Assessment and intervention for young children exposed to domestic violence

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INTRODUCTION

The clinical work and research described in this report has been undertaken within the Children's Services at Refuge over the last four years. The work has been carried out by the Refuge pre-school specialist/research psychologist, funded by the Department of Health, with the support of colleagues at Refuge.

Refuge is the UK's largest single provider of specialist accommodation and support to women and children escaping domestic violence. It opened the world's first safe house for women and children experiencing domestic violence in Chiswick, London in 1971. Since then Refuge has grown to become the UK's largest organisation of its kind, providing a national "lifeline" for up to 80,000 women and children every year. In addition to the safe, emergency accommodation provided through a growing network of refuges, a range of support services is offered. These include:

- A confidential 24-hour National Domestic Violence Freephone Helpline, run in partnership with Women's Aid
- A unique children's psychology programme which helps children come to terms with the violence they have either witnessed or experienced themselves
- Individual and group counselling for abused women
- A resettlement service offering continued emotional and practical support
- An outreach project for women from minority ethnic communities

The vision for the current research around pre-school child witnesses of domestic violence arose from the work of the previous Head of Children's Services at Refuge, Ruth Aitken. Ruth initiated a children's psychology programme at Refuge in 1995, using best practice from the London, Ontario model and brief solution focused therapy as a guide for developing group and individual psychological services for children and their mothers (Aitken, 1998). During the course of this work, Ruth observed the high numbers of under five's passing through the refuge houses. She also noted the scarcity of research and literature about the effects of domestic violence on young children and the lack of appropriate interventions for this population. As a result, the proposal for the current project was developed and funding obtained from the Department of Health for the post of Pre-school Specialist/Research psychologist to carry out this much needed work.

The following document provides a summary of this research into the effects of domestic violence on its youngest survivors, children under five years of age. A model of intervention is described which includes empathy groups and individual debriefing/play sessions with the children and individual child-focused sessions with the mothers. The focus of this research can be described as 'ground-breaking' worldwide and this report presents our first forays into this area of work. It is hoped that continued funding will allow further work to enable better understanding of the effects of living with domestic violence on pre-school aged children and to develop much needed, appropriate support services for this population.

SUMMARY OF LITERATURE

Definition and prevalence - women

The Greater London Domestic Violence Strategy group (2001) have defined domestic violence as being

> '*essentially about the misuse of power and the exercise of control by one adult person, usually a man, over another adult, usually a woman, within the context of an intimate relationship. Such abuse may manifest itself in a variety of ways including physical violence, emotional or psychological abuse, sexual violence and abuse, financial control and abuse and the imposition of social isolation or movement deprivation*."

Domestic violence is known as an 'equal opportunities phenomenon', occurring in all economic, class and ethnic groups (Osofsky, 1994). Any woman can experience domestic violence regardless of her social background, culture, age or religion[a]. Statistics indicate that 1 in 9 women is severely beaten by her partner every year (Stanko, 1998) and 1 in 4 women will experience violence from her partner over her lifetime (Mooney, 1994). Two women in England and Wales are killed each week by a current or former partner (Homicide Statistics, 1998). Many women who are abused by an intimate partner continue to keep the abuse secret, and so the real incidence may be much greater. For example, a 1998 study in America found that 47% of women did not report domestic violence to the police (Gjelsvik, Verhoek-Oftedahl & Pearlman, 2003). Reports also indicate that the violence often reaches severe levels before it is reported, with a woman being assaulted an average of 28 to 35 times before reporting it to the police or seeking refuge (Violence Against Women RCOG, 1997; Webb, Shankleman, Evans & Brooks, 2001)

Definition and prevalence – children

Children who live in homes where violence is perpetrated have come to be described as 'child witnesses of domestic violence' (Aitken, 1998). However, as Aitken also suggests, there are multiple ways in which children experience domestic violence beyond accidental or forced direct witnessing, and as such multiple factors which can influence the effects of the violence upon the children. These can include exposure to the immediate and/or long-term aftermath (such as physical injury or psychological effects like depression), presence during a parent's arrest, being threatened, being used as a pawn, and taken hostage (DeVoe and Smith, 2002).

In considering how children may experience violence, Holden (2003) suggests that the word 'exposed' is better than witnessed or observed because it is more inclusive of the different types of experiences and does not assume that the child simply observed the violence. He goes on to offer a *taxonomy of children's exposure to domestic violence* which can be particularly useful in thinking about what children might experience beyond direct witnessing and thus how they may be affected. The forms of exposure he describes are separated into 10 discrete categories, with the first six categories reflecting direct involvement with the violence and the last 4 concerning indirect exposure. These categories include: prenatal exposure, child

[a] As is acknowledged in the definition, abuse is generally perpetrated by a man against a woman, and as Refuge provides safe accommodation for women and their children, this research focuses only on the effects of woman abuse on young children.

overhears, child witnesses, child participates, child directly assaulted, child intervenes, child observes the initial consequences of violence, child experiences the aftermath, child is told or overhears conversations about the violence, child is unaware. Although the current research at Refuge has not used such a taxonomy to explore the effects, it is presumed (and often confirmed by the mothers' reports) that the pre-school children may have experienced any or all forms of exposure.

Exposure during prenatal development is an important time to consider as pregnancy has been recognised as a period of heightened risk for partner abuse (e.g. Campbell & Parker, 1999 in Holden, 2003). The foetus can be the direct or indirect target of an assault and it is also possible that the foetus may be affected by the physiological state of the terrorized woman. Statistics indicate that 25% of women experiencing domestic violence are assaulted for the first time during pregnancy (Royal college of midwives, 1997) and that between 40% and 60% of women experiencing domestic violence are abused while pregnant (Helton, 1997).

In terms of directly seeing and/or hearing the violence, the 1992 British Crime Survey found that 90% of children are in the same or the next room when a domestic violence incident is occurring. Other statistics on school age children suggest that between three and five children in every classroom are witnessing domestic violence at home (Kincaid, 1982, Aitken, 2001). More recent research from the London Borough of Ealing found that an even higher 27% (n=3007) of primary school pupils (or 8 out of a class of 30) reported exposure to violence at home within the previous month (Stewart, Ruggles, & Peacock, 2004). 35,000 children annually pass through refuges in England and Wales, with a similar number passing on to other safe accommodation (Webb et al, 2001).

Not only are we beginning to hear of even higher numbers of children exposed to violent and terrorizing home environments, but research also indicates that there is an established correlation between woman abuse and child abuse. The NSPCC reported that in over 50% of known domestic violence cases, children were also directly abused (NSPCC, 1997). Other research suggests this estimate is higher, ranging from a 60 to 75% overlap (Lewis, 1996). Most recently, Appel and Holden (1998) carried out a review of 31 studies over the last 20 years about the co-occurrence of spouse abuse and physical child abuse. They found a percentage overlap ranging from 20 to 100%. When a conservative definition of child abuse was used, they found a median co-occurrence of 40%. Research has also shown an overlap between child fatalities and domestic violence with English, Marshall and Stewart (2003) reporting a review which found domestic violence in 47% of 117 child fatalities. Between 1 and 2 children are killed by their parents each week in England and Wales (Stewart et al., 2004). Based on the above overlaps we would predict the co-occurrence of domestic violence in at least half of these cases.

Over-representation of young children

It is apparent that significant numbers of children who are regularly exposed to domestic violence and to the fear and helplessness that accompany this terrifying and terrorizing home environment. It is even more disturbing to realise that the majority of these children are under five years of age. At this age, children may be especially vulnerable to the harmful effects of domestic violence because, among other reasons, they have not developed the capacity to understand and cope with trauma in the same way as older children (Osofsky, 2003).

Very few studies have reported the relative numbers of school-age compared to pre-school-age children in terms of exposure to domestic violence. The first research article to note concerns about this issue was written by Fantuzzo in 1997. In a 5 city study in the United States he found that children under the age of five, as compared with older children, were more likely to be exposed to multiple incidents of domestic violence over a 6 month period, and thus concluded that 'young children appear to be over-represented among those growing up in homes where domestic violence occurs'.

A New Zealand study found that domestic violence was most common among the young parents of small children, and concluded that young children are especially at risk because they spend a great deal of their time in the home (Moffitt et al, 1997, in Moffitt & Caspi, 1998).

The most recent, and only other, study found to report on this was carried out in Rhode Island by Gjelsvik et al in 2003. In analysing police reported domestic violence incidents they found that where children were reported to be witnesses, 47% were under 6 years of age (the rest were aged from 6 to 17 years).

The research strongly indicates an over-representation of very young children in homes where domestic violence occurs. This is a significant finding and highlights the need for research into the effects of domestic violence on this population, given the current lack of such research. It is also an important finding because of the vulnerability of children in their early years of development, this time therefore representing a higher risk period. For all children, the most devastating negative life events are likely to be those that involve abuse by the very people they look to for protection and safety (Holden, 2003). However, very young children exposed to violence represent a significant and challenging group because they are less able to talk about their violent experiences (The Violence Study Group, 1994), are more apt to be overwhelmed by exposure to violence, and are more at risk due to their increased proximity to and dependence upon their caregivers (Osofsky, 1996; Holden, 2003).

The first years of a child's life are a critical time for development, and any disruption, particularly one such as chronic violence in the very place which needs to be safe and nurturing, is likely to have long term negative impacts. Zeanah (1994) states that '*the pace of development in the 1st three years of life is so rapid, and the interrelationships among domains of development so complex, that a young child's experience of violence may reverberate, affecting the child's ability to handle expectable developmental challenges*' (p32).

More recently neurodevelopmental research by Bruce Perry (1997, 2000, 2001), has highlighted just how critical the first three years of life are for brain development. This growing body of evidence suggests that exposure to violence or trauma, and the resultant persisting fear with which the young child lives, actually alters the developing brain, which is exquisitely sensitive to stress. The more threat-related neural systems are activated during the brain's development, the more they will become established in the brain. Perry suggests that children exposed to violence and trauma during this period of brain development literally organise their neural systems to adapt to this kind of environment. This is in contrast with older children and adults exposed to violence and trauma whose brains, after recovery, will return to pre-trauma normal state (Perry 2000). '*All studies to date using EEG findings suggest that exposure to violence in childhood alters brain development (and subsequently ability to process new information and learn) and that the abnormalities are more prominent if the traumatic exposure is e**arly in life**, severe and chronic'* (Perry, 2001, p9)

Living in a violent environment - why and how domestic violence affects young children

Research suggests that a number of factors influence the direct effects of domestic violence on children. According to Osofsky (1996), factors which may lead to a more severe response to a traumatic event include the intensity or level of violence, the child's proximity to the event, the child's familiarity with the victim, perpetrator or both, the developmental status of the child (younger children being more vulnerable), and the chronicity (e.g. one event versus repeated events). On the basis of this information we would expect that young children witnessing ongoing domestic violence in their homes, perpetrated against their primary caregivers would be likely to experience a more severe response.

Disrupted parenting

However there are other factors reported to mediate these impacts on children. Several models have been suggested as a way of understanding both the direct and indirect effects of witnessing domestic violence upon children. A significant proportion of this research has focused on what Jaffe, Wolfe & Wilson (1990 in Huth-Bocks, Levendosky & Semel, 2001) term the *family disruption hypothesis*. This suggests that domestic violence may indirectly affect children's adjustment through its negative impact on maternal parenting capacity and maternal psychological functioning. For example, when mothers are being directly abused it is likely they will have a reduced capacity to parent and thus have more difficulty being emotionally available, sensitive and responsive to their children's needs (Osofsky & Jackson, 1994).

