versus their chronological age, the findings did not produce the expected results. The results showed that there was no difference between the developmental age scores from the children’s drawings and their chronological age. The assumption was that the children exposed to domestic violence would show a discrepancy in their developmental age score compared to their chronological age because developmental delays have been associated with trauma in young children (Moore, 1990).
Examples of some of the drawings obtained from children and their verbatim responses are presented in Appendix C6.

Children’s drawings – Refuge versus Outreach groups

A series of analyses were carried out to examine whether there were any significant differences between the scores on all three drawings for each child, between the children in the Refuge group and the children in the Outreach group. No statistically significant differences were found on any of the scores ('Person' Emotional Indicators; 'Person' developmental age score; 'Self' Emotional Indicators; 'Self' developmental age score, and developmental/chronological age discrepancy score).

The scores obtained from the HFDs for the children in both the Refuge and Outreach groups were then combined (DV group) and compared against a control group (Controls) of Australian children of similar ages who had not been exposed to any domestic violence (see Table 6). Before considering these data it should be noted that three children had data missing from their drawings, and all the children under the age of 3 years were excluded from this analysis so as to reduce the average age discrepancy between the ‘DV group’ and the ‘Control group’. This resulted in the numbers of children in the sample group being reduced (n=29).
Table 6: Comparison of DV group with Control group.

<table>
<thead>
<tr>
<th>Drawings</th>
<th>DV (n=29) Mean (SD)</th>
<th>Controls (N=13) Mean (SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Person' EIs</td>
<td>4.11 (1.43)</td>
<td>2.65 (1.46)</td>
<td>2.97</td>
<td>.00**</td>
</tr>
<tr>
<td>'Person' developmental Age score (yrs)</td>
<td>4.33 (0.88)</td>
<td>5.16 (1.29)</td>
<td>2.08</td>
<td>.05*</td>
</tr>
<tr>
<td>Age discrepancy score</td>
<td>-0.77 (.86)</td>
<td>-0.91 (.94)</td>
<td>0.48</td>
<td>.63</td>
</tr>
<tr>
<td>'Self' EIs</td>
<td>4.53 (1.53)</td>
<td>2.69 (1.33)</td>
<td>3.95</td>
<td>.00**</td>
</tr>
<tr>
<td>'Self' developmental Age score (yrs)</td>
<td>4.28 (0.85)</td>
<td>5.01 (0.82)</td>
<td>2.63</td>
<td>.01*</td>
</tr>
</tbody>
</table>

Note. 'Person' = Human Figure drawing; EIs = Emotional Indicators; 'Self' = Self drawing.
**p < .01; *p < .05.

The children in the control group (Controls) were older (on average) than the children in the domestic violence (DV) group. The mean age of the Control group was 4.2 years (SD=.66) versus 3.7 years (SD=.62) for the DV group. Despite this age difference there was a significant difference between the two groups with the DV group displaying significantly more Emotional Indicators on both their ‘Person’ drawings and their ‘Self’ drawings. This can be interpreted as the DV group of children expressing more emotional stress in their drawings than the Control group. A significant difference was also found between the DV group and the Control group on their developmental score for both their ‘Person’ and their ‘Self’ drawings. These scores however, need to be considered cautiously because on average the Control Group was older by 7 months, a significant age difference for children so young. Even so, the results may indicate that the experience of the DV group has impacted on their development, compared to children from a non-domestic
violence population. There was no significant difference between the two groups with regard to the discrepancy between developmental age and chronological age (see Table 6).

In answer to research question 5a, the children who were exposed to domestic violence expressed significantly more emotional stress (EIs) in their drawings, compared to children who had not been exposed to domestic violence. In addition, there was some indication that the experience of domestic violence may have delayed the developmental functioning of the children exposed to domestic violence, compared to those children who had not been exposed to domestic violence. However, these results need to be considered cautiously.

4.5.2. Research question 5b: Are the preschool aged children in this research negatively affected by their exposure to domestic violence?

The second assumption is that the mother’s reports of her child’s behaviour will show evidence of behavioural disturbance following the child’s exposure to domestic violence, with the children in the Refuge group fairing worse than the children in the Outreach group.

The children in the Refuge group and the Outreach group were examined on results obtained from the mother’s report of child behaviour problems on the Child Behaviour Checklist (CBCL; Achenbach, 1991 & 1992) parent version. The overall scores for Internalising, Externalising and Total behaviour problems were considered from the perspective of clinical range cut-off scores on these scales (see Table 7).

The results obtained from the present study were compared with results obtained from an Australian study of children aged 6 – 12 years of age exposed to domestic violence (Mathias et al., 1995). No other Australian comparison data was available for preschool aged children exposed to domestic violence. These data from Mathias, et.al.’s, (1995) study
can be considered for comparison purposes as they are scored with adjustments made for the different age groups. The results showed that the CBCL Internalising, Externalising and Total problem behaviour scores were slightly higher for the present sample group compared to the older Australian DV sample group (see Table 7). Overall, the Outreach sample of children faired worse on the CBCL Externalising and Total problem scores compared with both the Refuge group of children and an older sample of children exposed to domestic violence. The Refuge sample of children faired worse on the CBCL Internalising behaviour score compared with both the Outreach group of children and an older sample of children exposed to domestic violence.

Table 7: Child behaviour problems – data from the CBCL

<table>
<thead>
<tr>
<th>CBCL scale</th>
<th>Refuge group (n=21)</th>
<th>Outreach group (n=21)</th>
<th>Total (n=42)</th>
<th>Australian DV sample (6-12yrs) (n=79)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* clinical</td>
<td>* clinical</td>
<td>* clinical</td>
<td>* clinical</td>
</tr>
<tr>
<td>Total Internalising</td>
<td>71% 57%</td>
<td>57% 48%</td>
<td>62% 52%</td>
<td>61% 47%</td>
</tr>
<tr>
<td>Total Externalising</td>
<td>52% 24%</td>
<td>71% 52%</td>
<td>62% 38%</td>
<td>52% 37%</td>
</tr>
<tr>
<td>Total Behaviour Problems</td>
<td>67% 43%</td>
<td>81% 67%</td>
<td>74% 55%</td>
<td>63% 45%</td>
</tr>
</tbody>
</table>

Note. * = percentages for combined borderline and clinical scores (with borderline scores being in the range of 60 – 63).

Of the sample groups, the data showed that large numbers (43% - 67%) of children fell within the clinical range on the CBCL and would be regarded as having problems that require treatment. When those children with borderline levels of problems were added to
this group, between 52% and 81% of the children would require some form of treatment or close monitoring. Only 26% of the total children in this sample would be regarded as functioning within the normal limits of behaviour.

The data from the CBCL were considered in terms of any differences between the children in the Refuge group and children in the Outreach group. The findings showed that the Outreach group of children had significantly higher externalising behaviour problems compared to the children in the Refuge group, (Refuge) $M=58.14$, $SD=9.85$; (Outreach) $M=64.95$, $SD=12.04$; $t(40) = 2.00$, $p = .05$. No other differences were found.

In answer to research question 5b, the results showed that the CBCL Internalising, Externalising and Total problem behaviour scores were particularly high for the children in the current research, and were also slightly higher for the present sample group compared to the older Australian DV sample group. The results from CBCL also showed that the mothers in the Refuge group perceived their children as being more contained and as having less behavioural problems compared to the mothers’ perception of their children in the Outreach group. The Outreach group of children had significantly higher total externalising behaviour problems and total problem behaviour scores on the CBCL. These results were contrary to expectations. Given the recency of the last domestic violence episode, and the disruption for the children of entering crisis accommodation, it was expected that the Refuge children would display more behavioural problems that the Outreach group of children.
4.6. The mother’s trauma and child’s functioning

4.6.1. Research question 6: Is the child’s behavioural functioning related to the mother’s trauma?

The assumption is that the child’s behavioural functioning will be negatively influenced by the mother’s experience of trauma. The mother’s functioning was considered in relation to her child’s scores on the CBCL, with the focus being to explore whether the mother’s functioning on trauma and anxiety measures influenced whether her child obtained scores in the clinical range on the CBCL.

Initially, the children (collapsed over Refuge and Outreach groups) were classified into two groups: clinical children versus non-clinical children (ie., in terms of the total score on the CBCL). The mothers (of the children belonging to these two groups) scores on measures of trauma were compared using t-tests for independent samples. The dependent variables were: PTSD symptom severity score (PTSDSS), PTSD number of symptoms (PTSDN), PTSD level of impairment (PTSDI), total Dissociative Experiences score (DISS), State Anxiety score (STATE) and Trait Anxiety score (TRAIT). The results showed a significant difference between the clinical and non-clinical children, with the mothers of the children in the clinical range of the CBCL scoring significantly higher on Trait Anxiety, \( t(57.04) = -2.23, p = .032 \) (see Table 8).
Table 8: Comparisons on mothers’ scores between clinical and non-clinical children.

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Clinical (n=23) Mean (SD)</th>
<th>Non-clinical (n=19) Mean (SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE</td>
<td>52.70 (12.49)</td>
<td>47.84 (10.77)</td>
<td>-1.33</td>
<td>.19</td>
</tr>
<tr>
<td>TRAIT</td>
<td>57.04 (11.96)</td>
<td>49.10 (10.88)</td>
<td>-2.23</td>
<td>.03*</td>
</tr>
<tr>
<td>DISS</td>
<td>23.29 (13.49)</td>
<td>19.75 (11.72)</td>
<td>-0.896</td>
<td>.37</td>
</tr>
<tr>
<td>PTSDSS</td>
<td>29.52 (12.71)</td>
<td>25.53 (10.60)</td>
<td>-1.091</td>
<td>.28</td>
</tr>
<tr>
<td>PTSDDN</td>
<td>13.65 (3.80)</td>
<td>13.42 (3.73)</td>
<td>-0.198</td>
<td>.84</td>
</tr>
<tr>
<td>PTSDI</td>
<td>5.74 (2.78)</td>
<td>5.47 (2.44)</td>
<td>-0.325</td>
<td>.74</td>
</tr>
</tbody>
</table>

*Note. PTSD symptom severity score = PTSDSS; PTSD level of impairment = PTSDI; state anxiety score = STATE; trait anxiety score = TRAIT; total dissociative experiences score = DISS.

* p < .05.

All of these dependent variables were entered into a logistic regression model. The mothers’ Trait Anxiety was the only variable to enter the model, $\chi^2(1) = 4.82$, p = 0.02, indicating that the mothers’ Trait anxiety was found to be a predictor of whether the child’s score was in the clinical range on the CBCL.

The results were then considered in terms of any differences between the two groups of children, Refuge group versus Outreach group. The findings showed that the mean State and Trait anxiety scores for the Outreach group of mothers were significantly higher for the children with externalising scores in the clinical range (S-anxiety: t (19) = 2.1, p = .05; T-anxiety: t (19) = 2.2, p = .04). The Outreach group of mothers’ Trait anxiety scores were also significantly higher for the children with total problem behaviour scores in the clinical range (t (19) = 2.3, p = .03).
In answer to research question 6, the results show that across both sample groups (Refuge and Outreach), the mother's Trait anxiety was found to be a predictor of whether the child's score on the CBCL was in the clinical range. Furthermore, the results support a positive association between the Outreach mothers' functioning in terms of anxiety, and her child's problem behaviours, thus supporting the developing view of the greater vulnerability of the Outreach group of women and children, compared to the Refuge group.

4.6.2. Research question 7a: Is the security of the child's attachment behaviour associated to the mother's perception of her child's behavioural problems?

The assumption is that the preschool children with an insecure attachment classification will display more behavioural problems, as perceived by their mothers, than the preschool children with a secure attachment classification.

The extent to which attachment security was related to child behaviour problems was considered. Given that no significant differences were found in attachment security between the Refuge group and the Outreach group of children, these two groups were collapsed into one group for the initial analyses. The children were then classified into two groups: children with a secure attachment versus children with an insecure attachment. The children's scores on the CBCL were compared using t-tests for independent samples. The results showed that insecurely attached children had significantly higher Internalizing anxious/depressed scores (a sub-scale of the Internalizing scale) $t (10.33) = -2.31, p = .02$, than children with a secure attachment. Insecurely attached children also had significantly higher scores on the total Internalizing score, $t (18.27) = -2.30, p = .02$; and significantly higher scores on the Total behaviour problems score, $t (75.07) = -2.23, p = .03$, than children with a secure attachment (see Table 9).
Table 9: Relationship between the child’s attachment and child behaviour problems

<table>
<thead>
<tr>
<th>CBCL parent version scale</th>
<th>Secure attachment (n=27) Mean (SD)</th>
<th>Insecure attachment (n=15) Mean (SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Internalizing</td>
<td>13.22 (5.84)</td>
<td>18.27 (8.31)</td>
<td>2.30</td>
<td>.02*</td>
</tr>
<tr>
<td>Total Externalizing</td>
<td>19.04 (8.16)</td>
<td>25.93 (12.44)</td>
<td>1.93</td>
<td>.06</td>
</tr>
<tr>
<td>Total problem behaviours</td>
<td>55.00 (17.72)</td>
<td>75.07 (32.23)</td>
<td>2.23</td>
<td>.03*</td>
</tr>
</tbody>
</table>

Note. *p < .05.