A significant number of studies have documented the effects of domestic violence on women's psychological functioning, particularly levels of post-traumatic stress disorder (PTSD) and depression. In summarising several studies, Levendosky, Huth-Bocks, Shapiro, & Semel (2003) report that the prevalence of PTSD in women is high, ranging from 45% to 84%. If a mother is suffering from PTSD from exposure to violence, she may have difficulty recognising and attending to her child's own distress precisely because it serves as a reminder of exactly what she wishes to forget (Osofsky & Jackson, 1994). Levendosky et al. (2003) report on a number of studies which have also found higher rates of depression in women experiencing domestic violence (e.g. Cascardi & O'Leary, 1992; Khan, Welch & Zillmer, 1993 in Levendosky et al., 2003). Parents who are extremely depressed may be unable to provide for their children's most basic physical needs. A depressed caregiver may also have detrimental effects upon a baby, who comes into this world prepared to respond to smiles and lively facial expressions; '*if they don't find these in their caregiving environment, babies begin to withdraw from the human world, soon their sad, blank faces reveal their own depression'* (Osofsky & Jackson, 1994 p10)

Until recently there had been little research on the effects of living with chronic violence on parenting and the care-giving environment, which are particularly crucial issues for young children. A deficit model of parenting has been reported based on a few research findings that some women who experience domestic violence are likely to be aggressive to their children (Straus & Gelles, 1990), display less warmth (McCloskey, Figuerdo & Koss, 1995) and be less consistent in their parenting efforts (Holden, Stein, Ritchie, Harris & Jouriles, 1990 in Levendosky et al, 2003) than non-abused mothers. Levendosky et al (2003) also found that women who were psychologically harmed by the violence appear to be struggling with parenting. DeVoe and Smith (2002) comment on the unsurprising nature of these findings considering that '*mothers are forced to cope with their own physical injuries and emotional reactions…are necessarily preoccupied with basic safety and survival…and may also be fearful for their children's safety'* (p1077-1078).

More recent research has begun to explore these processes in more detail and some findings question the supposition of the deficit model of parenting. Levendosky & Graham-Berman (2000), through direct observation and mother's self-report, found domestic violence directly affected women's parenting behaviours over and above maternal reports of depression, indicating that it is not purely mediated through maternal psychological functioning. They suggest that the experience of chronic abuse depletes one of the ability to give emotional support to others. This was supported by other research (Levendosky, Lynch & Graham-Berman, in press, in Levendosky & Graham-Berman, 2000) where women talked about the abuse interfering with their ability to give love and time to their children. Based on these findings the authors concluded that interventions must focus on removing abusive men from the family in order to protect women and children; treating women's depression and PTSD is unlikely to positively impact children if the abuse continues to take place.

Some research confirms positive parenting among many women who have been abused (McCloskey et al., 1995), with one study (Holden et al., 1998) finding that although women report higher levels of parenting stress, they provided as much and often more structure for their children than did non-abused women. DeVoe and Smith (2002) used focus group interviews to explore women's views and experiences in more detail. They discovered that for most participants there was a sense of trying to compensate for children's exposure to domestic violence through things such as working hard to provide a sense of safety and a strong desire to teach children that abuse is not a healthy part of relationships. These authors concluded that in research there is a need to shift away from a focus on '*pathology to a view of battered mothers' strengths and coping in their parenting roles*' (p1097). They also found a consensus among the women about a lack of appropriate services for their young children and suggest that

> '*the development of age-appropriate interventions that target the effects of domestic violence is critical for pre-school age children and their abused mothers…at the very least women are in need of information about how their children may be affected and specific assistance with how to address those effects an appropriate developmental level*.' (p1098)

Psychological maltreatment

Holden (2003) puts forward the case that children exposed to domestic violence qualify as maltreated because they are living in an environment that is psychologically abusive. He suggests this model as a way of considering how children are likely to be affected by living with domestic violence and claims that they will be victims of most, if not all, of each of the 6 manifestations of psychological maltreatment. This is a useful model to consider as it takes into account the effects of the whole environment including the abusive man's parenting of the child, which the 'mother's disrupted parenting capacity' hypothesis described above fails to do.

Firstly, he says, children who live in homes where domestic violence occurs are 'terrorized'. '*Exposure to a parent being verbally or physically assaulted is physiologically arousing, emotionally distressing, and often trauma inducing*.' (p156). A second category is corruption or mis-socialisation which suggests that children learn ways of behaving through parental modelling such as '*the man has power in the house*' or '*violence is an effective way to resolve conflict'* (p157). Third, children may be directly spurned through verbal comments which degrade, reject and belittled them. A forth type of psychological maltreatment is that children may be denied appropriate emotional responsiveness both from their mothers due to the processes outlines above, but also from uninvolved, inconsistent or abusive fathers.

Fifth, children may be isolated. Perpetrators of violence are well known for discouraging or forbidding their partners to maintain social relationships and as such children are not given adequate socialising opportunities, particularly young children who are too young for nursery or school. Older children may also isolate themselves as a coping strategy to remove themselves from the violence. Finally Holden suggests that children's mental health, medical and educational needs may be neglected. This may be due to the mother's necessary preoccupation with safety and survival and managing her own impacts and the father's lack of involvement in parenting activities.

When evaluating the effects of domestic violence on young children it is apparent that we need to consider the whole environment and at the very least the impacts on the parenting and psychological functioning of the primary caregiver. However, it appears important to consider these issues not only in the context of pathology but also in terms of strengths, ways of coping and other compensatory strategies which mothers may have adopted in attempting to provide safety and security for their children.

Effects of exposure to domestic violence on young children

Young children exposed to domestic violence have been described as an 'unstudied and unknown population' as recently as 2001. (Webb et al, 2001). Even now there are only a handful of studies which have begun to explore the effects on young children's behaviour and development of witnessing the abuse of their mothers (see below). Misconceptions and myths have acted as barriers to young children receiving the attention and support they desperately need. Many people still assume that very young children are not affected at all, erroneously believing that they are too young to know or remember what has happened (Osofsky, 1995). Others see reactions as 'expectable' and 'inevitable' and expect them simply to pass, and so do not seek help (Zeanah & Scheeringa, 1996). Age has also been considered by some as a protective factor; i.e. young children do not have the cognitive maturity to make sense of what they are seeing thus will not be affected by it. We are now learning that in fact the opposite of this may be true. Due to their cognitive immaturity and lack of available filtering processes, young children may have few protecting factors available to them.

Only recently have researchers begun to explore the impacts of domestic violence on children under 5 years of age. Prior to this the literature available looked at young children and their reactions to traumatic events such as war (Almquist & Brandell-Forsberg, 1997; Laor, Wolmer, Mayes, Gershon, Wieznam, & Cohen, 1995), chronic community violence (Magwaza, Killian, Petersen, & Pillay, 1993), hospitalisation (Gaensbauer, 1995; Osofsky, Cohen, & Drell, 1995), natural disasters (Burke, Boors, Burns, Hangman Millstone, & Beasley, 1982; Green, Koroal, Grace, Vary, Leonard, Gleser, & Smitson-Cohen, S, 1991), and parental homicide (Osofsky, Cohen, & Drell, 1995). The majority of this research is relatively new (e.g. mid '90s), but begins to document the variety of ways young children may be affected by trauma. These included sleep problems, anxiety, over-dependence, regression, nightmares and the experience of post-traumatic stress disorder, to name but a few. The literature which describes children's reactions to domestic violence has focused on exploring similar areas, specifically, post-traumatic stress reactions, social and behavioural difficulties including externalising and internalising problems, and cognitive development. The research from each of these areas is summarised below.

Post-traumatic stress disorder

A review of the studies of PTSD symptomatology in children finds that about 25% to 40% of children of all ages exposed to traumatic events meet diagnostic criteria for PTSD, according to DSM-IV (Levendosky et al., 2002). The Diagnostic and Statistical Manual for Mental Disorders, Version IV (DSM-IV) criteria for post-traumatic stress disorder (PTSD) firstly requires exposure to a traumatic event in which the actual threat or threatened death or serious injury (to self or others) occurs, resulting in extreme fear, helplessness and/or horror (APA, 1994). Diagnosis of PTSD also requires the presence of a specific number of symptoms from the 3 categories of re-experiencing the traumatic event (e.g. flashbacks, nightmares), avoidance of stimuli associated with the trauma (e.g. thoughts, feelings) and persistent increased arousal (e.g. startle response, irritability) for at least 1 month. The specific symptoms however, are adult-focused and several researchers have questioned the usefulness and applicability of the criteria for children, particularly for those under 6 years of age (Levendosky et al. 2002; Scheeringa, Zeanah, Drell, & Larrieu, 1995). Scheeringa et al (1995) after firstly confirming that young children do appear to actually experience post traumatic stress symptoms, devised a new set of criteria which have since been adopted by the Zero to Three National Centre for Infants, Toddlers and Families (Zero to Three, 2002). These criteria are more behaviourally anchored and thus more appropriate for observing symptoms in young children. The categories, similar to DSM-IV, include re-experiencing the trauma, numbing of responsiveness, and increased arousal, but another category, new fears and aggression, has been added for young children. These new criteria have been used in the current study.

Not only has this lack of appropriate criteria made research into the effects of trauma in young children difficult but there are also surprisingly few standardised trauma-relevant measures available for children (Briere, Johnson, Bissanda, Damon, Crouch, Gil, Hanson & Ernst, 2001). The only 2 available standardised, normed tests, the Trauma Symptom Checklist for Children (TSCC, Briere, 1996 in Briere et al, 2001) and the Child Sexual Behaviour Inventory. CSBI: Friedrich, 1998 in Briere et al, 2001), are both inappropriate for use with pre-school witnesses of domestic violence. The TSCC has a lower age limit of 8 years and the CSBI is limited to a review of sexual behaviours. For these reasons, the current author developed a checklist, The Pre-school Traumatic Stress Questionnaire, based on the diagnostic classification of the Zero to Three Centre, to assess trauma symptoms in pre-school children involved in this study at Refuge.

Despite these assessment difficulties there have still been a number of studies which report on post-traumatic stress reactions in child witnesses to mother-assault. In carrying out a meta-analysis of 34 publications which referred to mother assault/family violence/child witnesses/PTSD/traumatic symptoms, over the period 1980 to 1999, Lehman (2000) found that in approximately 65% of the studies there was a trend toward younger children exhibiting more distress. Upwards of 30% of the publications reported that when comparing age groups, younger children appeared to be more at risk of exhibiting PTSD symptoms than their older counterparts (age range 8 months to 19 years). For all age children, symptoms included high levels of re-experiencing, repetitive play, sleep problems, trauma-specific fears, withdrawal, regressions, irritability and anger.

Only one of those 34 publications, however, refers specifically to research carried out with a pre-school age population only (i.e. some studies include children from age 4 to 9 years or 3 to 16 years). Only 3 more studies referring to trauma symptoms in pre-school children have been found. Despite the dearth of research, all studies report high levels of post-traumatic stress in children aged under 5 years. Pynoos and Eth, back in 1984 (In Lehman, 2000), writing about

some of the first findings, used clinical interviews with 40 pre-schoolers. They found that 60% of witnessing children met the criteria for PTSD. Lehman and Rycraft (1996) found similar rates of diagnosis with 57% of 14 children under five years of age meeting the DSM-IV criteria for PTSD. In a large longer term study being carried out in the United States with 70 child-mother pairs, the Preschooler Witnesses to Domestic Violence Project found 69.1% of 3 to 5 year olds met the Zero to Three Diagnostic Classification for PTSD (Groves, Lieberman, Osofsky & Fenichel, 2000).

The most recent study assessed trauma symptoms in a community sample of 39 pre-school children whose mothers reported that they had recently witnessed domestic violence (Levendosky et al, 2002). The authors used 2 different tools to assess PTSD in these young children to determine efficacy of different measures. Using the DSM-IV based measure only 3% of the sample met the criteria for diagnosis (even though all 39 children had at least 1 symptom) and using the PTSD scale from the CBCL, a higher 24% met diagnostic criteria. The authors then applied the Scheeringa's (1995) alternative criteria to the data from both of these measures, and found higher rates of 26% and 50%, respectively, of children then meeting PTSD diagnostic criteria. The results led the authors to support concerns that current assessment tools are not appropriate for this population and Scheeringa's criteria maybe more useful.

Emotional and behavioural difficulties

Only one other British study has reported on the effects of domestic violence on pre-school children, and it is still in conjunction with school age children so we are unable to see specific effects upon the behaviour of pre-schoolers (Webb, Shankleman, Evans & Brooks, 2001). The authors assessed the health, developmental status, emotional and behavioural difficulties (EBD) and access to primary healthcare services of children living in refuges in Cardiff, Wales. Just under half of the children were pre-school age. Results, however, for EBD include all children up to 15 years of age, thus it is not possible to identify results only for pre-school children. Assessment for EBD, using a semi-structured interview with the mothers and the Revised Rutter Parents' Scales, found 48% scoring greater than 10, suggesting a greater risk for mental health difficulties (expect 10-26% in general school age population).

Research has been reporting on behavioural adjustment difficulties in pre-schoolers exposed to domestic violence for some time, mainly through data from clinical work or case studies. For example, Osofsky (1995) suggests that pre-school children will experience a range of difficulties including being less likely to explore their physical environment and play freely, showing less motivation to master their environment, sleep disturbances, increased anxiety, increased irritability, fears of being alone, and/or regression in developmental achievements such as toileting and language. Research has also noted disrupted development of empathy or greater difficulty developing empathy in pre-schoolers witnessing domestic violence (Fantuzzo, DePaola, Lambert, Martino, Anderson, & Sutton, 1991; Huth-Bocks et al, 2001).

More recently, research has begun to systematically explore behavioural problems in pre-school children exposed to domestic violence. Findings are demonstrating poorer scores on emotional, somatic and social behaviour scales (Attala & McSweeny, 1997), lower self-esteem, lower levels of social functioning, and higher levels of depression and anxiety relative to children in non-violent homes (Levendosky et al., 2003).

Difficulties exist again in comparing findings due to inappropriate and inconsistent use of measures for pre-school children, as well as results for pre-schoolers being included with those

for older children, thus masking any specific effects on pre-school children. For example, Kernic, Wolf, Holt, McKnight, Huebner, & Rivara (2003) assessed 167 two to seventeen year olds using the Child Behaviour Checklist (CBCL). They found these children were more likely to have borderline to clinical scores on externalising and total behaviour problems, relative to normative children. The relative contribution of pre-schoolers to this effect is not described.

The only findings specific to pre-schoolers come from the US Preschooler Witnesses to Violence Project (Groves et al., 2000). Out of seventy 3 to 5 year olds assessed using the CBCL, they found 29.3% scored in the clinical range for total problems, 27.7% for externalising problems, and 26.5% for internalising problems (expect only 5% in normal population). In order to allow comparisons to be made, and to incorporate a standardised measurement, the current study uses the CBCL for young children to assess for behavioural difficulties in the Refuge population.

Development

Perhaps unsurprisingly, there is also little research exploring the effects of domestic violence upon the development of all age children, let alone pre-schoolers. Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe (2003), in their meta-analysis of 41 studies of children exposed to domestic violence did not include educational and cognitive outcomes as there were not enough studies to facilitate an analysis. Three studies do however give us some interesting preliminary findings, all implying the negative impacts on young children's development. The Preschooler Witnesses to Violence Project (Groves et al., 2000), using the Wechsler Preschool and Primary Scale of Intelligence (WPPSI-R) to assess cognitive performance, found an over-representation of children in the lower end of the distribution. A second study used just the block design sub-scale of the WPPSI-R in order to examine pre-school children's visual-spatial abilities, as well as the Peabody Picture Vocabulary Test-Revised (PPVT-R) to measure children's receptive vocabulary (Huth-Bocks, Levendosky & Semel, 2001). Results indicated that children who witnessed domestic violence during the last year had poorer verbal abilities than non-witnesses. However, the 2 groups did not differ significantly on WPPSI-R block design scores. Finally, the only other UK study (Webb et al., 2001) used the Denver Developmental Screen with 68 children aged 3 to 4 years; 9% failed and 10% had borderline results requiring review.

Due to the implementation of a Developmental Checklist already in place in the Refuge play-centre, this was used for the current study to assess current developmental functioning of children aged from 2 to 4 years.

METHOD

Setting

The current study was carried out within the Children's Service at Refuge with women and children living in a cluster of 4 of Refuge's safe houses. These 4 houses offer accommodation to a total of 33 women, and their children, escaping from domestic violence. The women are supported by refuge workers based in each house and also have access to the on-site women's psychologist, Children's Services manager, child psychologist, pre-school psychologist and play-centre.

The Refuge play-centre is available for children aged from 2 to 5 years who are currently living within the 4 Refuge houses. Based on statutory child-staff ratios, the play-centre provides places for up to 12 children at any one time. The play-centre staff, all qualified early years professionals, complete developmental checklists on the children as they come into the play-centre in order to plan an appropriate curriculum to meet their individual needs. This is done using Refuge developmental checklists. The staff implement the Early Years Curriculum and Early Learning Goals.

Data on the development of pre-school children in the community was also collected as a comparison group. Six early childhood centres agreed to take part in this study. These included 3 private day nurseries for children aged from 3 months to rising 5 years and 3 pre-schools for children aged from 2.6 to 5 years of age. These settings provided places for between 24 and 50 children.

Participants

Participants were 33 women and 38 pre-school children. The children included 27 boys and 11 girls ranging in age from 7 months to 4 years 11 months (*M* = 3 years).
The women defined their ethnicity as 18% African, 15% White British, 15% Asian, 12% Black British, 12% European, 6% Caribbean, 3% Middle Eastern, 3% mixed race and 15% as 'other'. The ethnicity of the children was described as 44% mixed race, 27% Black British, 15% White British, 3% Asian and 12% as 'other'.

Data on children's development was also available for 80 children who had been resident at Refuge both prior to (*n* = 66) and during (*n* =14) the current study. This group of children included 42 boys and 38 girls aged from 2 years to 4 years 5 months (*M* = 3 years 2 months). The ethnicity of the 14 children resident during the study is included above, the ethnicity of the remaining children is unrecorded.

Data on the development of 37 children in the community was collected as a control group, also using the Refuge developmental checklists. Children included 20 girls and 17 boys aged from 2 years to 4 years 2 months (*M* = 3 years 2 months). Eighty-two percent of the children in the community settings were White (British or other), 15% were mixed race and 3% were European. Seventy percent of the children lived in mortgaged housing, 18% lived in council rented, 6% in privately rented, 3% in housing association rented, and 3% in HM Forces housing.

Child measures

Pre-school traumatic stress questionnaire (PTSQ)

This is a questionnaire for assessing maternal report of post-traumatic stress symptoms exhibited by pre-schoolers exposed to domestic violence. The pre-school psychologist developed this questionnaire as part of the current study (see appendix 1). It is partly based on the work of Scheeringa et al. (1995) who proposed alternative PTSD criteria, after finding that the current DSM IV criteria were not diagnosing the condition effectively in very young children.

These alternative criteria were designed to be more objective and anchored in observable behaviours, rather than based on subjective thoughts and feelings. They were felt to be more developmentally sensitive and thus more applicable to the younger age group. The first 3 categories of the criteria remain the same as DSM IV and include re-experiencing the trauma, numbing of responsiveness, and increased arousal. However, it is within these categories that items have been changed or adapted to reflect the young child's experience. Scheeringa et al. also added a 4th category called new fears and aggression. In order to attain a diagnosis of PTSD children must be experiencing 1 item within each of these 4 categories. This set of criteria was adopted by the Zero to Three Diagnostic Classification in Infancy (Zero to Three, 1994) and remain the only alternative PTSD diagnostic criteria for pre-school children.

The PTSQ was also based on the Refuge Children's Impact of Event Scale which was adapted by Ruth Aitken, previous Head of Children's Services at Refuge. She adapted this questionnaire from the Children's Impact of Events Scale[a] (IES) in the Child Psychology Portfolio (1998) to reflect the experiences and symptoms of children exposed to domestic violence living at Refuge. The original IES was designed to 'monitor the main phenomena of re-experiencing the traumatic event and of avoidance of that event and the feelings to which it gave rise' (Child Psychology Portfolio, 1998).

The PTSQ begins by asking what the most recent traumatic event was which the child witnessed, whether the mother observed the child showing fear and helplessness, and what the child's other responses to the violence were. There are 20 items which assess maternal report of children's behaviour within the Scheeringa et al. categories of Re-experiencing, Numbing, Arousal and New Fears. The questionnaire is completed with the child's mother, asking her to consider the child's behaviour over the previous 2 weeks. The mothers rated the occurrence of the item as either *No, Not much, Sometimes or A lot.* The distinction between *Sometimes* and *A lot* tended to be on the basis of the item being reported to occur several times a week (*sometimes*) or every day (*a lot*). For the purposes of analysis, it was decided to collapse these 2 categories.

In order to use the questionnaire as a tool for the diagnosis of post-traumatic stress disorder in infants and young children, the Diagnostic Classification: 0 –3, was used (Zero to Three, 2002). To make a diagnosis of traumatic stress disorder, the clinician looks for the existence of a traumatic event and the occurrence of at least one item from each of four categories of Re-experiencing, Numbing, Increased Arousal and New Fears or Aggression.

[a] This is the short form for children based on the IES originally developed for use with adults by Horowitz et al. (1979). See the Child Psychology Portfolio (1998) for details.

Child behaviour checklist (CBCL) and teacher report form of the CBCL

We used the Child Behaviour Checklist (CBCL) for children aged 1 ½ to 5 years (Achenbach & Rescorla, 2000) to assess children's emotional and behavioural difficulties, as reported by the mother. This is a standardised, extensively used psychometric instrument with high reliability and validity (see Achenbach and Rescorla, 2000). It consists of 99 problem items which yield scores indicating levels of internalising, externalising and total behaviour problems. In addition, the checklist can also be scored in terms of 7 syndrome scales[a] and 6 DSM-IV diagnostic categories[b]. Play-centre staff completed the Teacher Report Form of the CBCL (C-TRF) for a number of the children who regularly attended play-centre. This form yields nearly identical information but from the perspective of the teacher.

Refuge developmental checklists

The Refuge play-centre developmental checklists were developed by Ruth Aitken, using a number of other developmental assessments, including the Denver Developmental Screening Test (1992), Griffith Mental Development Scales (1970) and the Mary Sheridan Charts of Children's Developmental Progress (2003). There are separate checklists to measure developmental progress at 2, 2.6, 3 and 4 years of age. Some items were removed for the current analysis.

Each checklist consists of a range of items designed to assess functioning across 4 different areas. These areas include Posture and Large Movements (PLM), Hearing and Speech (HS), Vision and Fine Movements (VFM), and Social Behaviour and Play (SBP). Items were scored as either Yes, Emerging, or No. Due to the transient nature of the population data were not always complete. The decision was made to exclude some children for particular parts of the analysis if more than 25% of the data were missing.