4.6.3. Research question 7b: Are gender differences found between the child’s attachment to his/her mother, and the mother’s perception of her child’s behaviour?

The assumption is that the child’s attachment relationship with his/her mother will influence the behavioural problems displayed by the child, and that these will differ between girls and boys.

Further examination of the data explored the children with a secure and insecure attachment, and the child behaviour scores for girls and boys. The total scores on the CBCL (Internalizing, Externalizing, and Total problem behaviours) were compared for boys with a secure attachment versus boys with an insecure attachment. The results showed that boys with an insecure attachment to their mothers had significantly higher total Externalizing scores, $t (70.33) = -2.14$, $p = .04$, and significantly higher Total CBCL scores, $t (73.00) = -2.29$, $p = .03$, compared to boys with a secure attachment to their mothers (see Table 10). These findings indicate that boys with an insecure attachment to their mothers had a higher level of behavioural problems compared to boys with a secure attachment, as reported by their mothers.

There were no significant differences between the girls with an insecure attachment to their mothers and the girls with a secure attachment to their mothers, on their CBCL scores.
Table 10: Boys with a secure versus insecure attachment

<table>
<thead>
<tr>
<th>CBCL parent version scale</th>
<th>Secure attachment (n=13) Mean (SD)</th>
<th>Insecure attachment (n=9) Mean (SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Internalizing</td>
<td>62.77 (9.06)</td>
<td>69.22 (10.67)</td>
<td>1.52</td>
<td>.14</td>
</tr>
<tr>
<td>Total Externalizing</td>
<td>58.92 (9.30)</td>
<td>70.33 (15.76)</td>
<td>2.14</td>
<td>.04*</td>
</tr>
<tr>
<td>Total CBCL</td>
<td>63.15 (7.49)</td>
<td>73.00 (12.64)</td>
<td>2.29</td>
<td>.03*</td>
</tr>
</tbody>
</table>

Note. *p < .05.

In answer to research question 7a, children who had an insecure attachment to their mothers were reported by their mothers as having higher Total Internalising scores and higher scores for Total behaviour problems, compared to the children who had a secure attachment to their mothers. Furthermore, in answer to research question 7b, when gender differences were examined to explore whether a mother’s reports of her child’s behaviour was any different for boys as opposed to girls, the results showed that boys with an insecure attachment had the highest level of behavioural problems.

4.7. Summary of results

The research questions that were posed in chapter 1 were addressed from the analyses of the data obtained from women and their children in the Refuge and Outreach sample groups. These results are summarised as follows.

4.7.1. The mother’s trauma in relation to domestic violence.

The descriptive data obtained from the background questionnaire given to the women in the Refuge group and the Outreach group provided similar results for both groups. The main differences in the data were related to the questions of when the last episode of domestic violence occurred, and the reasons for contacting the Women’s refuge.
All the data that were obtained from the mothers in the Refuge and Outreach groups were compared. On the measures of trauma, three quarters of all of the mothers tested received a diagnosis of PTSD as measured on the Posttraumatic Stress Diagnostic scale (PDS; Foa, 1995). The average scores for the mothers on State and Trait anxiety, and on the DES were considerably higher than reported normative data. In comparing the results from the mothers in the two groups, the mothers in the Outreach group had significantly higher scores for dissociative experiences than the mothers in the Refuge group. No other significant differences were found between the two groups. The expectation was that the mothers in the Refuge group, because of the recency of the last domestic violence episode would have significantly elevated scores on all of the measures associated with trauma, compared to the mothers in the Outreach group. This was not found.

4.7.2. The mother’s trauma and maternal caregiving.

The results from the measurement of maternal caregiving were unexpected with 71% of the Refuge mothers classified as secure caregivers, and 67% of the Outreach mothers also classified as secure caregivers. The results revealed that there were no significant differences between the Refuge and Outreach groups of mothers with regards to maternal caregiving.

The results of the mothers’ scores on their maternal caregiving classification were subsequently compared to their scores on various measures of trauma symptomatology. The results showed that the Outreach mothers who were classified as insecure caregivers scored higher on the DES and had higher symptom severity scores on the PDS compared to secure caregivers. However, with the Refuge mothers, no relationship was found between the mothers’ caregiving classification and their scores on the measures associated with trauma.
Furthermore, no relationship between the mothers’ caregiving classification and the mothers’ PTSD diagnoses was found.

Further in depth exploration of the mothers with an ‘insecure’ maternal caregiving classification was carried out, in terms of the two sample groups. Interestingly, the findings revealed that the Outreach mothers had significantly higher scores for dissociative experiences, Trait anxiety, PTSD level of impairment, and PTSD symptom severity scores. These results contributed to an emerging picture of greater vulnerability for the Outreach mothers with an insecure category of maternal caregiving. However, given the very small group numbers for ‘insecure’ maternal caregiving, these results need to be considered as highly exploratory.

4.7.3. Maternal caregiving and child’s attachment.
A complementary relationship was found between the child’s attachment classification and the mother’s caregiving classification, where almost all of the mothers classified as secure caregivers had securely attached children. Conversely, most of the mothers classified as insecure caregivers had children classified as insecurely attached.

The attachment classification of the children in both the Refuge group and the Outreach group showed that the majority of the children from both groups were classified as having a secure attachment. This result was not expected; however, the results in the present study, when considered in the light of findings in other attachment research with infants and preschoolers, in the same or related fields, follow a similar pattern. This pattern being that with increased age the proportion of secure attachment classifications increased and the proportion of insecure attachment classifications decreased (see Cicchetti & Barnett, 1991; Zeanah et.al., 1999). Even so, the findings from the current study were the opposite of what
was expected. The large proportion of preschool aged children with a secure attachment (in both Refuge and Outreach groups) may indicate a level of robust and resilient features in these mother-child dyads.

4.7.4. Maternal trauma and child’s attachment.
The results showed that the Outreach children who were classified as having an insecure attachment, had mothers who scored higher on the DES and had higher symptom severity scores on the PDS compared to the children with a secure attachment to their mothers (caution is required in interpreting these results because of the small group numbers). However, with the Refuge children, no relationship was found between the child’s attachment classification and his/her mother’s scores on the measures associated with trauma. Furthermore, there was no association found between the child’s attachment classification and the mother’s PTSD diagnosis.

4.7.5. The child’s functioning in relation to domestic violence.
The final section of the results explored the data obtained about the functioning of the children in this research project. This exploration considered the children’s Human Figure drawings, and the Child Behaviour Checklist (CBCL) that was completed by the mother’s of the children.

The results from the children’s drawings provided rich and interesting descriptive data. In particular, the children who had been exposed to domestic violence expressed significantly more emotional stress (ELs) in their drawings, compared to children who had not been exposed to domestic violence. In addition, there was some indication that the experience of domestic violence may have delayed the developmental functioning of the children exposed
to domestic violence, compared to those who had not. However, these results need to be considered cautiously.

The results from the CBCL showed that a large proportion of the children in both the Refuge and Outreach groups fell within the clinical range on the CBCL. Less than a third of the total children in this research would be regarded as functioning within the normal limits of behaviour. Furthermore, the children in the Outreach group had significantly higher Externalising behaviour problems than the children in the Refuge group.

4.7.6. The mother’s trauma and child’s functioning.
The results show that across both sample groups (Refuge and Outreach), the mother’s Trait anxiety was found to be a predictor of whether the child’s score on the CBCL was in the clinical range. Furthermore, the results support a relationship between the Outreach mother’s functioning in terms of anxiety, and her child’s problem behaviours, thus contributing to the developing view of the greater vulnerability of the Outreach group of women and children, compared to the Refuge group.

When the children’s scores on the CBCL were compared with their attachment status, findings indicated that those children with an insecure attachment to their mothers had significantly higher problem behaviour scores on the CBCL, compared to the children with a secure attachment to their mothers. Furthermore, when gender differences in the children were considered, boys with an insecure attachment with their mothers were reported as having a higher level of behavioural problems than boys with a secure attachment relationship with their mothers. No differences were found between girls with an insecure attachment relationship with their mothers and girls with a secure attachment relationship with their mothers.
CHAPTER 5

Discussion

5.1. Overview

There is an emerging body of attachment literature that has provided a useful framework from which researchers have been able to inform practitioners of the experiences and needs of infants, toddlers and preschool aged children who have experienced traumatic events. A prominent view presented is that the impact of a trauma on a young child is not determined by the trauma itself but by the caregiver’s ongoing way of being with the child (Stern, 1994). This view argues for the need to consider the experiences of preschool children, not in isolation, but within the context of their primary attachment relationship. Researchers in the field have described the psychological effects of domestic violence on women and on their children from within the trauma response framework (Dutton, 1992; McAlister Groves, 1996). The views presented are that a large proportion of women who have experienced domestic violence experience trauma related symptomatology, and their young children, due to their dependency, are at a high risk of developing traumatic stress disorder (Gleason, 1993; Zeanah & Scheeringa, 1996).

The present study has examined both the experiences of mothers and their preschool aged children in order to explore how the trauma of domestic violence impacts on the mother’s functioning, and how this affects her relationship with her child. It has also explored the experience of the child following his/her exposure to domestic violence in terms of the child’s attachment relationship to his/her mother, and the child’s behavioural, emotional and developmental functioning. This research has considered the interaction between the mother’s functioning, her child’s relationship to her, and the child’s developmental
functioning. Furthermore, the research has considered the function of the dyadic relationship as a factor in the child’s tendency to experience developmental difficulties.

Research questions have been posed and answered, with unexpected and interesting results. These results are discussed in more detail, reviewing the strengths and weaknesses of the current research. The implications of the findings are discussed with recommendations for future research.

5.1.1. The mother’s trauma in relation to domestic violence.

The first part of this study was to consider the mothers of preschool aged children from two different sample groups who had been exposed to domestic violence. One group, the Refuge group, were mothers who were residing with their children in a women’s refuge at the time of assessment. The other group, Outreach group, were mothers living with their children in the community, who were only accessing outreach services from their local women’s refuge. The experience of domestic violence was considered from within a trauma framework. That is, it was assumed that the mothers in this study were traumatised by their experience of domestic violence. This assumption was confirmed by the results, with three-quarters of all the mothers tested meeting the criteria for a diagnosis of Posttraumatic Stress Disorder (DSM-IV; American Psychiatric Association, 1994). In addition, the average scores for the mothers on State and Trait anxiety, and on the Dissociative Experiences Scale (DES; Carlson & Putnam, 1993) were considerably higher than reported normative data.

In the current study the position that was taken was that the mothers who sought refuge for themselves and their children (Refuge group) in the form of crisis accommodation were more likely to display more severe trauma responses than the comparison community based
group (Outreach group). What the results showed was that there was a difference between the experiences of the mothers in the Refuge group and the Outreach group with regards to their exposure to domestic violence over the previous 12 months. This experience was related to the amount of time spent in the domestic violence setting, with the Outreach mothers having spent on average, 5 of the previous 12 months out of this setting. Consequently, the Refuge mothers reported experiencing a significantly higher number of severe episodes of domestic violence compared to the Outreach mothers.

Despite the fact that the Refuge mothers reported a significantly higher number of domestic violence episodes over the previous 12 months, sought crisis accommodation, and were disrupted by their relocation to a women’s refuge, these mothers surprisingly did not display more severe trauma responses when compared with the Outreach group of mothers. On the contrary, the mothers in the Outreach group presented as more vulnerable compared to the mothers residing in a women’s refuge. This was illustrated by women in the Outreach group reporting extraordinarily high scores on the Dissociative Experiences Scale (Carlson & Putnam, 1993), with almost half of these women describing their extreme social isolation, nominating refuge staff members as their only social support.

From these findings, it would appear that women’s refuges provide safe containment and support to mothers and their children at a time of extreme danger, whereas mothers who remove themselves from a domestic violence setting maintain their isolation, and therefore may continue to feel extremely vulnerable in the community.

5.1.2. The mother’s trauma and maternal caregiving.

In the present study, contrary to expectations, more than two thirds of the mothers were found to exhibit a maternal caregiving style that was relaxed and sensitive to their
children’s needs. The Caregiver Behaviour classification system (Marvin & Britner, 1996) used to obtain these results revealed that the majority of the mothers exhibited a “Beta” strategy which is associated with a secure pattern of attachment in the child-parent attachment system (Cassidy & Marvin, 1992). The results revealed that there were no significant differences between the Refuge and Outreach group of mothers in relation to maternal caregiving.