Maternal measures

Women's semi-structured interview

This interview was written by Ruth Aitken to form part of the assessment to be carried out by the child psychologist with women on arrival at Refuge. Its aim is two-fold. It allows the practitioner to gather assessment information about the domestic violence experiences and reactions of the woman and her child(ren). It also provides a safe semi-structured opportunity for the woman to debrief about her own and her children's experiences and to begin to make sense of the trauma.

Beck depression inventory

The mothers completed this self-report measure designed to assess the level of the woman's current depressive symptoms (Beck, Steer & Brown, 1996). The BDI-II (Beck, 1996) consists of 21 items that tap various aspects of depression including somatic complaints, guilt, worthlessness and indecisiveness. The reliability of this revised scale was .86 with test-retest reliability at .90 (www.harcourt-uk.com). Reliability and validity for the original BDI is high (Beck, Ward, Mendelson, Mock & Erbaugh, 1961).

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[a] Emotionally Reactive, Anxious/Depressed, Somatic Complaints, Withdrawn, Attention Problems, Aggressive Behaviour and Sleep Problems

[b] Affective Problems, Anxiety Problems, Pervasive Developmental Problems, Attention Deficit/Hyperactivity Problems, and Oppositional Defiant Problems

Beck anxiety inventory (BAI)

This scale consists of 21 items designed to measure the physiological and cognitive components of anxiety, describing subjective, somatic, or panic-related symptoms (Beck, 1990). It has been standardised on clinical and non-clinical populations and found to have an average reliability coefficient of .92 with test-retest reliability of .75 (www.harcourt-uk.com).

Impact of event scale (IES) and impact of event scale-revised (IES-R)

The IES (Horowitz, Wilner, & Alvarez, 1979) is a 15-item questionnaire designed to measure current subjective distress related to a specific traumatic event, specifically the intrusive and avoidant components of post-traumatic stress. Both the intrusion and avoidance scales have displayed acceptable reliability (alpha of .79 and .82, respectively), and a split-half reliability for the whole scale of .86 (Horowitz et al., 1979). The IES has been used to discriminate a variety of traumatised groups from non-traumatised groups (Devilly and Spence, 1999).

The IES-R (Weiss & Marmar, 1997) was developed in 1997 to parallel the DSM-IV criteria for PTSD. The original IES only taps 2 of the 4 criteria set out for PTSD in the DSM-IV: intrusion and avoidance, while the IES-R was intended to tap the hyperarousal cluster of symptoms. The IES-R is similar to IES in that it is a self-report measure designed to assess current subjective distress for any specific life event. The IES-R has 22 items, 7 items (6 hyperarousal symptoms and 1 dissociative-like re-experiencing symptom) having been added to the original 15-item IES.

Weiss and Marmar (1997) report very high reliability ranging from .79 to .92 with the hyperarousal subscale having good predictive validity with regard to trauma. For valid comparisons with the IES, the sum of the avoidance and intrusion subscales can be used.

Procedure

The current study was undertaken within the Children's Psychological Services at Refuge. The aim of this service is to provide psychological assessment, intervention and support to children and their mothers escaping from domestic violence and currently resident at Refuge[a]. The aim of the pre-school psychologist role is to develop further knowledge, understanding and intervention strategies for pre-school child witnesses of domestic violence. This study is an attempt to integrate both the research and the clinical work, being mindful that the needs of the women and children must always take priority over data gathering[b].

The pre-school psychologist contacted mothers shortly after their arrival at Refuge. Verbal and/or written consent was obtained from the mothers for their data to be included in the research. The following package of assessment and intervention services was available to these women and children (regardless of consent).

Assessment

The psychologist completed the semi-structured interview with the mother over the first few sessions. Initially, before a women's psychologist was available on-site, assessment of the

[a] support is sometimes offered to ex-residents as well.

[b] Sometimes it was not appropriate or possible to undertake all formal assessments with the women and/or children either due to their different needs or due to other factors inherent in emergency temporary accommodation such as turnover of residents.

women's current psychological functioning would also take place. This included assessment for depression, using the Beck Depression Inventory, anxiety, using the Beck Anxiety Inventory, and post-traumatic stress, using the Impact of Event Scale. However, once the women's psychologist started in post she completed the assessments of the women. At this point the IES was updated to the IES-R.

Next, assessments were completed for the children. For the pre-school child this included the PTSQ and the CBCL. If these children were aged between 2 and 5 years and were using the Refuge play-centre, play-centre staff completed their age-appropriate developmental checklists.

Intervention

Ongoing individual sessions were offered to the mother to support her. These could focus on understanding and managing the effects of domestic violence on pre-school children's behaviour, development and relationships[c].

Depending on age and developmental ability, sessions were also offered to the pre-school child[c]. The mother was able to be present at these sessions. These began with a semi-structured interview (see appendix II) designed to offer the young child an opportunity for debriefing. The session provided the means (e.g. doll's house play) for the child to share their memories of the violence and to express emotions in a safe and supportive environment. The aim was not only to gather information about pre-school children's memories of the violence, but also to offer direct support in enabling them to begin to recover.

Over the course of the project various other interventions were developed. These included offering informal coffee mornings in the houses for mums and toddlers. These were facilitated by the pre-school psychologist and play-centre co-ordinator and focused on play and discussion. Links were established with the Speech and Language Therapy Team who also provided training for the Children's Team staff. Regular meetings were also established with the local health visitor.

The development and piloting of Empathy Training Groups for 4 year olds was also established as an intervention. This is discussed in detail in a later section.

[c] these sessions are discussed in much more detail below, in the section titled 'individual work with mothers' and 'individual work with children'

RESULTS

Women's semi-structured interview [a]

A total of 27 women responded to this questionnaire, about their own and their children's experiences of and responses to domestic violence. 25 of the 27 women reported being physically abused sometimes or often. Such abuse consisted of the perpetrator punching, slapping, pushing and/or kicking them. Many women also reported being strangled, dragged and pushed, having objects thrown at them and their hair pulled by the perpetrator. Some women also reported sexual assault and 1 woman reported the perpetrator using a weapon against her

All 27 women reported being verbally abused sometimes or often. This consisted of the perpetrator shouting, calling the woman abusive names such as bitch and whore, attempting to control her movements by telling her what she can and can't do and/or threatening to harm or kill her.

24 of the 27 women said that their children were direct witnesses to this physical and verbal abuse sometimes or often. Women reported the most common reactions from the children were crying (21 children), seeming fearful (15 children) and trying to protect their mother (10 children). Some of the children were reported as being shocked and frozen to the spot (7), as showing no emotional reactions (6), hitting the perpetrator (2) and being angry (1).

18 women (and their children) were co-habiting with the perpetrator, while 9 women (and their children) were living apart from the perpetrator. 18 women reported that they had experienced physical abuse for more than 2 years while 20 women reported experiencing emotional abuse for more than 2 years. For at least 8 of the women the violence began either when she was pregnant or very soon after the birth of her first child[b]. The perpetrator is reported to be the biological father of 23 out of the 27 children.

Child measures

The number of children for whom the 3 questionnaires were completed is shown in Table 1, by age group. Twenty-six PTSQs were completed while 16 CBCL forms and 8 C-TRF forms were completed. There are fewer CBCL and C-TRF forms as these were not obtained until further on in the work.

Table 1. Distribution of ages of children for whom questionnaires were completed

Age of child	PTSQ (*n*=26)	CBCL *(n=16)*	C-TRF *(n=8)*
0 to 12 months	1	0	0
13 to 24 months (1 year)	5	1	0
25 to 36 months (2 years)	7	6	3
37 to 48 months (3 years)	7	6	3
49 to 60 months (4 years)	6	3	2

[a] see Appendix III for a breakdown of results

[b] This was not a specific question on the interview, thus this figure is most likely an underestimation of the true total.

Post-traumatic stress symptoms in the children

All 26 children had recently witnessed domestic violence prior to arriving at Refuge (see table 2). Twenty-five of the 26 mothers thought that their child was frightened and 20 thought their child was helpless at the time. Many of the children were crying, shaking or screaming (73%), while others were still and watchful (15%) & frozen in fear (8%). Two (8%) children vomited. Other children acted by either moving closer to their mothers (12%) or intervening in the violence (23%) (see table 4). Further analysis indicated that of the six children who intervened two were 2 years old, three were three years old and 1 was four. Two were female and 4 were male. Half of these children met the criteria for PTSD diagnosis.

Table 2. What was the most recent event that the child witnessed?

Event	*n*
Physical abuse toward mother	6
Physical and verbal abuse	6
Verbal abuse toward mother	5
Throwing/breaking objects/furniture	3
All of the above	2
Heard violence but did not see it	2
Verbal abuse and throwing/breaking objects/furniture	1
Physical abuse and throwing/breaking objects/furniture	1
Total	*26*

Table 3. Did the mother think the child felt frightened and/or helpless when exposed to the violence?

	Yes	No	Don't know
Frightened	25	0	1
Helpless	20	0	6

Table 4. How did the child respond[a]?

Child's response	*n*	*%*
Upset, scared, crying, shaking, screaming	19	73
Intervenes to try to stop it or distract the adult(s)	6	23
Looks, watches, stays still, stares into space	4	15
Moves close to the mother	3	12
Frozen in fear	2	8
Vomits	2	8

On the PSTQ, the most frequently reported symptoms were more trouble paying attention, regression in behaviours such as toileting and language, and new separation anxiety (see table 5.) Feeling jumpy and nervous and more aggression were the next most frequently reported symptoms.

[a] Children may have shown more than 1 type of response.

Table 5. Percentage of child witnesses to domestic violence who exhibit trauma symptoms

Symptom	*Total (n = 26)*	*%*
1. Repeat violence in play	8	31
2. More quiet or withdrawn	9	35
3. More trouble paying attention	16	62
4. Complain feel sick or funny	10	38
5. Appear jumpy or nervous	13	50
6. Less interested in things used to enjoy	5	19
7. Appear to have no feelings	4	15
8. Repetitive play	7	27
9. Repeat language overheard	5	19
10. Regression	16	62
11. Bad dreams	12	46
12. Check doors or windows	2	8
13. Trouble sleeping	8	31
14. More aggressive	13	50
15. New separation anxiety	16	62
16. Scared of going to the toilet alone	7	27
17. Scared of the dark	8	31
18. New fears	10	38
19. More aches and pains	6	23

To examine the symptomatology from a diagnostic perspective, the symptoms were divided into the four groups described in the Diagnostic Classification: 0-3 (Zero to Three, 2002) for Traumatic Stress Disorder. The first set of symptoms is described as a re-experiencing of the traumatic events and includes items 1, 4, 8, 9, and 11 from table 5. The child must have experienced at least one of these symptoms to satisfy this set of criteria. Seventy-seven percent of the pre-school children had at least one of these symptoms.

The second set of symptoms is described as a numbing of responsiveness or interference with developmental momentum. Again, at least one of items 2, 6, 7, and 10 must be evident. Seventy-seven percent of the children had at least one of these symptoms.

The third set is symptoms of increased arousal as revealed by at least one of items 3, 5, 12, and 13. Eighty-five percent of the children had at least 1 of these symptoms. The final set of symptoms is ones that were not present before the traumatic event, especially new fears or aggression, including at least one of items 14, 15, 16, 17, 18, and 19. Ninety-two percent of children had at least 1 of these symptoms.

To satisfy all of the criteria for a diagnosis of Post-traumatic stress disorder, children must have been exposed to a traumatic event and have at least one symptom in each of the above 4 categories. Based on this, 13 children (50%) met the criteria for a diagnosis. Although only 1 symptom per category is required for a diagnosis, many children had more than one symptom in each of the categories, with some children reported to be experiencing up to 5 symptoms within one category (see table 7).

Table 6.
Distribution of ages of children meeting the criteria for PTSD diagnosis.

Age	PTSD *(n=13)*
0 to 12 months	0
13 to 24 months	4
25 to 36 months	1
37 to 48 months	4
49 to 60 months	4

Table 7.
Number of children with PTSD experiencing 1 or more symptoms within each category (n=13).

	No. of Symptoms				
	1	2	3	4	5
Re-experiencing	2	5	4	1	1
Numbing	6	4	2	1	0
Arousal	5	3	4	1	0
New Fears	0	4	3	3	3

Regardless of diagnosis, the total number of symptoms can also give an indication of traumatic stress levels. The total number of symptoms possible is 19. The reported number of symptoms ranges from 1 to 14. There is a significant difference in the mean number of symptoms children experience between those who have a diagnosis of PTSD (M = 9.85, SD = 2.73) and those who do not (M = 3.62, SD = 1.71), $t(24)=6.97$, $p < 0.001$. Thus, children who experience PTSD also experience significantly more symptoms of this disorder.

Children's emotional and behavioural difficulties (CBCL)

The results of the CBCL are reported below in terms of children scoring in the borderline/clinical and clinical range for concern. Fifty-six percent of the pre-school children were reported by their mothers to be in the borderline/clinical range of concern for total problems, with 50% reported to be borderline/clinical for internalising problems and 38% for externalising problems (see table 8.) Forty-four percent of children were reported to be in the borderline/clinical range for somatic complaints while 38% were of clinical concern for 'DSM IV defined' anxiety problems.

In a comparison of mothers' and teachers' responses to the CBCL about the same 8 children, we found that for 50% of children there was agreement of non-clinical concern and for 17% there was agreement of clinical concern. In 33% of cases there was disagreement, with the mothers reporting the child in the clinical range for concern, while the teachers did not (see table 9).

Table 8.
Numbers of children scoring in the borderline and/or clinical range of the CBCL scales.

CBCL Scale	Borderline (84th-90th percentile) (n=16)	Clinical (>90th percentile) (n=16)	Total B or C (n=16)
Total Problems	7	2	9 (56%)
Internalising Problems	2	6	8 (50%)
Externalising Problems	2	4	6 (38%)
Borderline and/or clinical on at least 1 of the 3 scales	*9*	*10*	*12 (75%)*

CBCL Syndrome Scales	Borderline (93rd-98th percentile) (n=16)	Clinical (>98th percentile) (n=16)	Total (B or C) (n=16)
Somatic Complaints	5	2	7 (44%)
Anxious/Depressed	3	3	6 (38%)
Attention Problems	2	3	5 (32%)
Withdrawn	2	1	3 (19%)
Emotionally Reactive	1	1	2 (13%)
Sleep Problems	1	1	2 (13%)
Aggressive Behaviour	1	1	2 (13%)
Borderline and/or clinical on at least 1 of the 7 scales	*11*	*7*	*12 (75%)*

CBCL DSM-Oriented Scales	Borderline (93rd-98th percentile) (n=16)	Clinical (>98th percentile) (n=16)	Total (B or C) (n=16)
Anxiety Problems	2	4	6 (38%)
Attention Deficit/ Hyperactivity Problems	1	4	5 (32%)
Affective Problems	1	2	3 (19%)
Oppositional Defiant Problems	2	1	3 (19%)
Pervasive Developmental Problems	0	2	2 (13%)
Borderline and/or clinical on at least 1 of the 5 scales	*5*	*9*	*10 (63%)*

Table 9. Comparison of mothers' and teachers' responses on the CBCL and C-TRF for 8 children

	Mother and Teacher both non-clinical	Mother and Teacher both clinical	Mother clinical/Teacher non-clinical	Mother non-clinical/Teacher Clinical
Internalising	4	1	3	0
Externalising	5	1	2	0
Total Problems	3	2	3	0
Total	12 (50%)	4 (17%)	8 (33%)	0

Developmental checklists

Table 10 shows the average percentage of items the children achieved (i.e. scored *Yes*) within the 4 different areas of functioning, as well as the minimum and maximum percentages achieved within the different age groups. The children performed best in posture and large movements, achieving an average of 93% of the items. Next is social behaviour and play with the children achieving an average of 86% of the items and then vision and fine movements where children achieved on average 75% of the items. Children performed least well on the hearing and speech items with an average of only 64%.

Table 11 shows the results for the assessments carried out with the control group of children in the community. They also did best on posture and large movements, achieving an average of 92%. However, next best for them was hearing and speech where they achieved an average of 91% of the items, compared to 64% for children at Refuge. Next was social behaviour and play with 86% and then vision and fine movements with 69%.

Table 10. Refuge play-centre children's achievement on the developmental checklists: Posture and Large Movements

Checklist Age	*n* (children)	Minimum%	Maximum %	Mean %
2 years	9	67	100	93
2 ½ years	15	67	100	94
3 years	26	64	100	91
4 years	11	88	100	97
Total	61			93

Hearing and Speech

Checklist Age	*n* (children)	Minimum%	Maximum %	Mean %
2 years	12	0	100	41
2 ½ years	16	0	100	56
3 years	36	0	100	70
4 years	13	0	100	78
Total	77			64

Vision and Fine Movements

Checklist Age	*n* (children)	Minimum%	Maximum %	Mean %
2 years	7	20	100	68
2 ½ years	15	40	100	70
3 years	33	11	100	79
4 years	10	58	90	75
Total	65			75

Social Behaviour and Play

Checklist Age	*n*(children)	Minimum%	Maximum %	Mean %
2 years	6	50	100	74
2 ½ years	15	50	100	89
3 years	32	50	100	90
4 years	9	38	89	74
Total	62			86

Table 11. Children in the community's achievement on the developmental checklists:

Posture and Large Movements

Checklist Age	*n* (children)	Minimum%	Maximum %	Mean %
2 years	5	89	100	96
2 ½ years	6	80	100	97
3 years	9	64	100	83
4 years	13	57	100	96
Total	33			92

Hearing and Speech

Checklist Age	*n* (children)	Minimum%	Maximum %	Mean %
2 years	4	67	100	87
2 ½ years	7	83	100	96
3 years	10	67	100	89
4 years	15	83	100	92
Total	36			91

Vision and Fine Movements

Checklist Age	*n* (children)	Minimum%	Maximum %	Mean%
2 years	4	50	78	63
2 ½ years	5	50	80	64
3 years	7	38	86	68
4 years	12	50	91	74
Total	28			69

Social Behaviour and Play

Checklist Age	*n* (children)	Minimum%	Maximum %	Mean %
2 years	4	33	100	70
2 ½ years	7	33	100	90
3 years	7	75	100	92
4 years	6	71	89	84
Total	27			86

Comparisons between children's achievement in the Refuge play-centre and in the community show a significant difference in hearing and speech development. Children at Refuge were assessed as achieving significantly fewer items within the area of Hearing and Speech (M=64%) than those in other community play settings (M=91%) (see table 12). This difference was also significant across all age groups. (see table 13). There were no significant differences found across any of the other developmental areas.

Table 12. Significant differences between children's scores at refuge and in the community across each area of the developmental checklists

	Refuge			Community		
Area of Functioning	*n*	*M (%)*	*SD*	*n*	*M (%)*	*SD*
Posture and Large Movements	61	93	10.31	33	92	11.61
Hearing and Speech*	77	64	31.57	36	91	9.48
Vision and Fine Movements	65	75	20.76	28	69	14.01
Social Behaviour and Play	62	86	17.81	24	86	19.06

*$p < 0.001$

Table 13. Significant differences between children's hearing and speech scores at refuge and in the community across age groups

Area of Functioning	Refuge			Community		
	n	*M* (%)	*SD*	*n*	*M* (%)	*SD*
Hearing and Speech age 2 years*	12	41	36.19	4	87	14.15
Hearing and Speech age 2 ½ years**	16	56	31.03	7	96	7.61
Hearing and Speech age 3 years*	36	70	28.58	10	89	11.10
Hearing and Speech age 4 years*	13	78	24.48	15	92	7.6

** $p < 0.01$ * $p < 0.05$

Relationships between children's measures

Post traumatic stress and other emotional and behavioural adjustment difficulties (PTSQ and CBCL)

The mothers of 13 children responded to both the CBCL and the PTSQ about their children. Five of those children met the diagnostic criteria for PTSD. All five children reported to be experiencing PTSD were also of borderline/clinical concern on at least 1 CBCL scale (see table 14).

Table 14. Number of children diagnosed with PTSD and scoring in the Borderline or Clinical (B/C) range on the CBCL scales:

Internalising, Externalising and Total Problems	
B/C on CBCL scales	Number of Children *(n=5)*
PTSD and 1 scale	1
PTSD and 2 scales	3
PTSD and 3 scales	1
7 Syndrome Scales	
B/C on Syndrome Scales	Number of children *(n=5)*
PTSD and 1 scale	1
PTSD and 2 scales	2
PTSD and 3 scales	1
PTSD and 4 scales	1
5 CBCL DSM-Oriented Scales	
B/C on DSM-Oriented Scales	Number of Children (*n*=5)
PTSD and 1 scale	0
PTSD and 2 scales	4
PTSD and 3 scales	1

Table 15 shows significant positive correlations (Pearson's correlation coefficient) between the child's total number of symptoms on the PTSQ and their t-scores on the CBCL scales of Internalising and Total Problems. This suggests that those children rated by their mothers as having more post-traumatic stress symptoms are also rated as having more internalising and more overall problem behaviours on the CBCL.

Table 15. Correlations between a child's total number of symptoms on the PTSQ and their t-score on the CBCL scales

Variable	Child IES Total Symptoms *(n=13)*
Internalising	.711*
Externalising	.127
Total Problems	.738*

* $p < 0.01$

Independent Samples T-tests revealed that children with PTSD also score significantly higher on the CBCL subscales of Emotionally Reactive, Sleep Problems, and Anxiety Problems, than do those children without PTSD (see table 16).

Table 16. Differences between average scores on the CBCL scales for children with and without a diagnosis of PTSD

	PTSD (*n*=5)		Not PTSD (*n*=8)	
CBCL subscales	*M*	*SD*	*M*	*SD*
Emotionally Reactive**	63.80	9.15	51.00	1.69
Anxious/ Depressed	61.80	10.78	54.50	4.44
Somatic Complaints	62.80	8.32	57.13	7.68
Withdrawn	58.60	7.12	55.88	4.88
Attention Problems	61.60	8.76	61.00	9.18
Aggressive Behaviour	59.60	7.30	56.88	6.77
Sleep problems*	64.40	11.76	52.63	3.96
Affective Problems	65.40	12.64	55.63	4.31
Anxiety Problems*	65.20	11.67	54.13	3.68
Pervasive Developmental Problems	57.40	9.86	55.00	4.38
Attention Deficit/Hyperactivity	63.00	9.30	59.25	11.26
Oppositional Defiant Problems	58.40	9.29	57.38	6.93

**$p < 0.01$ *$p < 0.05$

Developmental checklists, PTSQ and CBCL

There were no significant correlations between children's scores (total percentage of items achieved) on the 4 scales of the developmental checklists or the overall developmental checklist scores and their total number of PTSD symptoms or CBCL scores.