The assumption that the more traumatised the mothers were the more likely they were to utilise insecure strategies of maternal caregiving behaviour was not supported by this research. What the results showed was that maternal caregiving may function independently of the mother’s external trauma experience. Alternatively, it may be that given these mothers all accessed some form of assistance from women’s refuges, they may have already been highly invested in their own protection as well as the care and protection of their children.

The results of the mothers’ scores on various measures of trauma were subsequently investigated as a function of their maternal caregiving classification. The results showed that the Outreach mothers who were classified as insecure caregivers scored higher on the Dissociative Experiences Scale (DES; Carlson & Putnam, 1993), and had higher symptom severity scores on the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995) compared to secure caregivers. However, with the Refuge mothers, no association was found between the mother’s caregiving classification and their scores on the measures associated with trauma. Furthermore, no association was found between the mother’s caregiving classification and the mother’s PTSD diagnosis. These results contributed to an emerging picture of greater vulnerability for the Outreach mothers, particularly those with an insecure category of maternal caregiving. It must be noted though that this emerging picture of
greater vulnerability for the insecure Outreach mothers is based on the analyses of very small group numbers. Therefore any conclusions presented at this point in time are purely exploratory. Further research with larger group numbers would be required to support the views presented.

A significant theme that was revealed from the data on maternal functioning was the extraordinarily high score the women in the Outreach group attained on the Dissociative Experiences Scale (Carlson & Putnam, 1993). This finding raises speculation about the function of dissociative responses utilised by women exposed to severe domestic violence. From clinical experience, the employment of dissociation as a defensive mechanism to separate in one’s mind that which is terrible, from the demands of daily functioning, may allow mothers to be both traumatised and yet able to be sensitive caregivers. Mothers may use dissociation to escape from the negative experiences in their lives, and in cutting themselves off from the trauma of domestic violence they put all their energies into their beloved child. This process thus strengthens the mother-child relationship. An alternative hypothesis may be that the results of the present study are compounded by the capacity of some of the sample mothers to separate their experience of trauma (through dissociation) from mothering, while others in the sample cannot do this.

Researchers in the trauma field have described chronic PTSD as characterised by additional coping mechanisms developed to deal with the sense of anticipation engendered by repeated trauma (e.g. Lyons-Ruth & Block, 1996; Terr, 1991). These researchers have described dissociation, as utilised by many of the women in the Outreach group of the current research, as an example of one such coping mechanism. In their research exploring mothers’ past history of childhood trauma and its effect on maternal caregiving, Lyons-Ruth and Block (1996) hypothesised that the mothers who had experienced more extreme
classification and the child’s attachment classification, where almost all of the mothers classified as secure caregivers had securely attached children. Conversely, most of the mothers classified as insecure caregivers had children classified as insecurely attached.

The results supporting a strong relationship between maternal caregiving and the children’s attachment to their mothers were expected. These results support the view presented by Britner et al. (in press), that the dyadic relationship represents an interactive dance between mothers and their children. These results also indicate a positive strength in the dyadic relationship of this particular sample of women and their preschool aged children who have experienced severe domestic violence. This illustrates the robust nature of the dyadic relationship despite an extreme and traumatic external context, and supports the value of utilising the strength of the dyadic relationship as the starting point for developing clinical interventions for these sample populations.

However, what was unexpected was the result that the majority of the mothers in the current research had a secure classification style of maternal caregiving, despite their level of trauma-related symptoms and PTSD diagnosis. These results do not follow the view presented by George and Solomon (1999b) that the dynamics that occur between parents that result in domestic violence have been considered to be a significant factor leading to disabled maternal caregiving. Furthermore, the research findings in the current research do not follow the same trend as research findings in a similar area. The research findings from Zeanah et al. (1999) on 18 month old infants who had been exposed to domestic violence showed that a large proportion (62.5%) of the infants had an insecure attachment relationship to their mothers. Zeanah et al.’s (1999) sample population is different from the sample population in the current research in that the mothers of the infants in Zeanah et al’s research were recruited from a prenatal clinic and paediatric clinic of a tertiary referral
centre, as opposed to women accessing services from a women's refuge. Despite this factor, and the fact that maternal caregiving was not assessed, the expectation was that the current preschool sample would display a similar proportion of children who have an insecure attachment relationship to their mothers as found with the infants in Zeanah et al's (1999) study. This was not the case.

A possible explanation for this finding may be due to the different sample groups used in the current research in comparison with the sample groups used by Zeanah et al. (1999). In the current research both the Refuge and Outreach mothers had sought help, indicating a level of insight and agency. This level of functional ability may be higher for the sample populations that seek help as opposed to a domestic violence sample population that responds with helplessness. The present research does not account for preschool aged children exposed to domestic violence whose mothers have not sought help, or preschool aged children who currently reside in homes where there is still domestic violence. Mothers seeking help for either themselves and/or their children may utilise a protective function that is associated with security within the dyadic relationship.

There is a growing recognition in the trauma literature of the association between both child physical abuse and domestic violence, and links between domestic violence and child sexual abuse (Goddard & Hiller, 1993; Tomison, 1995 & 2000). In the current research children were excluded if there was knowledge that they had been sexually abused by the perpetrator of the domestic violence, or under investigation because of sexual abuse allegations. This was because of the legal complications of conducting research on children involved in legal proceedings. However, it is acknowledged that a thorough investigation of preschoolers exposed to domestic violence may ultimately include children who had
been both physically and sexually abused, as well as children under social welfare care and protection.

A body of international and Australian research has already found that domestic violence and child abuse frequently co-exist (e.g. Hughes, 1988; Stark & Flitcraft, 1988; Tomison, 1995). Furthermore, as described by Laing (2000b) there is already considerable debate about whether those children who only witness domestic violence but who are not directly abused should be included in the definition of child abuse. Nevertheless, it is currently estimated that child abuse and domestic violence co-exist in between 30 and 60 per cent of cases (Edleson, 1999a). These data support the need to include a broader sample group of preschool aged children exposed to domestic violence in future research studies.

Given the association between child trauma and child maltreatment, the child attachment results in the current research were considered in light of findings in the child maltreatment attachment research. Cicchetti and Barnett (1991) raised the question of why their sample of maltreated preschool aged children had a far lower than expected combined ‘C’ and ‘D’ type of insecurely attached children, compared with findings in maltreated children under two years of age (Carlson et al., 1989). As described in chapter 1, one of the explanations provided by Cicchetti and Barnett (1991) regarding their findings was related to the sensitivity of the Cassidy and Marvin attachment classification system (1989). They argue that developmentally, preschoolers use a range of different attachment strategies to those used when they are infants, and that the Cassidy and Marvin (1989) preschool coding system has more conservative criteria than the Main and Solomon (1990) system for identifying type D attachments (Cicchetti & Barnett, 1991).
Furthermore, Ciccetti and Barnett (1991) posed the question of why it was that still almost a third of the maltreated children in their preschool sample produced a secure attachment score, as opposed to the finding by Carlson et al. (1989) with 18 month old maltreated children, where only 13.7% were classified as secure. They proposed the hypothesis that a maltreated child could manifest a secure attachment relationship with a caregiver because of other factors that may have protected the child. Although these factors have not been identified, this research indicates the need to continue to explore different sample groups of children exposed to traumatic life situations in terms of their attachment relationships.

A comparison of attachment classifications of the children the present study with the 18 month old infants exposed to domestic violence, from the study by Zeanah et al. (1999) was undertaken. The comparison showed that almost two-thirds (64%) of the children in the total sample group in the present study were found to have secure attachment relationships with their mothers, compared to a little more than a third (37.5%) of the 18 month old sample group. To some extent these findings correspond to the view presented in the child maltreatment research that with increased age there is a decrease in the proportion of disorganised attachments with preschool aged children (Kaufman & Henrich, 2000). However, this view does not provide an explanation for the proportional distribution of children with secure and insecure attachments, in the present study.

In summary, these unexpected findings of the dyadic relationship of mothers and their preschool children exposed to domestic violence, do not support Main and Hesse’s (1990) hypothesis that the mother’s experience of trauma causes her to display not only fearful behaviour but also frightening behaviour (i.e. fearsome to the child). Furthermore, the current research found that despite the chronic trauma experienced by both the Refuge and Outreach mothers, the majority of the mothers displayed a secure style of maternal
caregiving and the majority of the children displayed secure attachment relationships with their mothers. These findings do not support the view presented by George and Solomon (1999b) that consider domestic violence to be a significant factor leading to disabled maternal caregiving. Further research with a broader sample group of preschool aged children and their mothers is required to either challenge or replicate these findings.

5.1.4. Maternal trauma and child’s attachment.

The results showed that the Outreach children who were classified as having an insecure attachment, had mothers who scored higher on the Dissociative Experiences Scale and had higher symptom severity scores on the Posttraumatic Diagnostic scale compared to the children with a secure attachment to their mothers. However, among the Refuge children, no association was found between the child’s attachment classification and the mother’s scores on the measures associated with trauma. Furthermore, no association was found between the child’s attachment classification and the mother’s PTSD diagnosis.

These findings exploring the mother’s trauma in relation to her child’s attachment did not find the associations or connections that were expected. These results are consistent with some of the findings from research by Lyons-Ruth and Block (1996), in which they found the overall severity of trauma in a mother’s past history was not significantly related to maternal hostile-intrusive behaviour toward her infant, and overall severity of trauma in the mother was not related to secure versus insecure attachment classification in the child. The present research does however, reveal some interesting themes with the mother-child dyads that were considered to be insecure, particularly with the dyads from the Outreach group. The findings from the present study raise further speculation about the positive function that residing in women’s refuges at a time of crisis associated with domestic violence provides women and their children, as opposed to remaining in the community during the
crisis period. The results may suggest that despite the passage of time following the last domestic violence incident, and despite leaving the violent environment, the women who live in the community following domestic violence continue to be vulnerable in terms of their overall functioning. The reason for this may further support the positive function that is provided by women’s refuges. These settings provide containment and a safe haven for women in danger who require crisis accommodation. Women’s refuges may in fact provide enough of a sense of personal security for mothers to reduce their heightened arousal and hypervigilance following severe domestic violence. On the other hand, women in the community, although no longer in domestic violence settings, may continue to feel highly anxious, vulnerable and at risk of further attack.

These findings lead us to consider how the mothers living in the community, following their experience of domestic violence, may use the defensive mechanism of dissociation in order to cope with everyday life. It may be that the use of extreme forms of defensive strategies may contribute to these women not readily seeking help for themselves, in the form of crisis accommodation. It may be that those mother-child dyads who access crisis accommodation in transition from a domestic violence setting to independent community based housing, may ultimately succeed in stopping the cycle of violence because of the support and assistance they receive from women’s refuges. The vulnerability and isolation experienced by the mothers who remove themselves and their children from a domestic violence setting, may predispose them to return to that setting which is familiar, rather than struggling in isolation. It is only through further research and longitudinal studies that these issues can be fully examined. Nevertheless, the value and function of women’s refuges in Western Australia is acknowledged.
The findings from the current research are valuable in terms of determining when to intervene with vulnerable mother-child dyads, in this instance, mother-child dyads that have been exposed to domestic violence. With the knowledge that women’s refuges may provide a positive and containing function for vulnerable mother-child dyads, it would appear timely to initiate an attachment-based intervention with these dyads, whilst the dyads are residing in the refuges. Future research exploring attachment-based interventions on site at women’s refuges is warranted.

5.1.5. The child’s functioning in relation to domestic violence.
The final section of the results explored the data obtained about the functioning of the children in this research project. This exploration considered the children’s Human Figure drawings, and the Child Behaviour Checklist (CBCL) that was completed by the mothers of the children.

As described by researchers in the field, the search for solutions to address the issue of children exposed to violence must include an examination of not only the context of the violent event, but also the child’s perception (Lewis, et al., 1997). One way of obtaining an understanding of a child’s personal experience is through an examination of the drawings a child produces.

The levels of distress expressed in their Human Figure Drawings by these preschool children exposed to domestic violence were measured using the Koppitz Emotional Indicators Scale (1968). When compared with a control group, the preschool children exposed to domestic violence had significantly higher Emotional Indicators suggesting that the levels of emotional stress in their drawings were of concern. The value of this information is that these very young children were able to display their distress in an
understandable and measurable way. A poignant example of this came from a 3-year-old child who stated (whilst drawing) "you know, I can't draw a picture of my Mum and Dad together on this paper... only one... 'cos my Dad will hurt my Mum." (see Appendix C6 for examples of verbatim statements made by the children whilst drawing).

Interestingly, when asked to 'draw a person', a third of the sample children drew a picture of the examiner (this was the child's first drawing). Research and clinical work with children has shown that the person whom the child draws is the person who is of greatest concern and importance to the child at the time he/she is making the drawing (Koppitz, 1968). However, as Koppitz (1968) has gone on to describe, sometimes the child indicates that the figure in their HFDs is a drawing of the examiner. In these cases she stated "children who draw the examiner are very lonely and unhappy youngsters who do not consider themselves worthy of concern and who have no-one at home with whom they are involved or preoccupied" (pp. 76-77). This provides a very bleak picture of these children.

The developmental functioning of the sample group was measured from the children’s HFDs using the Goodenough (1926) scale. The results showed that the preschool children exposed to domestic violence were on average, functioning at a significantly lower developmental level than the control group. This finding was interesting in that it is supported by the understanding that children exposed to trauma associated with violence function at a lower cognitive/developmental level than their peers (Lieberman, 2001). However, the results from the present study need to be considered cautiously due to the fact that the control group was on average 7-months older than the sample group. This age difference with a small sample size at a stage in a child’s development where significant developmental gains are made over a short period of time may be significant enough to distort this finding.
A more robust assessment of the child’s developmental functioning may be obtained by using a different assessment tool to drawings, such as the Stanford-Binet Intelligence Scale (4th Edition; Thorndike, Hagen & Sattler, 1986). Although this was not undertaken in the present research because of time constraints, the Stanford-Binet would certainly provide a more comprehensive view of the preschool child’s cognitive and developmental functioning. This additional information would complement the findings of the preschool children’s experience of domestic violence from the current research.

The results from the Child Behaviour Checklist showed that a large proportion of the children in both the Refuge and Outreach groups fell within the clinical range. This means that these children displayed behavioural problems that were at a level requiring intervention. A substantial proportion of these children had scores in the clinical range for Internalising problems. These findings were consistent with previous studies of school aged children exposed to domestic violence (e.g. Jaffe et al., 1986a; Mathias et al., 1995; Wolfe et al., 1985). Less than a third of the total children in this research would be regarded as functioning within the normal limits of behaviour. Furthermore, the children in the Outreach group had significantly higher Externalising behaviour problems than the children in the Refuge group.

In summary, the emerging picture of the majority of the preschool children who had experienced domestic violence was that these children displayed distress in their drawings, and were comparable with a clinical sample of preschool children, in terms of behavioural and emotional problems. Of these children two-thirds had a secure attachment relationship with their mothers. These findings show that the children’s security of attachment to their mothers does not protect them from the fall out of exposure to domestic violence. From a
clinical position, a point to consider may be that children with a secure attachment relationship with their mothers may feel safer and better able to express their emotional distress through behaviour because of this secure relationship. Further research would be required to explore this view, and also to understand more fully the developmental implications of being able to express rather than disavow their experience.

**5.1.6. The mother’s trauma and child’s functioning.**

The results showed that the mothers’ Trait Anxiety score (STAI; Speilberger, 1983) was found to be a predictor of whether the child’s CBCL scores were in the clinical range. Even so, this result needs to be considered in light of the fact that the mother was the only adult to complete the CBCL on her child. No independent CBCL scores on the child could be obtained from other significant adults in the child’s life, to confirm the mother’s perception of her child’s behavioural responses.

In research by Wolfe et al. (1985), they explored maternal stress and health as a mediating variable in the examination of the negative effects on children who had been exposed to domestic violence. They found evidence to support the view that some of the negative effects on children exposed to domestic violence are in fact mediated by the detrimental effect of the violence on their mother. This research highlights the need to disentangle the direct effects of the child witnessing domestic violence from effects mediated through the distress of mothers (Jaffe et al., 1992). It also lends support for future research to include independent assessments of the child’s behavioural and emotional functioning following domestic violence, so as to account for the possibility of the mother’s distress influencing her perception of her child’s behaviour.
In the current research the children’s experiences following their exposure to domestic violence were then considered in relation to their attachment to their mothers. The results showed that children with insecure attachments had significantly higher scores on the CBCL Internalising anxious/depressed sub-scale, significantly higher scores on the Internalising scale and on the Total behaviour problems scale of the CBCL. In addition, boys with an insecure attachment had significantly higher scores on the Externalising scale and Total behaviour problems scale of the CBCL. These results indicate that the child’s attachment status is related to the child’s emotional and behavioural expression, at least as perceived and recorded by their mothers on the CBCL-Parent version.

Interestingly, the boys with an insecure attachment were rated by their mothers as externalising their behavioural problems more than boys with a secure attachment, or girls with or without a secure attachment. Despite the small sample size, this finding is interesting, and may reflect one or more of several separate psychological processes. For example, the concept of identification with the aggressor as a defense mechanism employed by the child, enables the child to enact the role most likely to protect him from the helpless fear engendered by violent acts (Lieberman, 2001). An alternative explanation could be that this result reflects the child’s legitimate and understandable reaction to the experience of an unsafe world, compounded by the absence of male modelling of affect modulation (Herzog, 2001).

One could also speculate that this result reflects the child’s protection of the mother. However, other researchers in the field have identified this behaviour in children in their preschool years as being primarily directed toward the mother, although they have also identified these children as being aggressive towards their peers (Lieberman & Van Horn, 1998). The child’s anger at the mother has been described as mimicking the exact forms of
aggression perpetrated by the father against the mother (Lieberman & Van Horn, 1998). This finding was a pervading theme throughout the information gathered from the mothers in the current research project, in that many mothers stated that their child's behaviour towards them was "just like their father's behaviour". This finding was also consistent with the research findings from projects such as the Child Trauma Research Project at San Francisco General Hospital, USA (Lieberman, 2001; Lieberman & Pawl, 1993; Lieberman & Van Horn, 1998). The child's anger at the mother has been described as a pattern that appears in conjunction with the child's pervasive anxiety about his own aggression (Lieberman & Van Horn, 1998).

5.2. Summary

It must be reiterated that the current research was based on the assumption that 2 to 5 year old children cannot be studied independently of the caregiving relationship. The literature illustrated that there was a need to explore the influence of maternal functioning and its effect not only on the child's attachment to the mother, but also on the child's functioning (Radke-Yarrow et al., 1995). The literature also illustrated that unexpected findings have resulted from studies that have attempted to explore maternal functioning, in terms of the child's attachment to the mother and the child's functioning, under differing circumstances (Cicchetti & Barnett, 1991; Lyons-Ruth & Block, 1996).

The aims of the current research were to clarify both the experiences of the mother and the experiences of her preschool aged child in order to explore how the trauma of domestic violence impacts upon the mother's functioning, and how this affects her caregiving relationship with her child. In turn, it explored the experience of the preschool child in terms of the child's attachment relationship to their mother. It also explored the child's
behavioural, emotional and developmental functioning, from both the child’s expressions through drawings, and in terms of the mother’s report of her child’s behaviour.

The outcome of the current research provided an overview of preschool aged children within the context of their attachment relationship with their mothers, in the broader context of their exposure to domestic violence. What the current research found was that both the mothers and their children in the two sample groups were negatively affected by their exposure to domestic violence. However, the findings from this research also showed that despite these detrimental effects of exposure to domestic violence, the majority of the mother-child dyadic relationships were found to be primarily secure in relation to one another. The robust nature of the dyadic relationship found, highlights the value and need to develop early interventions in the area of domestic violence that capitalise on this strength. Attachment-based interventions may offer these mother-child dyads the opportunity to continue to develop positively, despite the earlier experience of exposure to severe domestic violence.

The current research did find a number of differences between the two sample groups, which supports the recommendations by researchers in the field of domestic violence to include the examination of broader samples of children exposed to domestic violence.

Furthermore, what has emerged from the current research is an interesting and important theme in relation to the selection of the two sample groups. In previous research there has been concern expressed about the selection of domestic violence samples being obtained from women’s refuges (Hughes, 1988; Wolf, Zak, Wilson & Jaffe, 1986). The argument is that only a small proportion of women experiencing domestic violence use residential services therefore this group of children is not representative of children exposed to
domestic violence (Laing, 2000a). However, in the current research two groups of women and their preschool children were examined. The findings illustrate that the women and their children in the community fared worse than the women and their children residing in the safety of women’s refuges. Furthermore, the mothers of the children in the Outreach group displayed significantly higher dissociative experiences than the mothers of the children residing in the women’s refuges. It is perhaps important to begin to consider the sample of women and children who are exposed to domestic violence on a continuum of experience associated with a continuum of functionality.

This continuum may be considered in the form of the women who do not seek assistance for on-going domestic violence, to those women that seek some assistance yet remain isolated in the community, to those women who access women’s refuges for assistance to stop the domestic violence. As alluded to earlier in this discussion, the women who access women’s refuges for themselves and their children may be more functional as this action taken indicates a level of reflective capacity and agency on behalf of themselves and their children, to stop the cycle of violence.

Some assumptions that are worthy of consideration for future research may be that those women who seek no assistance are more resigned to domestic violence, and that this may reflect their earlier history of domestic violence. The women with less or no early history of domestic violence may well be less tolerant of it, and seek support in the form of crisis accommodation more readily and more emphatically. Furthermore, when considering functionality and the utilisation of dissociative responses as a defense mechanism, those women with more extensive early experiences of trauma are probably more prone to resort to dissociation as a defense. If this is so, then the use of dissociation would render them both more tolerant of domestic violence and possibly more prone to dissociative mothering.
The implications of these views may lead to future research findings that illustrate more significant disturbances in the mother-child relationship, for those women who do not voluntarily seek assistance for themselves and their children.

5.3. Conclusions

The findings from the current research do not support the view presented by theorists that the mother’s experience of trauma causes her to display both fearful and frightening behaviour that leads to the conflict for her child, who in turn responds to the mother in a disorganized way (ie: D – disorganized attachment classification)(Main & Hesse, 1990; Lyons-Ruth & Block, 1996; Zeanah et.al., 1999). Furthermore, the findings in the current research do not conclusively support the view that the dynamics that occur between parents that result in domestic violence are a significant factor leading to disabled maternal caregiving (George & Solomon, 1999b).

The findings from the current research do however, support the view that women are traumatized by their experience of domestic violence. The findings also support the view that preschool children experience high levels of distress as a result of their exposure to domestic violence, and display their disturbance through problem behaviours. However, despite these findings the current research illustrates the robust nature of the mother-child relationship in the context of trauma.

Researchers in the field have already shown that not all children are adversely affected by their experience of parental violence (Mathias et al., 1995). It has been suggested that there may be mediating or protective factors both within the individual (e.g. temperament, coping style, locus of control) and in their environment (eg. maternal functioning) which determine
a particular child’s vulnerability to, and recovery from, the effects of domestic violence (Jaffe et al., 1990).

As illustrated in the current research, despite all the risk conditions it may be that secure mother-child relationships can prevail. As Werner (1997) states “risk is not destiny” (p.13), and there is evidence to indicate that high-risk children do not necessarily develop intractable problems in childhood or later life (Werner, 1997). The findings from this research illustrate that preschool children can express behavioural and emotional problems and still have a secure attachment to their mothers. It may be that because of their secure attachment to their mothers these children feel safe enough to express their distress through behaviour.

5.4. Directions for future research

Future research incorporating broader samples of women and children who are exposed to domestic violence, including women who do not voluntarily access help for themselves and their children would provide a more comprehensive view of the impact of domestic violence on the lives of young children. From this it may be possible to explore the external mediating factors that allow some children to manage sufficiently following exposure to domestic violence.

It would also be useful to consider whether the women who access women’s refuges with their children, have children who do better overall later on in life, than the women who do not access refuges. The question here is whether accessing safe refuge and the support offered by the staff in women’s refuges, is a factor in the positive relationship found between the mothers and their children in the current sample. Accessing women’s refuges is only one example of a positive strategy employed by mothers to stop the cycle of
domestic violence. However, longitudinal studies, or studies with larger group numbers may tease out other positive strategies used by mothers who have experienced domestic violence.

A second area of interest for future research may be the consideration of age appropriate measures for preschool aged children who have been traumatized. Children’s drawings are an easy and economical way of assessing the degree of distress that children are currently experiencing, and may be a good screening tool to assess if these children are developmentally impaired by their exposure to domestic violence (Moore, 2001). However, more up to date research is required on the cognitive and developmental functioning of traumatized children using both standardised measures such as the Stanford-Binet Intelligence Scale (4th Edition; Thorndike, Hagen & Sattler, 1986) in conjunction with children’s drawings, in order to validate drawings as a sound screening tool.

Furthermore, there is some speculation that the current Strange Situation procedure for preschoolers may not be a sensitive enough assessment tool to provide the information needed to understand the role of the dyadic relationship in the context of a traumatic environment (Cicchetti & Barnett, 1991). This speculation supports the need to continue to explore both attachment and maternal caregiving as a dyadic interaction, particularly in areas where trauma may exist. Finally measures that take into account the intricate developmental changes that occur in the preschool years are required to assess the preschool aged child’s functioning and experience more accurately.