Maternal self-report questionnaires

Results showed that on average the mothers reported moderate levels of depression and anxiety and severe levels of post-traumatic stress[a] (see table 17). If we look at the frequencies in table 18 we can see that 78% of mothers reported moderate to severe levels of depression, 73% reported moderate to severe levels of anxiety and 92% of mothers reported moderate to severe levels of post-traumatic stress. Significant positive correlations were found between all three measures, that is, women who scored higher on one scale also scored higher on the other scales (see table 19).

Table 17. Mean scores for women on Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI) and Impact of Event Scale (IES) and IES-Revised (IES-R).

Scale	*M*	*n*	*SD*
Beck Depression Inventory	28.00 (moderate)	23	10.49
Beck Anxiety Inventory	22.70 (moderate)	23	10.01
Impact of Event Scale (& IES-R)	47.56 (severe)	25	13.69

[a] as measured by the Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI) and Impact of Event Scale (IES) and IES-Revised (IES-R).

Table 18. Frequencies of women's levels of depression, anxiety, and post-traumatic stress as measured by the BDI, BAI and the IES and IES-R.

Level	BDI *(n=23) n (%)*	BAI *(n=23) n (%)*	IES/IES-R *(n=25) n (%)*
Minimal	3 (13)	1 (4)	0 (0)
Mild	2 (9)	5 (22)	2 (8)
Moderate	7 (30)	7 (30)	7 (28)
Severe	11 (48)	10 (43)	16 (64)

Table 19. Correlations between women's raw scores on the BDI, BAI, and IES/-R

	Impact of Event Scale (R)	Beck Depression Inventory
Beck Depression Inventory	.536**	-
Beck Anxiety Inventory	.473*	.601**

** $p < 0.01$ * $p < 0.05$

Relationships between child measures and maternal self-report

Analysis was carried out to look at the relationship between the child's experience of PTSD and his or her mother's experience of PTSD. The relationship between the child's total number of symptoms on the PTSQ and his or her mother's raw score on the IES or IES-R was examined. Both of these assessments were completed for 19 children and their mothers. Analysis showed no significant correlation between the two sets of scores (see table 20). While 18/19 women are scoring in the moderate to severe range for PTSD, children's total number of symptoms ranges from low to high.

Table 20. Relationship between child's total symptoms on PTSQ and mother's IES/-R level of post-traumatic stress

Child IES		Women's PTSD score		
Total no of symptoms	Sub-clinical	Mild	Moderate	Severe
1-6	0	0	2	5
7-12	0	1	1	7
13-19	0	0	1	2

A cross tab comparing a child's PTSD diagnosis with their mother's PTSD score was also carried out (see table 21). The results show nearly equal numbers of children with and without a PTSD diagnosis, nearly all of whom have mothers with moderate to severe levels of PTSD (18/19).

Table 21. Relationship between child's diagnosis of PTSD and mothers level of post-traumatic stress

		Women's PTSD score		
Child PTSD	Sub-clinical	Mild	Moderate	Severe
No	0	0	2	6
Yes	0	1	2	8

Further analysis investigated the relationship between the child's PTSD and the mother's depression and anxiety. Children with PTSD had mothers who scored significantly higher on the Beck Anxiety Inventory (see table 22).

Table 22. Relationship between child's PTSD and mother's BDI (depression) and BAI (anxiety) scores

	Child PTSD			Not PTSD		
Woman	*n*	*M*	*SD*	*n*	*M*	*SD*
BDI	10	27.00	11.624	8	27.88	8.32
BAI*	10	26.10	8.05	8	16.63	9.71
IES	11	47.91	12.73	8	52.88	11.51

* $p < 0.05$

There were no significant correlations between the maternal measures and the child's scores on the Developmental Checklists or Internalising, Externalising and Total Problems scales of the CBCL.

INDIVIDUAL SESSIONS WITH PRE-SCHOOL CHILDREN

Initial individual sessions with pre-school children were based on the 'focused therapeutic interview protocol'[a] devised by Pynoos and Eth (1986, in Arroyo & Eth, 1994). This was originally designed for use with young children who had witnessed a parental homicide but was soon employed effectively in numerous clinical situations with children who had been exposed to life-threatening events. Its aim is to provide the child with the first opportunity to begin a spontaneous and complete exploration of their subjective experience of the trauma with an unbiased adult who is a mental health professional. Pynoos (in Gaensbauer, 1996) states that the aim of this ongoing work is to help the child master and adaptively integrate the overwhelming traumatic feelings into their current emotional life.

For the current study, the pre-school psychologist devised a series of interview questions (see appendix II) for specific use with pre-school children exposed to domestic violence[b]. These questions encourage the child to begin to make sense of what has happened and to develop a coherent story. They include questions about the:

- Past, e.g. what happened; who was there; how did each person feel, then what happened; what did you want to happen
- Present, e.g. where live now, why came here, who is here
- Future, e.g. new house; who will live there

The clinician also aims to offer reassurance to the young child that she has talked with other children in similar situations and has talked with their mother about what happened at home. The aim is to elicit information in a safe and supportive way at a pace at which the child feels in control. It is expected that the questions will elicit descriptions of the violence, the child's interpretations of what occurred and their (and perhaps others') sensory and emotional responses to it. Children are also encouraged to express any wishes for revenge (Arroyo & Eth, 1994) and any fantasies about what they wish could have happened. Children's responses are normalised (i.e. understandable and universal) and children are complimented on their bravery during the violence and now in sharing difficult thoughts and feelings about what happened.

Throughout the sessions play materials are available to the pre-school children to encourage them to 'show' what happened rather than rely solely on language. The interviews always take place in the context of play. The main focus is a doll's house and doll figures to represent significant people in the child's life. Other toys available include emergency service vehicles and personnel such as a police as well as a toy telephone. Pictures of children experiencing different emotions such as sadness, fear, happiness, and anger are used. Drawing materials and puppets are also available. Different toys can be introduced depending on the developmental level, interests and needs of each individual child. It is necessary to consider the child's developmental level, particularly language and representational thinking (i.e. ability to use dolls/toys to represent self and others) before expecting the child to engage in this kind of play.

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[a] For more in depth discussion of this interview protocol refer to Arroyo & Eth (1994).

[b] These questions are also based on the work of Ruth Aitken (described in her 1998 King's Fund Report) where she used Pynoos and Eth as a model for developing an interview protocol for talking with all age children about their experiences of domestic violence.

The following summarises some responses and emerging themes from 12 of the pre-school children who took part in these individual sessions. The children included 4 girls and 8 boys ranging in age from 37 months to 55 months (six 3 year olds and six 4 year olds).

We were interested to know more about pre-school children's memories of the violence. Nine out of the 12 children talked about or showed violence which had occurred in their homes, usually toward their mothers. They all disclosed this in either the first or second session. Of the three children who did not disclose anything about the violence, one said shouting was a good thing and hitting someone on the bum was funny; one showed lots of happy family play, although his mother reported him recently saying 'daddy naughty, daddy beat mummy'; and the third engaged in very busy play and talk about anything but the violence, saying he 'couldn't remember' when asked directly. By the second session he acknowledged that some scary things did happen but that was as much as he was willing to say at that point. The remaining 9 children said or did the following:

- 'Dad smacked my mum'
- 'Mum and dad fight'
- Showed the mum and dad having a physical fight
- 'Dad was nasty, he strangled mum'
- Put one doll on top of the other and said 'she's beating her…my daddy hits my mummy…daddy pushes her'
- 'Dad fighting...He was shouting and he hit my mum'
- 'My dad smashed the phone'
- 'Daddy hit mummy'
- Showed and told about mum's boyfriend pushing mum down the stairs; also said 'he weed in mummy's mouth (he had witnessed this man put his penis in his mothers mouth when he raped her)

Children who live with domestic violence are used to keeping it a secret and even pre-school children become experts at keeping secrets. One child who was reluctant to talk during the session said it was a secret. It emerged that her mother had told her it was a secret and not to tell anyone else. We needed to get explicit permission from mothers to share the secret before we could go any further.

While working with the children it became evident that many of them were showing symptoms of PTSD. Many showed clear avoidance of anything to do with the violence by ignoring the questions, repeatedly changing the subject or attempting to distract their mother or another child from talking about the violence. For example, when 4 year old boy P's mother began to talk about the violence, P switched on the TV, put his hands on his ears, told the interviewer to close her eyes and finally put his hand over his mother's mouth. Another child refused to bring his father into the play by ignoring suggestions for a 'dad doll' and then saying no to 5 different potential 'dad dolls'. Children also showed signs of distress at reminders of the trauma, saying they did not want to talk about it and it made them feel sick. Many constantly showed signs of arousal, particularly difficulty concentrating, flitting from one topic or toy very quickly to the next, constantly talking, not listening, and chaotic, fast and uncontained play.

Renowned trauma expert Lenore Terr (2003) talks about principles which have come to guide her in working with traumatised individuals. One of these she calls *abreaction*' which is described as full emotional expression of the experience. She comments:

> *'I find that children with full blown PTSD must eventually vocalise words for their intense feelings or for their toy's emotions. Otherwise, there is too much tendency to*

act out the emotions dangerously or inappropriately beyond the doctor's office' (p1403).

The pre-school children at Refuge were specifically encouraged to talk about their emotions at the time of and following the violence, and since being at Refuge. With the help of pictures many children were able to identify and express not only their own emotions but those of their mothers and fathers as well. One 4 year old child, when asked if he saw anything bad or scary said 'Dad fighting. I was crying, scared, in my Mum's arms.' A 3 year old, when looking at the sad faces and asked if anyone in his family looked like that, said 'Mummy' and looked over at her in the session and said 'mummy cries'. Another child said 'mummy's face was sad and daddy's was scared. It was yucky when Daddy hit mummy. Daddy's face was like that' (points to the angry face). Another child showed his face as angry and himself as hitting (the perpetrator). He said his face and his Mum's were happy now at Refuge but at the old house his was sad, crying, angry and scared and his mum's was sad and scared.

Another essential principle guiding our work with pre-school children is highlighted by Terr (2003) and Arroyo and Eth (1994). Terr uses the term *correction* to mean finding ways to repair the trauma that has occurred by fixing or changing the endings of the post-traumatic play. In a similar way Arryo and Eth identify the importance of encouraging the child to vocalise or play out any thoughts and feelings of revenge. In our work, it was also felt to be essential to give the pre-school children a sense of control and mastery over a situation where they were once helpless and vulnerable. Aitken (1998) also refers to this phenomenon and talks of children gaining mastery of a previously overwhelming event. We called this *changing the ending* and during play sessions children did change the ending frequently, both spontaneously and with encouragement. Several examples of this follow with the clinician describing what happened during the play sessions:

- I asked her what she wants to say to dad, so she says to him, 'Don't hurt my mum'. Then I asked 'now what do you want to do?' and she said 'call the police', so she called them and told them 'my dad smacked my mum'. Then she got the police car and put the dad on it and had the police take dad to prison.
- She chose dolls representing herself, mum and dad, put the dad doll on the police car, saying 'Daddy go', and made the police car take Dad away from the house.
- I asked 'what about dad?' He looked at him (the doll) and threw him away. He then got the police car and ran it into his dad and said 'run him over'.
- M hit the perpetrator (which he had done during the abuse), threw him out of the window, pushed him down the stairs and said 'lets kill him';
- I asked him what happened after the fight and he said 'dad hugged mum and we all went out to the shops', which mum said did not happen.

Some children wanted to talk about and play out good memories of their fathers, to remember the good stuff. It is important to acknowledge children's conflicting feelings of love/hate and anger/happiness and to allow children to grieve for what they have lost. For example, one child talked about, and used the doll's house to play out, his positive memories of his father, recalling dad's armchair and cooking.