Finally, all of the information from the current research needs to be considered in terms of what value it may provide to clinicians who are trying to develop interventions for preschool aged children. In order to consider how to assist the preschool children described
in the current research, it is important to review what is hoped to be achieved from this. Many of the families who access assistance from women’s refuges are transient, have limited resources both emotionally and practically, and are difficult to work with because of their poverty, drug use, mental state, guilt and shame. In many cases they have sought refuge as respite from violence, in some cases returning to the environment they know best because of long, sometimes intergenerational histories of violence and abuse. The community resources available to help these families are stretched, have long waiting lists, and there is very little specialised training for the staff working with families exposed to domestic violence, particularly in terms of assisting young children. Further applied research in the area associated with appropriate interventions for these children is needed.

The view proposed in this discussion is that women and their children exposed to domestic violence form a continuum of those who actively seek help to those who do not. If this is so, then the development of interventions for these groups of women and their children needs to follow a similar course. Different interventions may be needed for women and their children who enter into the safety of women’s refuges as opposed to interventions that are designed for women and their children who have not voluntarily requested help.
APPENDICES

Appendix A: Attachment and maternal caregiving
1. ATTACHMENT SYSTEM CLASSIFICATIONS

The Cassidy-Marvin system (Cassidy & Marvin, 1987, 1990, 1991, 1992) for preschool-age children provides guidelines for a “secure” group (B) and four “insecure” groups as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
<th>Approximate % in normal pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td><strong>Secure</strong>: Uses parent as a secure base for exploration. Reunion behaviour is smooth, open, warm, positive.</td>
<td>50-60%</td>
</tr>
<tr>
<td>A</td>
<td><strong>Avoidant</strong>: Detached, neutral nonchalance, but does not avoid interaction altogether. Avoids physical or psychological intimacy.</td>
<td>~20%</td>
</tr>
<tr>
<td>C</td>
<td><strong>Ambivalent</strong>: Protests separation strongly. Reunion characterised by strong proximity seeking, babyish, coy behaviour.</td>
<td>~15%</td>
</tr>
<tr>
<td>D</td>
<td><strong>Controlling/disorganised</strong>: Characterised by controlling behaviour (punitive, caregiving) or behaviours associated with infant disorganisation.</td>
<td>~8%</td>
</tr>
<tr>
<td>IO or U</td>
<td><strong>Insecure/other</strong>: Mixtures of insecure indices that do not fit into any of the other groups.</td>
<td>~2%</td>
</tr>
</tbody>
</table>
2. ATTACHMENT CLASSIFICATION GROUPS AND SUBGROUPS

The Cassidy-Marvin system (Cassidy & Marvin, 1987, 1990, 1991, 1992) for preschool-age children provides subgroups for each attachment grouping as follows:

<table>
<thead>
<tr>
<th>SECURE</th>
<th>INSECURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECURE (B)</td>
<td></td>
</tr>
<tr>
<td>VERY SECURE (B3)</td>
<td>AVOIDANT (A)</td>
</tr>
<tr>
<td>SECURE-RESERVED (B1)</td>
<td>DEPENDENT (C)</td>
</tr>
<tr>
<td>SECURE-DEPENDENT (B4)</td>
<td>CONTROLLING/ DISORGANISED (D)</td>
</tr>
<tr>
<td>SEC-CONTROLLING (B4)</td>
<td></td>
</tr>
<tr>
<td>SECURE-FEISTY (B4)</td>
<td></td>
</tr>
<tr>
<td>SECURE-OTHER</td>
<td>OTHER</td>
</tr>
<tr>
<td></td>
<td>INSECURE-OTHER (I-O)</td>
</tr>
<tr>
<td></td>
<td>IGNORING (A1)</td>
</tr>
<tr>
<td></td>
<td>NEUTRAL (A2)</td>
</tr>
<tr>
<td></td>
<td>RESISTANT (C1)</td>
</tr>
<tr>
<td></td>
<td>IMMATURE (C2)</td>
</tr>
<tr>
<td></td>
<td>CONTROLLING-CAREGIVING</td>
</tr>
<tr>
<td></td>
<td>CONTROLLING PUNITIVE</td>
</tr>
<tr>
<td></td>
<td>CONTROLLING GENERAL</td>
</tr>
<tr>
<td></td>
<td>DISORGANISED</td>
</tr>
</tbody>
</table>
3. The Strange Situation procedure

The Strange Situation procedure as described in the Cassidy & Marvin 3- and 4-year-old Attachment Classification System (1992). The process will involve video recording observation of:

- Ep1.(3 minutes) Warm-up : Parent & child in playroom together
- Ep2.(3 minutes) Separation 1: Parent leaves room; child remains
- Ep3.(3 minutes) Reunion1: Parent returns
- Ep4.(6 minutes) Separation 2: Parent leaves room; child remains
- Ep5.(5 minutes) Reunion 2: Parent returns.

4. Rating scales for the Cassidy & Marvin 3- and 4-year-old attachment classification system (1992) (Avoidance scale and Security scale)

Rating Scales
At present, there are two rating scales: a 9-point scale of security of attachment, and a 7-point scale of avoidance. These scales are not designed to be independent. For instance, a high score on the avoidance scale necessitates a low score on the security scale; however, a low score on the avoidance scale is congruent with either a low or a high score on the security scale (p.69, Attachment Organization in Preschool Children: Procedures and Coding manual, Cassidy & Marvin, 1992).

Avoidance Scale
This scale is designed as a 7-point scale for easy comparison with Ainsworth’s 7-point strange situation avoidance scale.

1. No avoidance
3. Brief but limited, or persistent but faint avoidance
5. Brief but strong, or persistent low-keyed avoidance
7. High avoidance: extreme neutrality

The instructions for coding avoidance given in Main & Cassidy’s (1987) manual for use with six-year-olds are also useful for 2 1/2 to 4 1/2-year-olds. These instructions include three sections: a) Indications of avoidance; b) Forms of greetings, speech, and proximity-seeking consonant with high avoidance; and c) Forms of greetings, speech, and proximity-seeking inconsonant with high avoidance. Up to this point, we have seen no need to modify this avoidance scale for use with children in this younger age range (p.70, Attachment Organization in Preschool Children: Procedures and Coding manual, Cassidy & Marvin, 1992).

Security Scale
Defining points are from the scale for rating security in six-year-olds from Main & Cassidy (1987), but relevant specific behaviours may be different.
9. Highly secure: Initiating
This score is given to children who initiate interaction, proximity, or contact with complete ease and unambivalence. The child indicates that his relationship with this parent is a special one. The child is particularly calm, yet at the same time clearly pleased, on reunion.

7. Secure: Responsive
This score is given when the child is responsive to the parent, and indicates through any variety of ways that this is a special relationship. There is some reason, however, that the highest score is not given: perhaps a bit of initial reserve, or slight attempts to control the parent.

5. Probably Secure
This score is given when there are indications of both security and insecurity, but on balance, the child seems secure. This score is given a) when there are clear signs of neither security nor of insecurity, or b) when there are signs of both security and insecurity.

3. Insecure
This score is given when the child is either avoidant, ambivalent, controlling, or disorganized. However, there is some slight indication of security within the child’s relationship with the parent.

1. Highly Insecure
This score is given when the child is either highly avoidant, highly ambivalent, highly controlling, highly disorganized, or shows a combination of more than one strategy.

Scores of 2, 4, 6, and 8 may, of course, also be given.

The connections between the security scale and the attachment classifications are as follows:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Security scale score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant-ignoring</td>
<td>1 - 2</td>
</tr>
<tr>
<td>Avoidant-neutral</td>
<td>2 – 4.5</td>
</tr>
<tr>
<td>Very secure</td>
<td>7.5+</td>
</tr>
<tr>
<td>Other secure groups</td>
<td>5 – 7.5</td>
</tr>
<tr>
<td>All ambivalent and controlling subgroups</td>
<td>1 – 4.5</td>
</tr>
<tr>
<td>Insecure-other</td>
<td>1 – 4.5</td>
</tr>
</tbody>
</table>


SECURE

**Beta:** These parents display an easy, relaxed, intimate pattern of behaviour in the Strange Situation with their preschool children.

ANXIOUS OR INSECURE

**Alpha:** These parents are avoidant or dismissing of attachment/caregiving interactions, and either engage in a minimum of interactions with their children, or restrict interaction to exploration, discipline or other non-attachment/caregiving (i.e., intimate) contexts.

**Gamma:** These parents are overly-encouraging of their children’s attachment behaviour, and their children’s intimacy with and dependency upon themselves. At the same time, they tend to resent the burden this degree of intimacy places upon themselves.

**Delta:** These parents are somewhat disorganised in their caregiving/attachment interactions with their children: they seem not to take the “executive role” with their children and accept the child’s control of the reunions. (In the case of some very young preschoolers, the child taking control may be “Disorganised” (see Cassidy & Marvin, 1992)). A best-fitting “forced” Alpha, Gamma, or Beta classification is also made.

**Iota:** These parents do not display an easy, relaxed and intimate pattern of behaviour, but they display either a unique pattern not included among the Alpha, Gamma or Delta groups, or they display a combination of identified patterns in their behaviour. A best-fitting “forced” Alpha, Gamma, or Delta classification is also made.

**Can’t Classify:** These parents are not classifiable, usually due to some procedural difficulties, but sometimes because of special characteristics of either the parent or the child (e.g., some severe developmental disabilities).

Coding Reliability:

Caregiving

All 42 videotapes were double-coded for maternal caregiving behaviour using the Marvin & Britner system. Marina O'Leary, a certified and trained coder of the system, primarily coded all of the tapes. The tapes were later re-coded by one of the authors of the system A/Prof. Preston Britner, in order to obtain inter-rater reliability scores.

Inter-rater reliability was:

(92%) at the 5-category (Alpha-Beta-Gamma-Delta-Iota) level.
(81%) exact agreement on rating scales and (91%) within-1 point on the 9-point scales.

Attachment

All of the videotapes were coded for child attachment classifications, using the Cassidy & Marvin system. A/Prof. Preston Britner carried out the initial coding. For the purposes of inter-rater reliability, 13/42 (~30%) were also coded by Renu Mittal, a certified and trained coder of the system.

Inter-rater reliability was:

11/13 (85%) at the 5-category (A-B-C-D-IO) level.
20/26 (77%) exact agreement on rating scales, and 24/26 (92%) within-1 point on the 7- or 9-point scales.

Attachment-Caregiving (Dyadic) Agreement:

(83%) showed the same 5-category (A-B-C-D-IO) pattern.
(94%) showed the same 3-category (A-B-C) forced pattern.
Appendix B: Procedural Information and measures
1. Consent form:

**TITLE**: THE EFFECT OF TRAUMA ON THE ATTACHMENT BETWEEN A PRE-SCHOOL AGE CHILD AND HIS/HER MOTHER.

**CONSENT FORM**

This study is aimed at trying to understand the needs of young children who enter into a Women’s refuge with their mother.

The study will involve observing you and your child together in play, followed by two 3 minute episodes where your child is left to play on their own. The observation session will take approximately 16 minutes and will be video recorded. These video tapes will be used solely for the study.

This process is confidential except where disclosures are made relating to current protective concerns; disclosures of intent towards self-harm, or disclosures about the intent to harm others.

If you have any queries please contact Bridget Boulwood (Clinical Psychologist - PhD. student researcher) on 9341-5648 or my supervisor Dr Pia Broderick (Lecturer-Murdoch University) on 9360-6000.

I (the participant) have read the information above and any questions I have asked have been answered to my satisfaction. As guardian of my child I agree for both my child and I to participate in this activity, realising that I may withdraw at any time without prejudice. I agree that research data gathered for the study may be published provided my name or other identifying information is not used.

Participant/guardian

SIGNATURE:_________________________ DATE:_________________________

Bridget Boulwood (Clinical Psychologist – Ph.D. student researcher)

SIGNATURE:_________________________ DATE:_________________________
2. Information sheet:

THE EFFECT OF TRAUMA ON THE ATTACHMENT BETWEEN A PRE-SCHOOL AGE CHILD AND HIS/HER MOTHER.

Thank you for agreeing to participate in this study. The focus of this study is to try to understand what it is like for very young children (2yrs 6 months - 4yrs 11 months) who witness Domestic Violence, and then enter into a women’s refuge with their mother.

For us to understand how it is for children of this age group, we need to assess your child both in your presence and on their own. The assessment will involve observing you and your child together in play, followed by two brief separations where your child is left to play on their own. The observation session will take approximately 20 minutes and will be videotaped. The assessment will also include some questionnaires for the mothers to complete and a qualified and experienced Clinical Psychologist will obtain some standard drawings from the children.