Children played out themes of fighting, death and monsters, not necessarily connecting this to the violence they had witnessed. For example, 3 year old boy S immediately engaged in play with the small dolls, saying 'big boy is fighting the monster'. He then continued with a monster hitting everybody and then the big boy having a fight with the monster. A 4 year old girl G's play included monsters and death. She said 'Daddy dead', and 'there's a monster in my room'.

She said Daddy's name was monster and hit the picture of the monster saying 'beat the monster', then she went and phoned the police to take the monster away. Themes of death were common with one child showing his dad dying, himself dying and carrying on to show all of the dolls dying. Eth and Arroyo suggest that it may be important during the session to connect this kind of traumatic play with the reality of what happened while at the same time comforting and reassuring the child that they will not be overwhelmed with emotion. The importance of a comfortable and safe atmosphere, and a compassionate and genuine clinician is imperative at this stage.

However, at times, it was also important to allow the child to play out a theme to its end, to express himself and resolve it within his play. For example, one child used the police car to smash up things in the house for several minutes. He made it clear he did not want any intervention. He eventually stopped and found a doll and said 'she is going to fix the house'. He fixed the window and had someone remove the police car from the house. He then stopped and was able to move to another task unrelated to the violence. He became far calmer and appeared to have achieved a sense of closure.

Over time, changes in the content and nature of children's play were observed. For example, there was less killing, less inclusion of 'dad doll' and of getting rid of him. Play became less repetitive, less over-whelming, more self-contained, and more self-directed. For example, after several sessions one child took control by deciding that he had finished and said he was ready to go. The play also began to include more positive aspects with children seeing positive futures and expressing dreams. For example, one child drew a smiley face and a flower with a spider on it, linking it with a wish to become spider-man. The children were more able to listen and respond and to engage in reciprocal conversations and play rather than the previous avoidant and chaotic interactions.

WOMEN'S INDIVIDUAL SESSIONS

Scheeringa (1999) states that '*when treating infants and toddlers who have been severely traumatised, even more attention must be focused on families and larger systems because the developmental capacities of children this young make them even more dependent on adults*' (p 20). It is much more effective to work in conjunction with caregivers (than not) in order to help a child of any age. For pre-schoolers living at Refuge, it is imperative that mothers are provided with support both for managing the effects of domestic violence on themselves and to elicit effective parenting to support their children. Support for a mother who may be experiencing flashbacks of the violence is essential, to enable her to notice and reassure her young child, who may also be feeling sick and upset at reminders of the violence.

Thus, it is imperative to offer sessions to mothers of the pre-schoolers. For those children who are too young to access intervention in their own right (e.g. play-centre), sessions with the mother become even more important.

The psychological approach adopted in these sessions is an eclectic one based on feminist brief solution-focused (Letham, 1994) therapy. Woman abuse is viewed as a social problem and women are not seen to seek out or enjoy nor deserve violence (Aitken, 1998). The many societal myths about woman abuse are challenged and responsibility for the acts of violence is placed where it belongs, with the perpetrator. The support is solution-focused in that it aims to elicit women's own ways of coping, survival skills and strengths. Thus women are empowered to discover their own solutions to problem behaviours and situations.

For young children, the emotional relationship with their mothers is crucial. The importance of the parent-child relationship for normal social and emotional development is well-established (Scheeringa and Zeanah, 2001). Where domestic violence has occurred, this relationship has often been disrupted due to the effects of violence on the woman and subsequently on her emotional availability to her child(ren). Thus, when offering support to women of pre-school children it is essential that attention is paid to this relationship and that intervention aimed at re-establishing positive emotional interactions is provided. This is often done in individual sessions with mothers through asking questions and offering comments that focus on the emotions of their children.

There are many other issues which are addressed in the work with the mothers of pre-school children. Some of these will be similar to clinical work carried out with caregivers of children who have experienced trauma or who display challenging behaviours. However, some will be unique to mothers of young children exposed to domestic violence. Below is a summary of some of the themes arising from the individual sessions carried out with 27 mothers of pre-school children. Many of these issues are also discussed the King's Fund report (Aitken, 1998) as they are part of and relevant to the wider work of the Children's Team at Refuge with children of all ages.

Mothers seek support for a range of concerns. These have included:

- aggressive behaviour
- not talking/language development
- not eating
- difficulty interacting with other children
- not using the toilet/wetting pants/bed

- severe clinginess, fear and distress in child; i.e. not being able to move without the child following or screaming; needing to be right next to mum
- wanting to know how the violence may be affecting the children
- sleeping – not sleeping without mother near; waking looking for her
- distress reactions to reminders of the abuse – shouting, loud noises, arguing
- regression – eating, talking, toileting
- what is normal behaviour?
- hyperactivity/lack of concentration
- excessive crying
- fears
- tantrums/rage

Women are supported to find ways of managing these behaviours and to explore effective ways of parenting in keeping with their own culture and beliefs. Behaviours are considered in the context of the effects of violence, as well as the effects of having to leave home and all that is familiar to find a place of safety. Women look at young children's normal reactions to the violence, such as PTSD and how this might be manifest in their pre-school child. Ways the women can support their child to recover, such as reassurance and comfort at times of distress, are discussed.

Many mothers are also managing the effects on themselves and their children when children have been used in the abuse. One woman described how her husband placed his own baby in a dangerous position on the edge of a bed and prevented her from getting to the baby, simply to 'get at me'. Another mother sought help for managing her 3 year-old child's behaviour, where the father had repeatedly encouraged her to abuse her mother. He would encourage the girl to call her mother names and disobey her, while preventing too much contact between mother and child.

The effect of fathers seeking or having contact with the children is addressed. With young children, fathers will want to talk to the mothers about the child rather than directly to the child. Often this is a way of continuing to verbally abuse and threaten the woman. Women are encouraged to address the feelings of guilt they often have about taking the children away from their fathers and to recognise instead the brave decision they made to free their children from a life of violence. By doing this they can begin to focus on the children's needs for safety, security and positive family relationships and to resist the man's continued attempts to control and abuse her via contact.

When contact arrangements are made and children do see their fathers, this can have adverse effects on young children. One 2 year-old child suffered from nightmares and vomiting after contact with his father, even though this contact was supervised in a contact centre. Because of the severe violence he had witnessed from birth it is likely that seeing his father triggered stress reactions. When contact arrangements are set up, women are supported in making safety plans for themselves and their children. Women are invited to consider all the implications of contact for their children and for themselves.

Mothers often talk about feelings of guilt and shame they have for staying with their violent partner and thereby exposing their children to the violence. Women are encouraged to consider that the responsibility for the violence lies with the perpetrator and not with them. The wider context of domestic violence is considered and the social and economic factors explored that make it difficult for women to escape from a violent relationship. Mothers are encouraged

to focus on the reactions of their children and most will say their children feel safe and happy now they are at Refuge. They are encouraged to see this as a positive achievement.

Some women discuss the emotional reactions they have to their children who remind them of their abusive partner. Reactions can be strong when the child has a physical resemblance to the perpetrator or similar mannerisms. Such direct reminders can trigger intrusive post-traumatic stress symptoms which can manifest in seeing the child as abusive and manipulative. The consequence can be a desire to punish the child or to be inappropriately angry with the child. Women's reactions are normalised in the context of post-traumatic stress and they are encouraged to consider the child as a separate person and to remind themselves of the differences between the child and the perpetrator. Recognising and understanding this process is the first step in managing the feelings. Women are encouraged to work through normal feelings of anger toward the abuser with the women's psychologist.

This research indicates that children's development in the pre-school years is significantly affected by domestic violence, particularly speech and language development. Where mothers are concerned about their child's general development, more in-depth cognitive assessments can be carried out by the pre-school psychologist, and referrals made to appropriate local agencies. Support is offered to the mothers in facilitating their child's development and in managing some of the behavioural effects of delayed language development, e.g. tantrums and frustration at not being able to communicate needs and wants.

With established psychological services for pre-school children it is normally possible to plan transition effectively so that when children leave Refuge there is time for goodbyes and transfer to community services, such as nursery places or speech therapy. Throughout all of this women are encouraged to remember the strengths in themselves and their children which have enabled them to cope, survive and recover from the effects of living with violence. In focusing on a future free from violence, many women's dream is simply to live with their children in peace and safety.

EMPATHY TRAINING GROUPS

Empathy has been defined as 'understanding, being aware of, being sensitive to, and vicariously experiencing the feelings or thoughts of another person' (Webster's Dictionary, 1990). Feshbach (1975 in Committee for Children, 1995), in a major developmental model, describes the cognitive and affective components of empathy as:

- The ability to determine the emotional state of another person
- The ability to assume the perspective and role of another person
- The ability to respond emotionally to another person.

Children develop this ability to empathise over a period of time and progress through a number of stages. Research suggests that empathy skills begin to take form as early as three to four years of age (Lee, 1989 in Committee for Children, 1995).

Young children who are exposed to domestic violence are at significant risk of failing to develop an empathic ability to perceive, predict, identify and respond to another's emotional state. The Committee for Children (1995) claim that very young children who are exposed to domestic violence may close down their empathic response as a means of psychological survival. They suggest that such exposure to violence, and the effects of this on the mother and the child, may simply cause this empathic awareness and response to fail to develop. Children who do not develop empathy are then at increased risk of developing aggressive and anti-social behaviour rather than pro-social behaviours and interpersonal problem-solving skills.

Research has shown that empathy is a learned behaviour. Consequently, several teaching strategies have been identified to enhance children's development of the specific components of the empathic response (e.g. Beland, 1988, 1989 in Committee for Children, 1995). Thus, as part of the current project we aimed to establish Empathy Training Groups for young children (3-5 years of age) exposed to domestic violence.

Pilot Groups

The curriculum was adapted to meet the needs of the refuge population and therefore the programme was carried out with a pilot group to assess its suitability and effectiveness. The structure and content is primarily based on the Committee for Children's '*Second Step: A Violence Prevention Curriculum*' (1995) for pre-school children[a]. Activities from 'Circle time' (Mosley) were also incorporated throughout the sessions. Each session was based on a photograph accompanied by a story with discussion questions. Additional activities included stories, role-plays, songs, puppetry, and physical exercise and games. The sessions aimed to enable the children to:

- Identify feelings from a variety of physical (face, body) and situational cues
- Recognise that people may have different feelings about the same thing
- Recognise that feelings change and why this is so
- Predict feelings for simple actions
- Understand that people may have different likes and dislikes (preferences)
- Differentiate intentional from accidental acts
- Apply fairness rules in simple situations

[a] This is an American programme designed as a prevention program to be implemented with whole class groups of 4 to 6 year olds.

- Communicate feelings using 'I' messages and actively listen to another person
- Express care and concern for others

Participants

The participants in this group originally numbered 5 children. However, due to identified families either moving on or not being available for the beginning groups we ran this pilot group with 2 children, one boy aged 4 years 8 months (child A) and one girl aged 4 years 7 months (child B).

Assessment, Delivery and Outcomes of Empathy Groups

Two facilitators[a] carried out twelve 30-45 minute sessions with the children. There were 2 sessions per week, running over a 6 week period. Each session focused on a new empathy skill and consolidation of those learnt in previous sessions (see aims above).

Semi-structured interview

A semi-structured interview to assess the children's pre and post-group level of empathy skills was developed. Ten skills were assessed using toys, pictures and games in an attempt to make the language demands as few as possible. This assessment was carried out individually with the children prior to the groups starting. Unfortunately repeat administration proved impossible once the groups had finished. This should be a priority for assessing the effectiveness of groups in future.