CONFIDENTIALITY:
The videotapes will be used solely for the study, following which they will be destroyed. All assessment material will be coded to ensure confidentiality, and will be stored safely on University grounds.

NB: The process is confidential except where:
- Disclosures are made relating to current protective concerns;
- Disclosures of intent towards self-harm; or,
- Disclosures about the intent to harm others.

OUTCOME:
This study will help us to develop the most effective strategies and intervention programs to help pre-school age children who come into Women’s’ refuges.

*********************************************************
If you have any queries please contact:
Bridget Boultonwood (Clinical Psychologist - PhD. student) on 9341-5648, or
Dr Pia Broderick (Supervisor & Senior Lecturer-Murdoch University) on 9360-6000.
3. Background questionnaire – Refuge group

Entry into Refuge (Date):

1. Family Genogram:

2. Child’s name: DOB: Age:

3. Mother’s name: DOB: Age:

4. Siblings: (Give ages)

5. Perpetrator of violence (Relationship to child):

6. What made you come to the refuge now?

6b. Have you been in a refuge before?
6c. When?

7. To the best of your knowledge, did your child witness any DV?

8. Was the child the target of the violence?

9. Are there any legal actions current that involve your child?

10. Has there been any involvement by Family and Children’s services, or the Police involving the safety or well-being of your child?

11. Has your child ever been the target of violence (past or present)?

12. What is your relationship like with your child?
13. Have you ever lost your temper with your child?

14. Mother’s History: substance abuse psychiatric involvement

   Perpetrator’s History: substance abuse psychiatric involvement

15. What are your main concerns regarding your child?

16. Do you know when your child is:
   Scared/frightened?

   Sad?

   Worried?

   Angry?

   How do you manage your child when they are in this state?

17. What was your child’s behaviour like when you came into the refuge?

18. Describe (Mum’s) social supports:
4. Background questionnaire – Outreach group

Last incident of Domestic Violence (date):

1. Family Genogram:

2. Child’s name: DOB: Age:

3. Mother’s name: DOB: Age:

4. Siblings: (Give ages)

5. Perpetrator of violence (Relationship to child):

6. What made you leave the relationship?

6b. Have you been in a refuge before?

6c. When?
7. To the best of your knowledge, did your child witness any DV?

8. Was the child the target of the violence?

9. Are there any legal actions current that involve your child?

10. Has there been any involvement by FACS or the Police involving the safety or well-being of your child?

11. Has your child ever been the target of violence?

12. What is your relationship like with your child?

13. Have you ever lost your temper with your child?

14. Mother's History: substance abuse psychiatric involvement
Perpetrator’s History: substance abuse psychiatric involvement

15. What are your main concerns regarding your child?

16. Do you know when your child is:
Scared/frightened?

Sad?

Worried?

Angry?

How do you manage your child when they are in this state?

17. What was your child’s behaviour like when you first left the relationship?

18. Mum’s social supports:

19. When did you contact the Refuge for assistance?

Why?
5. Summary of demographic information obtained from the background questionnaire

<table>
<thead>
<tr>
<th>Last episode of domestic violence</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>Average = 7 days (SD = 0.6)</td>
<td>Average = 5 months (SD = 4.07)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perpetrator of domestic violence</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>Husband (52.4%)</td>
<td>Husband (52.4%)</td>
<td></td>
</tr>
<tr>
<td>Defacto (38.1%)</td>
<td>Defacto (42.9%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reason for contacting refuge</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>Feared - own safety (81%)</td>
<td>Counselling and support (43%)</td>
<td></td>
</tr>
<tr>
<td>Feared – child’s safety (14.3%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attended a refuge before</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>Once before (81%)</td>
<td>Once before (47.6%)</td>
<td></td>
</tr>
<tr>
<td>More than 3 times in past 2 years (28.6%)</td>
<td>Never (52.4%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child witnessed domestic violence</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>95.2%</td>
<td>95.2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child target of domestic violence</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>66.7%</td>
<td>61.9%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social support for the mother</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>No social support (28.6%)</td>
<td>One family/friend (57%)</td>
<td></td>
</tr>
<tr>
<td>One family/friend (71.4%)</td>
<td>Refuge Staff (43%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance use</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>52.4%</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Past psychiatric history</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>76.2%</td>
<td>95.2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perpetrators known substance use</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>93%</td>
<td>81%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concerns about child</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>Child’s behaviour (42.9%)</td>
<td>Child’s behaviour (42.9%)</td>
<td></td>
</tr>
<tr>
<td>Emotional state (33.3%)</td>
<td>Emotional state (23.8%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother lost temper with her child</th>
<th>Refuge Group</th>
<th>Outreach Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n = 15)</td>
<td>Mothers (n = 17)</td>
</tr>
<tr>
<td></td>
<td>Children (n = 21)</td>
<td>Children (n = 21)</td>
</tr>
<tr>
<td>76.2%</td>
<td>76.2%</td>
<td></td>
</tr>
</tbody>
</table>
6. The Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995) – protocol and scoring sheet
Part 1

Any day, a person may have lived through or witnessed a very stressful and traumatic event at some point in their lives. Below is a list of traumatic events. Put a checkmark in the box next to ALL of the events that have happened to you that you have witnessed.

☐ Serious accident, fire, or explosion (for example, an industrial, farm, car, plane, or boating accident)

☐ Natural disaster (for example, tornado, hurricane, flood, or major earthquake)

☐ Non-sexual assault by a family member or someone you know (for example, being mugged, physically attacked, shot, stabbed, or held at gunpoint)

☐ Non-sexual assault by a stranger (for example, being mugged, physically attacked, shot, stabbed, or held at gunpoint)

☐ Sexual assault by a family member or someone you know (for example, rape or attempted rape)

☐ Sexual assault by a stranger (for example, rape or attempted rape)

☐ Military combat or a war zone

☐ Sexual contact when you were younger than 18 with someone who was 5 or more years older than you (for example, contact with genitals, breasts)

☐ Imprisonment (for example, prison inmate, prisoner of war, hostage)

☐ Torture

☐ Life-threatening illness

☐ Other traumatic event

If you marked Item 12, specify the traumatic event below.

☐ You marked any of the items above, continue. If not, stop here.

Part 2

(14) If you marked more than one traumatic event in Part 1, put a checkmark in the box below next to the event that bothers you the most. If you marked only one traumatic event in Part 1, mark the same one below.

☐ Accident

☐ Disaster

☐ Non-sexual assault/someone you know

☐ Non-sexual assault/stranger

☐ Sexual assault/someone you know

☐ Sexual assault/stranger

☐ Combat

☐ Sexual contact under 18 with someone 5 or more years older

☐ Imprisonment

☐ Torture

☐ Life-threatening illness

☐ Other

In the box below, briefly describe the traumatic event you marked above.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Below are several questions about the traumatic event you just described above.

(15) How long ago did the traumatic event happen?
(circle ONE)

1. Less than 1 month

2. 1 to 3 months

3. 3 to 6 months

4. 6 months to 3 years

5. 3 to 5 years

6. More than 5 years

For the following questions, circle Y for Yes or N for No.

During this traumatic event:

(16) Y N Were you physically injured?

(17) Y N Was someone else physically injured?

(18) Y N Did you think that your life was in danger?

(19) Y N Did you think that someone else's life was in danger?

(20) Y N Did you feel helpless?

(21) Y N Did you feel terrified?
Part 3

Below is a list of problems that people sometimes have after experiencing a traumatic event. Read each one carefully and circle the number (0–3) that best describes how often that problem has bothered you IN THE PAST MONTH. Rate each problem with respect to the traumatic event you described in Item 14.

- **0** Not at all or only one time
- **1** Once a week or less/once in a while
- **2** 2 to 4 times a week/half the time
- **3** 5 or more times a week/almost always

1. **0 1 2 3** Having upsetting thoughts or images about the traumatic event that came into your head when you didn't want them to

2. **0 1 2 3** Having bad dreams or nightmares about the traumatic event

3. **0 1 2 3** Reliving the traumatic event, acting or feeling as if it was happening again

4. **0 1 2 3** Feeling emotionally upset when you were reminded of the traumatic event (for example, feeling scared, angry, sad, guilty, etc.)

5. **0 1 2 3** Experiencing physical reactions when you were reminded of the traumatic event (for example, breaking out in a sweat, heart beating fast)

6. **0 1 2 3** Trying not to think about, talk about, or have feelings about the traumatic event

7. **0 1 2 3** Trying to avoid activities, people, or places that remind you of the traumatic event

8. **0 1 2 3** Not being able to remember an important part of the traumatic event

9. **0 1 2 3** Having much less interest or participating much less often in important activities

10. **0 1 2 3** Feeling distant or cut off from people around you

11. **0 1 2 3** Feeling emotionally numb (for example, being unable to cry or unable to have loving feelings)

12. **0 1 2 3** Feeling as if your future plans or hopes will not come true (for example, you will not have a career, marriage, children, or a long life)

13. **0 1 2 3** Feeling irritable or having fits of anger

14. **0 1 2 3** Having trouble concentrating (for example, drifting in and out of conversations, losing track of a story on television, forgetting what you read)

15. **0 1 2 3** Being overly alert (for example, checking to see who is around you, being uncomfortable with your back to a door, etc.)

16. **0 1 2 3** Being jumpy or easily startled (for example, when someone walks up behind you)

17. **0 1 2 3** How long have you experienced the problems that you reported above? (circle ONE)
   - **1** Less than 1 month
   - **2** 1 to 3 months
   - **3** More than 3 months

18. **0 1 2 3** How long after the traumatic event did these problems begin? (circle ONE)
   - **1** Less than 6 months
   - **2** 6 or more months

Part 4

Indicate below if the problems you rated in Part 3 have interfered with any of the following areas of your life DURING THE PAST MONTH. Circle Y for Yes or N for No.

19. **Y N** Work

20. **Y N** Household chores and duties

21. **Y N** Relationships with friends

22. **Y N** Fun and leisure activities

23. **Y N** Schoolwork

24. **Y N** Relationships with your family

25. **Y N** Sex life

26. **Y N** General satisfaction with life

27. **Y N** Overall level of functioning in all areas of your life
Posttraumatic Stress Diagnostic Scale
Edna B. Foa, PhD

Hand-Scoring Worksheet
**A**

**Exposure to Traumatic Event** (Items 16–21)

- Total Yes
- Total No
- Yes/No/Omit

**B**

**Reexperiencing** (Items 22–26)

- Items 22–26 0's
- Items 22–26 1's x 1 =
- Items 22–26 2's x 2 =
- Items 22–26 3's x 3 =
- Number of Symptoms
- Symptom Severity

**C**

**Avoidance** (Items 27–33)

- Items 27–33 0's
- Items 27–33 1's x 1 =
- Items 27–33 2's x 2 =
- Items 27–33 3's x 3 =
- Number of Symptoms
- Symptom Severity

---

**PTSD Diagnosis: Criteria A–F Met?**

- Yes
- No
- Incomplete Information

---

**Level of Impairment in Functioning:**

---

**Number of Symptoms Endorsed (maximum = 17):**

---

**Symptom Severity Score (maximum = 51):**

---

**Symptom Severity Rating:**

---

**Traumatic Event:**
### D: Arousal (Items 34–38)

<table>
<thead>
<tr>
<th>0's</th>
<th>1's</th>
<th>2's</th>
<th>3's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>3's</td>
</tr>
</tbody>
</table>

\[ 3's \times 3 = \]

- Number of Symptoms
- Symptom Severity

### E: Symptom Duration/Delayed Onset (Items 39–40)

<table>
<thead>
<tr>
<th>Item 39</th>
<th>Item 40</th>
</tr>
</thead>
</table>

### F: Significant Distress or Impairment in Daily Functioning (Items 41–49)

<table>
<thead>
<tr>
<th>Item 49</th>
</tr>
</thead>
</table>

- Yes/No/Omit
- Number of Areas Affected

---

**Number of Omitted Items (Items 14–49):**

**Inappropriate Omits?**

- No
- Yes, symptoms may be understated
- Yes, results are questionable

### Symptom Duration (Specifier 1)

<table>
<thead>
<tr>
<th>Date</th>
<th>Chronic</th>
<th>Does Not Apply</th>
<th>Incomplete Information</th>
</tr>
</thead>
</table>

### Delayed Onset (Specifier 2)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

- Incomplete Information
7. The Dissociative Experiences Scale (DES; Carlson & Putnam, 1993).
DIRECTIONS

This questionnaire consists of twenty-eight questions about experiences that you may have in your daily life. We are interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you are not under the influence of alcohol or drugs.

To answer the questions, please determine to what degree the experience described in the question applies to you and circle the number to show what percentage of the time you have the experience.

EXAMPLE:

<table>
<thead>
<tr>
<th>0%</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(never)</td>
<td>(always)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Some people have the experience of driving or riding in a car or bus or subway and suddenly realizing that they don't remember what has happened during all or part of the trip. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people find that sometimes they are listening to someone talk and they suddenly realize that they did not hear part or all of what was said. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people have the experience of finding themselves in a place and having no idea how they got there. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people have the experience of finding themselves dressed in clothes that they don't remember putting on. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people have the experience of finding new things among their belongings that they do not remember buying. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people sometimes find that they are approached by people that they do not know who call them by another name or insist that they have met them before. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people sometimes have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people are told that they sometimes do not recognize friends or family members. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

Some people find that they have no memory for some important events in their lives (for example, a wedding or graduation). Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%
10. Some people have the experience of being accused of lying when they do not think that they have lied. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

11. Some people have the experience of looking in a mirror and not recognizing themselves. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

12. Some people have the experience of feeling that other people, objects, and the world around them are not real. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

13. Some people have the experience of feeling that their body does not seem to belong to them. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

14. Some people have the experience of sometimes remembering a past event so vividly that they feel as if they were reliving that event. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

15. Some people have the experience of not being sure whether things that they remember happening really did happen or whether they just dreamed them. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

16. Some people have the experience of being in a familiar place but finding it strange and unfamiliar. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

17. Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

18. Some people find that they become so involved in a fantasy or daydream that it feels as though it were really happening to them. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%

19. Some people find that they sometimes are able to ignore pain. Circle a number to show what percentage of the time this happens to you.

   0%  10  20  30  40  50  60  70  80  90  100%
20. Some people find that that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time. Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

21. Some people sometimes find that when they are alone they talk out loud to themselves. Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

22. Some people find that in one situation they may act so differently compared with another situation that they feel almost as if they were two different people. Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

23. Some people sometimes find that in certain situations they are able to do things with amazing ease and spontaneity that would usually be difficult for them (for example, sports, work, social situations, etc.). Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

24. Some people sometimes find that they cannot remember whether they have done something or have just thought about doing that thing (for example, not knowing whether they have just mailed a letter or have just thought about mailing it). Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

25. Some people find evidence that they have done things that they do not remember doing. Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

26. Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing. Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

27. Some people sometimes find that they hear voices inside their head that tell them to do things or comment on things that they are doing. Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |

28. Some people sometimes feel as if they are looking at the world through a fog so that people and objects appear far away or unclear. Circle a number to show what percentage of the time this happens to you.

| 0% | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100% |
Appendix C: Children’s Human Figure Drawings
1. Drawing Test

**DRAWING TEST**

Name: ____________________________
Age: ____________________________

1. Draw me a picture of a person. (*Who is this person?*)
2. Draw me a picture of you. Make the very best picture you can of your whole self.
3. Draw me a picture of you and your Mum.
2. Child Drawings – Outreach raw scores

<table>
<thead>
<tr>
<th>Subject number</th>
<th>Emotional Indicators</th>
<th>D.A. vs C.A. *</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>person</td>
<td>self</td>
<td>(age in mths)</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>3</td>
<td>+ 11</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>3</td>
<td>+ 4</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>5</td>
<td>+ 12</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>5</td>
<td>+ 2</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>2</td>
<td>+ 6</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>5.5</td>
<td>- 6</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>5</td>
<td>- 4</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>4</td>
<td>- 14</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>3.5</td>
<td>+ 7</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>4</td>
<td>+ 9</td>
</tr>
<tr>
<td>12</td>
<td>4.5</td>
<td>3.5</td>
<td>+ 17</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>4</td>
<td>+ 12</td>
</tr>
<tr>
<td>14</td>
<td>5.5</td>
<td>3</td>
<td>+ 16</td>
</tr>
<tr>
<td>15</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>5</td>
<td>+ 3</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>5</td>
<td>+ 15</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>5</td>
<td>4.5</td>
<td>+ 5</td>
</tr>
<tr>
<td>20</td>
<td>7</td>
<td>7</td>
<td>+ 13</td>
</tr>
<tr>
<td>21</td>
<td>3</td>
<td>5</td>
<td>+ 10</td>
</tr>
</tbody>
</table>

Note. *Developmental age scores versus chronological age scores. Age difference is provided in months.
### 3. Child Drawings – Refuge group raw scores

<table>
<thead>
<tr>
<th>Subject number</th>
<th>Emotional Indicators</th>
<th>D.A. vs C.A. * (age in mths)</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>6.5</td>
<td>+ 11</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>4</td>
<td>+ 6</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>4</td>
<td>+ 6</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>5</td>
<td>+ 2</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>4</td>
<td>- 18</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>6</td>
<td>- 12</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>3</td>
<td>+ 6</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>2</td>
<td>+ 8</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>7</td>
<td>+ 9</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>6</td>
<td>+ 16</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>5</td>
<td>- 5</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>8</td>
<td>+ 3</td>
</tr>
<tr>
<td>13</td>
<td>6</td>
<td>4.5</td>
<td>+ 9</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>3</td>
<td>- 14</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>3</td>
<td>+ 13</td>
</tr>
<tr>
<td>16</td>
<td>5.5</td>
<td>7.5</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>5</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>4</td>
<td>4.5</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>3</td>
<td>+ 11</td>
</tr>
<tr>
<td>20</td>
<td>3.5</td>
<td>5</td>
<td>+ 6</td>
</tr>
<tr>
<td>21</td>
<td>8.5</td>
<td>5.5</td>
<td>+ 3</td>
</tr>
</tbody>
</table>

**Note.** *Developmental age scores versus chronological age scores. Age difference is provided in months.*
4. Koppitz Developmental Items:

<table>
<thead>
<tr>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Head</td>
</tr>
<tr>
<td>2. Eyes</td>
</tr>
<tr>
<td>3. Pupils</td>
</tr>
<tr>
<td>4. Eyebrows or Eyelashes</td>
</tr>
<tr>
<td>5. Nose</td>
</tr>
<tr>
<td>6. Nostrils</td>
</tr>
<tr>
<td>7. Mouth</td>
</tr>
<tr>
<td>8. Two lips</td>
</tr>
<tr>
<td>9. Ear</td>
</tr>
<tr>
<td>10. Hair or head covered by hat</td>
</tr>
<tr>
<td>11. Neck</td>
</tr>
<tr>
<td>12. Body</td>
</tr>
<tr>
<td>13. Arms</td>
</tr>
<tr>
<td>14. Arms two-dimensional</td>
</tr>
<tr>
<td>15. Arms attached at shoulders</td>
</tr>
<tr>
<td>16. Arms pointing downward</td>
</tr>
<tr>
<td>17. Elbow</td>
</tr>
<tr>
<td>18. Hands</td>
</tr>
<tr>
<td>19. Fingers</td>
</tr>
<tr>
<td>20. Correct number of fingers</td>
</tr>
<tr>
<td>21. Legs</td>
</tr>
<tr>
<td>22. Legs two-dimensional</td>
</tr>
<tr>
<td>23. Knee</td>
</tr>
<tr>
<td>24. Feet</td>
</tr>
<tr>
<td>25. Feet two-dimensional</td>
</tr>
<tr>
<td>26. Profile</td>
</tr>
<tr>
<td>27. Good proportion</td>
</tr>
<tr>
<td>28. Clothing: one piece or none</td>
</tr>
<tr>
<td>29. Clothing: two or three pieces</td>
</tr>
<tr>
<td>30. Clothing: four or more pieces</td>
</tr>
</tbody>
</table>

### 5. Koppitz Emotional Indicators:

<table>
<thead>
<tr>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Broken Lines</td>
</tr>
<tr>
<td>2. Poor integration</td>
</tr>
<tr>
<td>3. Shading, face</td>
</tr>
<tr>
<td>4. Shading, body, limbs</td>
</tr>
<tr>
<td>5. Shading, hands, neck</td>
</tr>
<tr>
<td>6. Asymmetry of limbs</td>
</tr>
<tr>
<td>7. Slanting figure</td>
</tr>
<tr>
<td>8. Tiny figure</td>
</tr>
<tr>
<td>9. Big figure</td>
</tr>
<tr>
<td>10. Transparencies</td>
</tr>
<tr>
<td>11. Tiny head</td>
</tr>
<tr>
<td>12. Large head</td>
</tr>
<tr>
<td>13. Vacant eyes</td>
</tr>
<tr>
<td>14. Glance of eyes</td>
</tr>
<tr>
<td>15. Crossed eyes</td>
</tr>
<tr>
<td>16. Teeth</td>
</tr>
<tr>
<td>17. Short arms</td>
</tr>
<tr>
<td>18. Long arms</td>
</tr>
<tr>
<td>19. Arms clinging</td>
</tr>
<tr>
<td>20. Big hands</td>
</tr>
<tr>
<td>21. Hands cut off</td>
</tr>
<tr>
<td>22. Hands hidden</td>
</tr>
<tr>
<td>23. Legs together</td>
</tr>
<tr>
<td>24. Genitals</td>
</tr>
<tr>
<td>25. Monster, grotesque</td>
</tr>
<tr>
<td>26. Three figures</td>
</tr>
<tr>
<td>27. Figure cut off</td>
</tr>
<tr>
<td>28. Baseline, grass</td>
</tr>
<tr>
<td>29. Sun</td>
</tr>
<tr>
<td>30. Clouds, rain</td>
</tr>
<tr>
<td>31. No eyes</td>
</tr>
<tr>
<td>32. No nose</td>
</tr>
<tr>
<td>33. No mouth</td>
</tr>
<tr>
<td>34. No body</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>35. No arms</td>
</tr>
<tr>
<td>36. No legs</td>
</tr>
<tr>
<td>37. No feet</td>
</tr>
<tr>
<td>38. No neck</td>
</tr>
</tbody>
</table>

6. Examples of children’s drawings and verbatim responses

**Drawing 1: Girl (3 years 6 months)**
When drawing herself and her mother she became very quiet and purposeful. She drew Mum and coloured in her eyes then drew self. Slowly and deliberately she then scribbled over the picture and turned away. She then turned back, turned over the picture so that it was no longer visible, and stated “my mummy is cross and sad”. She then slid the paper to the examiner and got up and walked away.

**Drawing 2: Boy (4 years 6 months)**
When he drew a picture of self and Mum, he stated “this is mummy.....she is cut....she’s got pains......she’s broken and she has a hole in her tummy”.

**Drawing 3: Girl (4 years 11 months)**
In drawing self with Mum she drew Mum first then herself. As she coloured in the eyes of herself she said, “I see my Mum ......she’s crying”. This child stated that she was unable to draw a mouth for her drawing of herself.

**Drawing 4: Girl (4 years 2 months)**
In the drawing of self and mother this child drew the bigger figure first and said that it was her and she was angry. She then drew the second figure and said “ My Mum has a small face......my Mum she has been mad at me. It looks like my Mum is sad”. The child then scribbled over her Mum’s face with the back of the pencil making a few faint lines. She then said, “ Mummy doesn’t have a face.....she has no smiles”.

165
Drawing 1:
3. Draw me a picture of you and your Mum.
Drawing 2:
3. Draw me a picture of you and your Mum.
Drawing 3:
3. Draw me a picture of you and your Mum.
Drawing 4:
3. Draw me a picture of you and your Mum.
PILOT STUDY

Reviewing the empirical literature that explores the impact of domestic violence on children raises common methodological issues. An important issue is that of sampling, with many studies using samples of children residing in women's refuges (Hughes, 1988; Wolf, Zak, Wilson & Jaffe, 1986). The argument presented is that only a small proportion of women experiencing domestic violence use these services therefore this group of children is not representative of children exposed to domestic violence (Office of the Status of Women, 1998, in Laing, 2000a, p.4). In the present study children from both residential and outreach services programs at women's refuges were selected as a sample group for two reasons. The first was the ease of obtaining a sample of children exposed to domestic violence, where domestic violence is often a hidden problem in our society. The second reason was to develop a preliminary understanding of preschool age children exposed to domestic violence within the context of their attachment relationship to their mother. Thus refuges and refuge services provided a referral source where both women and their children attended.

The pilot study for this research offered the opportunity to establish a working and research alliance with women's refuges in Western Australia where the focus of the research was on the children and their relationship with their mother, and not solely on the women receiving services from the refuges.

At the time of developing this research, there were no studies available in the literature internationally, and certainly no studies nationally, that focused specifically on the assessment of the attachment relationship of children exposed to domestic violence, who were in their preschool years. Although the national trend in Australia was beginning to include the examination of the needs of children who witnessed domestic violence who in the company of their mothers accessed community based services, this focus began with school-age children and adolescents. Once this research project was under way other studies around the world began to emerge, with a focus on this age group (eg: The Parent-Trauma Centre, San Francisco Hospital, USA).

As the project developed and the research began, so too did many other research projects across Australia, coinciding with the federal government push to include programs for children within the domestic violence field. One of the women's refuges supporting this project had just received funding to build a child support centre within the grounds of the refuge, and employ two child support workers whose role was to facilitate interventions directly for children who entered into the refuge with their mothers. This initiative was
state-wide and meant that eventually all refuges in Western Australia would be funded for programs aimed at children in these settings.

The purpose of the pilot study was to elicit and resolve any problems with the project practically and legally. This process also focused upon clarifying what testing was needed to assess the children and mothers, which assessment tools would be most appropriate, and why. The process also addressed any practical difficulties that arose out of the testing process.

The final part of the preparation prior to beginning the pilot study was to complete the training required to assess the attachment of preschool aged children. This training was undertaken with Associate Professor Robert Marvin at the University of Virginia, USA, in the Cassidy & Marvin 3- and 4-year-old attachment classification system (1989).

In order to ascertain the need for programs aimed at children under 5 years of age, I conducted a brief survey of all the refuges in Perth, Western Australia. This survey asked the co-ordinators of each refuge how many children in the pre-school age range had entered their refuge in the past 12 months. It also asked if they felt there was a need within their refuge for specific services for these children. The results of the survey (June 1995 – June 1996) were that 13 refuges were surveyed. Of these 13 refuges, six responded to the survey. Five of these refuges stated their willingness to participate in this research project. Of these five refuges that responded positively, the number of children in the following age groups that entered the refuge in the previous 12 months were in total 240 children:

(1) 0-18mths: ~116 children
(2) 19mths – 48mths: ~224 children

**Procedure**

Initial test cases:

(001) This child was female and 4 years of age. The results from this test case established the need for a specially built portable screen, a cameraperson, specialised tools such as lighting, microphones, toys for the strange situation test, stop-watch, paper and pencils.

(002) This second child used in the pilot was a female aged 3 years and 9 months. Her mother was at the time a resident in the refuge. During this trail the consent form and background questionnaire for the mothers was developed. This case also provided the knowledge of the need for a cameraperson who was trained in how to capture on film the necessary information needed to effectively score the Strange Situation video recordings.
This cameraperson also needed to the right temperament to tolerate filming children whom from time to time became distressed.

(003 & 004) The selection of a suitable cameraperson became a particular issue during the assessment of the next two children. Both assessments were of two very difficult cases. The first case was a young boy aged 2 years and 11 months. This young boy had been run over by a car and had both his legs in plaster. Although he managed the Strange Situation testing process without distress or incident, the cameraperson was quite distressed by the story of how he had been injured following an incident of domestic violence. The next case the child struggled with the Strange Situation testing process, and cried when her mother left the room. It both instances it was clear that the cameraperson required debriefing and support, as she found being so physically close in proximity to the child whilst filming (even though the child could not see her behind the screen) was emotionally challenging and demanding.

This raised an issue in the differences experienced between in situ research testing, and testing within a controlled clinical environment such as a University laboratory. In an external or community environment, the researchers are continuously exposed to the raw behaviour and emotions of the subjects. During these test cases it became clear that testing in-situ was necessary as many of the women entering into the refuge had neither the means nor the motivation to participate in research that required them to travel to a University laboratory. From a practical point of view it became clear that it would not be possible to have a ‘stranger’, in addition to a cameraperson available for each Strange Situation assessment. It was decided that the Strange Situation procedure would proceed according to the recommended guidelines as set out for the exclusion of a ‘stranger’.

(005) In this final pilot test case, all of the assessments were carried out. The procedure for collecting the data was established and the sequence of the collection process was formalised. No further modifications were made to the procedure.
Appendix E - Examples of verbatim responses from the background interviews with the mothers from both the Refuge and outreach groups
Appendix E: Examples of verbatim responses from the background interviews with the mothers from both the Refuge and outreach groups

(NB: Permission to present this information was provided by the mothers in these cases, and names have been changed to ensure anonymity).

SUBJECT 1:

I: **What made you leave the relationship?**

Subject: Well he kept slagging off the two older girls and giving them a hard time. Because he wasn’t getting enough sleep because he was using heroin and like they like to sleep in all day and all night I suppose. Threatened Max at 17 months, he’d smack him and put him back to bed and you know, threatened to smash him. I’ve been paying his way all that time for thirteen months, helping him out, feeling sorry for him, paying for his drugs. That’s what they do. Heroin addicts make you feel sorry for them. They all do. All the violent partners make you feel sorry for them.

I: **Have you been in a refuge before?**

Subject: Yeah, heaps.

I: **How many times?**

Subject: With my kids or myself?

I: **All together.**

Subject: Heaps.. I dunno..Since I was 14 or 13.

I: **When was the last incident of domestic violence you experienced?**

Subject: Three weeks before August last year.

I: **Can you tell me about the event?**
Subject: Well I was pregnant, woke up in the morning about six o’clock, Max wanted to play, Mark woke and he was irritable because he hadn’t had enough sleep because he had no drugs, and smashed Max, and told him to go back to bed...then he went for me you know...that was enough.....too many times.... And then he got up and had a shower went out to get drugs, and I made the kids some sandwiches got them dressed left them in there and walked down the street to the refuge.

Subject: Yeah....as I was saying.... Well he wouldn’t let the girls play and the motel people the manager, the lady, actually saw the way he used to hit the girls. In public. So I mean when I rang her up to tell her that I was going to come to the refuge, she said it was just as well because she had two kids too. Two little ones... and she said it was just as well I’ve seen the way he hits you and your girls. The way he speaks to the kids. I mean, they’re not his kids. So he had no right. Well she could see it yeah, but it took me thirteen months to see what he was doing. Because I’m normally the victim, not the child. It’s hard with the child being the victim. You don’t see it but when you’re the victim you know when it was going to happen so you feel like you’re walking on eggshells anytime. Doesn’t matter if they’re not violent or they are violent you’re always expect it to happen. That’s why they had one, cause they’re all pigs. No because you’re always expect it, no matter who they are even if they’re not violent you expect it to happen, which is just being trapped in that circle. You can’t get out. Even if you married someone from the church you expect it to happen. Not fully trusting, you can’t. It’s impossible to fully trust any one.

I: Has Max been the target of violence?

Subject: Yeah.

I: Have you ever lost your temper with him?

Subject: I might have once. Mostly I scream at him. I won’t hit him. I won’t hit anyone. I won’t lay into my kids. Cause I’ve got too much anger, it’d probably kill em. That’s what my problem is. Yelling and screaming and swearing. That’s all I can do to em. I can’t hurt them.
SUBJECT 2:

I: *What made you leave the relationship?*

Subject: All the abuse. Um, he would just stop me from doing a lot of things. He was controlling me.... To the point where I just didn't want to hang out with my friends or my family cause he'd work away. And um, that was really my free time and then he'd come back for the week. He'd isolate me from everyone. I just found myself having to act different when he was around. He didn't like me to smile or what are you looking at or, so I kind of had to watch what I said and I wasn't me at all.

I: *Have you ever lost your temper with John?*

Subject: Um, yeah. I yell...sometimes smack too....Yeah. But I usually um, I did child management about 18 months ago with my special needs boy with disability services so I use a lot of time out, yeah. But he, I find with John he's got a bad habit of um, he imitates. So whatever Mike does, he seems to, he picks or he touches.....keep touching people. My oldest boy's like that too.

SUBJECT 3:

I: *What was the last incident of domestic violence?*

Subject: I had come home from a day out with the children, he was already home, pacing up and down the driveway. I went in and started making them some dinner and he said I'm going next door for a drink and I said it would be really nice to have some assistance some time with these children. I've basically been a single parent for the four, three and half years and with that he grabbed the, I had some water melon, grabbed it out of my hand, threw it in the sink, plates smashed. The children were there, grabbed me, threw me on the floor, how dare I tell him what to do blah, blah. Kicking, hitting, yelling and
then grabbed me and I knew he was trying to throw me outside cause he said I could just nick off and so I tried to cling on to cupboards or whatever. I think I stuck my teeth in his arm so he wouldn’t get me out of the door but he did and the children were watching by this time and screaming and I ended up standing up so he came out and pushed me down on the driveway on my face and then locked the door. The children screaming and (inaudible)......

Subject: I stood on the front lawn and thought what do I do now. I went to the neighbours, which in hindsight was a bad decision because they have a very abusive relationship. Didn’t get any assistance or support. The husband went over and talked to him, which was beneficial, because that allowed me to go in and get the kids which he’d sat at the table with five day old fruit salad. I got the kids into next door but they wouldn’t let me ring the police or, I was sort of talked out of all of that and anything I said to them was later transferred back to him. Because their relationship hadn’t been good for some time. So then after he spoke with the neighbour and had several more drinks he drove off.

I: Has there ever been any history of violence from you towards to Jessica? Have you ever lost your temper with her?

Subject: No...Yes, well I have I know.....maybe once. Not, not excessively at all. She’s just been pushing and pushing and then she, I went to do something for her and she just slapped me across the face. I lost it.......So I just put my hand to her face. It was like an instant snap and I don’t do.......I don’t know......I turned around and walked away. So that’s probably as close as we’ve got......I did loose it ..... it’s hard you know.
Appendix F: Women’s Refuges
2. Description of S.A.A.P. services - Australia

The Supported Accommodation Assistance Program (S.A.A.P) commenced in 1985.

Up until this time policy and program reforms to homelessness in Australia were diffuse and the States/territories operated a range of independent programs. Since 1985, under bilateral agreements, the Commonwealth Government and the State/territory Governments have jointly funded the Supported Accommodation Assistance Program (S.A.A.P.) to provide a nationally coordinated policy approach to address the social phenomenon of homelessness, and to provide support and services to homeless people.

In 1996/97 1,183 Supported Accommodation Assistance Program agencies were operating in Australia and receiving funding under the program. They comprise eight categories:
- medium to long term accommodation (475 agencies)
- crisis or short-term accommodation (408 agencies)
- multiple service delivery (144 agencies)
- 'other' (50 agencies)
- day support (28 agencies)
- agency support (20 agencies)
- telephone information and referral (19 agencies)

Women’s refuges fall under the category of crisis or short term accommodation agencies.

In 1996/97, 22% of clients sought Supported Accommodation Assistance Program support for reasons of domestic violence.

Reference: Ms Deb Dearnley (2001), Co-ordinator, Nadine Wimmin’s Refuge, Western Australia.
2. Description of Nardine Wimmin’s Refuge (Western Australia):

Nardine Wimmin’s Refuge provides safe, secure accommodation and related services for women with/without children who are escaping domestic violence. The service includes the provision of basic counselling, information, para-legal information, referral, advocacy and support on issues related to domestic violence. Staff aim to support, assist and inform women and children so that they can gain knowledge and develop skills to become self-determining and move towards independence.

In addition to providing a range of supports to women the refuge has a Child Support program that offers support to children and young people who accompany their mother. Child Support includes assistance with school enrolments and transport to school on a daily basis. Organising recreational/social activities. School holiday programs. Support for mothers with parenting issues and in exploring the impact of domestic violence on children/young people. Referrals to specific agencies, for example, the Domestic Violence Children’s Counselling Service (DVCCS), and local child health nurses. Providing basic counselling/emotional support to children/young people. Providing developmentally appropriate activities for pre schoolers. Provision of childcare to enable mothers to attend appointments, group work, etc. The service has the capacity to provide supported accommodation for up to 5 families at any one time.

The Outreach service at Nardine Refuge aims to provide support and assistance to women in the community who have/are experiencing domestic violence but who are not in need of accommodation. Such assistance may take the form of provision of information, para-legal
information in relation to Violence Restraining orders, Family Law Court matters, etc. Referral to relevant individuals, agencies, eg. Lawyers, counsellors, financial counsellors etc. Provision of crisis counselling. Group programs that explore the dynamics of domestic violence and aim to break down the isolation that woman in Domestic Violence relationships often suffer. Outreach also provides a continuum of support for women who may have stayed in the refuge and are in need of on going support at their point of exit from the refuge. This may take the form of attending women’s group or wanting to access on going emotional support as they settle back into independent living in the community.

In essence, the refuge services aim to provide safe accommodation and/or support to women who are homeless or at imminent risk of homelessness. Women are provided with a support planning service to assist them to move to more stable long-term accommodation and reduce the likelihood of future homelessness.

Reference: Ms Deb Dearnley (2001), Co-ordinator, Nadine Wimmin’s Refuge, Western Australia.
BIBLIOGRAPHY


Cicchetti, D., Cummings, E. M., Greenberg, M. T., & Marvin, R. S. (1990). An organizational perspective on attachment beyond infancy: Implications for theory,
measurement, and research. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 3 - 49). Chicago: The University of Chicago Press.


Koppitz, E. M. (1967). Expected and exceptional items on Human Figure drawings and IQ scores of children age 5 to 12. *Journal of Clinical Psychology, 23*, 81-83.


211