The results from the pre-group assessment indicated that both children were only able to name 2 out of the 6 basic emotions[a] from pictures. Child A named happy and angry and Child B named sad and angry. Child A was unable to demonstrate understanding of same/different feelings or to predict another's feelings whereas child B was confident in this. Child A showed understanding that feelings can change whereas child B was unsure about this. Both children showed understanding that different people may have different likes and dislikes and that these may change. Child B showed basic understanding of the difference between intentional and unintentional acts and demonstrated fair, helping and caring behaviour whereas child A struggled with these concepts. Both children were able to listen and follow simple instructions however neither was able to show or describe how people show they are listening.

[a] the pre-school psychologist and the play-centre co-ordinator
[a] happy, sad, surprised, angry/mad, disgusted/yucky, scared

Table 23. Pre-group assessment of empathy skills

Empathic skill	Child 1	Child 2
Naming 6 emotions	2/6	2/6
Same/different feelings	x	√
Feelings change	√	x
Predict feelings in others	x	√
Different wants/likes	√	√
Un/intentional actions	x	√
Fairness	x	√
'I feel…"	x	x
Listening behaviour	x	x
Helping/caring behaviour	x	√

A pre- and post-group questionnaire about the children's displays of empathy was also developed and given to the children's mothers and teachers to assess their demonstration of empathy skills. Prior to beginning the groups, parents and teachers generally assessed both children to be demonstrating less than ½ of the skills outlined above. Comments by teachers suggested than both children generally used very little language and were hesitant to take part in activities. Both during and after the groups parents and teachers noticed a change in the children, commenting that they were more vocal and willing to talk about themselves and events in their lives, more interactive with peers, and more responsive in general. They had not generally noticed an increase in the use of the specific skills we asked about, e.g., using 'I feel' sentences or using feeling words to describe themselves and others. It may be that their understanding of emotions increased but that this way of talking is not common in the school or home context.

An evaluation form was completed after every session by the 2 facilitators and 2 more in-depth reviews were carried out with the facilitators and their supervisor at intervals throughout the groups. Some sessions were videoed (with parental and child consent) for this evaluation of teaching and learning as well as for possible future training purposes.

In general the facilitators found that the children did gain in understanding and use of the skills over the course of the groups. However, there were many challenges to the teaching of these skills requiring adaptation of both the content and teaching methods used (see below).

As has been shown in the previous Results section, many children who come to the refuge are suffering from the effects of exposure to domestic violence. Some of these effects are behaviour difficulties such as difficulty paying attention and sitting still or developmental difficulties such as language delay. These effects were evident in the children in the empathy group and as such the curriculum was continually adapted to meet their needs in the following ways:

- Reducing language demands by simplifying examples and stories to one sentence or idea at a time
- Using concrete materials where possible
- Using familiar activities to teach concepts
- Making tasks/stories as meaningful as possible, e.g. using the children's names
- Integrating the day's theme into all the day's tasks, e.g. fairness at snack-time, puzzles, reward, not just in the story-time teaching activity.
- Reducing new cognitive demands - use consistent structure of activities across sessions

- Continually modelling concepts through facilitator interaction
- Alternating between 'sit down' and 'active' tasks
- Pacing the session allowing for free play and breaks in concentration
- Implementing behaviour management strategies of immediate and delayed positive reinforcement, warnings and time out

Transfer of training

For the teaching of any skills to be successful children need the opportunity to use those skills in real life. For this reason, the second step curriculum has an added component called 'transfer of training' which refers to the setting up of specific opportunities for children to use the skills in everyday situations and interactions.

We adapted these ideas for use in the refuge play-centre (both for the children in the empathy group who attended an after school club there and for the benefit of all of the children attending the play-centre). The play-centre staff were given the list of aims for each session and details of how they could teach and reinforce the concepts in daily activities. For example, when teaching that feelings about a situation may change, a teacher may comment 'Alex, you say you are feeling sad *now* and want to look at the books, but *later* you may feel differently and want to join the group.'
Staff were also encouraged to use stickers and praise children whenever they noticed the desired behaviour occurring. Finally, at the end of the session staff were able to review the session and help the children remember times they used a particular skill, such as naming their feelings.

Parent empathy groups

A group for parents was also set up to run alongside the children's groups. A Family Guide to Second Step (1995) suggests that for prevention (or intervention) to be effective, all three socialising agents – families, peers and teachers need to be targeted.

Two sessions were offered to the mothers of the 2 children in the group. Other mothers with younger pre-school children were also invited to the group. Five mothers attended the first group and six attended the second. The aims of the 2 sessions were:

- To give information about what the children are learning in the empathy groups (mothers were taken through part of one of the child's sessions)
- To learn what empathy is, how it develops, why it is important and how the mothers can encourage their children to develop it (a video was shown from the 2nd step programme and a handout was given on Empathy)
- To establish a forum for mothers to get to know each other, share concerns, hopes and solutions in helping their children to grow and develop

The structure of the sessions was based on the belief that the mothers know best what works for their children. Thus the group facilitator encouraged mothers to find their own solutions and ways of encouraging the pro-social development of their children via group discussion, modelling, supportive coaching and guided feedback.

Feedback from the mothers about the group indicated that they found the video very helpful in seeing the reality of managing a difficult child but seeing how it can be done differently. Many mothers reported how different it had been when they were children and recalled never being asked what they thought or how they felt. They found the group really helpful in discovering

that that there were other ways of being a parent. One parent commented that she was going to try to put herself in her child's shoes in terms of feelings, something she'd never done before. Another said that she needed to be more patient and listen more instead of just shouting.

All the mothers said they liked hearing other mothers' experiences and opinions and wanted the group to continue on a weekly basis[a]. They liked the open group discussion, with a focus but not a rigid structure. The mother's also identified several other ideas they wanted to spend more time discussing. These included:

- How to listen
- How to know if your child is happy or insecure or needs help
- How to manage their behaviour without shouting and getting stressed
- How to bring out the best in the children
- How to stop children hitting each other
- How to help children feel confident

Future possibilities

The implementation of the empathy groups for the children and mothers was judged to be an effective exercise, based on the parent and teacher feedback and staff observations of positive changes in the children. However as most of this was made up of anecdotal evidence it would be important to carry out structured pre- and post-group individual assessments in the future. These could include the semi-structured interview and the parent and teacher questionnaires outlined above. It could also include the Child Behaviour Checklist to assess for any decrease in behaviours causing concern.

The current aim is to continue offering these groups to four year olds based at the Refuge site. However, they could be adapted to fit in with the other groups offered to school age children and as such be offered on a once a week basis after school. Due to the level of cognitive demand involved in these groups it may be appropriate to include 5 years olds. Due to the transient nature of the refuge population it may be more helpful to have an open rather than closed group so children may join the group at any time. Thus each session would need to stand alone and not require prior learning.

Future plans for extending the number of children reached by this program include developing an 'empathy curriculum' which could be used in the refuge play-centre for all of the children. This could be done by focussing on one empathy concept per week, for 12 weeks and highlighting key phrases and activities for each week.

Other future options include running these groups in the community with children identified to be at risk, for example in Social Services nurseries or local authority nurseries. Staff in these settings could be trained to deliver the 'empathy curriculum' to whole classes.

[a] a general parenting group was in the process of being developed and was subsequently offered to all mothers at the refuge site

SUMMARY AND RECOMMENDATIONS

Pre-school children's exposure to domestic violence

The majority of pre-school age children were reported[a] to be direct witnesses to the physical and/or verbal abuse of their mothers. Children showed a range of responses while witnessing this abuse from crying, screaming or vomiting to trying to protect their mothers to no emotional reaction at all. Twenty-three percent of the children whose mothers completed the PTSQ actually intervened during the violent events, thus putting themselves at greater risk of physical harm. Two of these children were 2 years old. In one other study reporting this, 30% of mothers reported their school-age children's typical response to the violent incidents would be to verbally or physically intervene on their behalf. (Smith et al., in Holden, 2003)

There does not appear to be any research focusing on children's reactions at the time of the violence, and whether this influences immediate and/or subsequent impacts. It may be that children who are mobile and can actively remove themselves from the situation, or even attempt to stop the violence, feel more in control of the situation which may lessen the impacts. For young children who are totally dependent on caregivers and can only passively sit, watch and absorb, the effects may be even greater. Interestingly, research has shown that the best single predictor of the severity of infant symptomatology by far is whether or not the caregiver was threatened by the traumatic event (Zeanah & Scheeringa, 1996). This is more predictive than injury to the child him- or herself. Future research which explores young children's exposure to and effects of domestic violence would do well to also consider the range of child responses to the violence and the interaction of all of these factors.

Effects of domestic violence on pre-school children

PTSD

Fifty percent of the pre-school children met diagnostic criteria for PTSD, suggesting that pre-school children who directly witness domestic violence are at significant risk of developing PTSD. This figure is slightly lower than in other studies exploring trauma symptoms in pre-school children exposed to domestic violence, which range from 57% to 69.1% (Pynoos and Eth, 1984 in Lehman, 2000; Lehman and Rycraft; 1996, Groves et al., 2000). Interestingly it is the same as the larger of the range of percentages found in the Levendosky et al. (2002) study, where they used various criteria to determine PTSD diagnosis. This is notable as their study was carried out on a sample of pre-school children exposed to domestic violence in the community as opposed to living in a refuge. Various research has suggested that the results of findings from refuge populations are not generalisable to the community for reasons including confounding potential effects of displacement, loss and trauma associated with emergency relocation to a refuge[b]. However, it may be that for young children, the most important influencing factor is the nature of the violent environment they are or have been living in, which has trauma effects over and above other events in the child's life. Obviously this needs further research in terms of refuge versus community pre-school samples of children. Regardless of this, it is apparent that there is growing evidence that very young children exposed to violent traumatic events are developmentally capable of exhibiting PTSD or trauma-like symptoms, in concerning numbers.

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[a] maternal report

[b] these are discussed in detail in the section below, 'limitations of the research'.

The most common set of trauma symptoms experienced by pre-school children are new fears and aggression, with 92% of children reported to be experiencing at least one of these symptoms. This finding supports the work of Scheeringa et al., (1995) who added this set of symptoms to the criteria for PTSD in young children, suggesting that young children do experience PTSD, but in slightly different ways than is manifest in adults and possibly older children.

The next most common set of symptoms experienced by children was increased arousal, with 85% of children experiencing at least one of these symptoms. Re-experiencing and numbing of responsiveness were experienced equally with 77% of children experiencing at least one symptom in both categories.

Two other publications also report on the most common type of symptoms experienced by pre-schoolers, however, they both used DSM-IV categories as criteria (Lehman and Rycraft, 1996, Levendosky et al, 2002). One of them however, did add the 'new fears and aggressions' behaviours and found that 100% of the children experienced symptoms in this category (Lehman and Rycraft, 1996). It appears that in order to be effective in diagnosing trauma symptoms in pre-school children, the most useful and applicable set of criteria will be those from the Zero to Three Diagnostic Classification, based on Scheeringa's work (1995), which include these behaviours. If we fail to use this, and continue to rely on the adult oriented DSM-IV criteria for PTSD, we risk continuing to do a disservice to our young children by failing to recognise their trauma symptoms and thus, failing to be in a position to offer appropriate interventions to facilitate recovery.

It is also interesting to note that both other studies found avoidance symptoms were the least experienced by the children, at 28.1% and 46%, whereas in the current study, at least one of this group of symptoms, renamed numbing of responsiveness, were experienced by at least 77% of children. Again this suggests the greater applicability of the new criteria, or at least that young children have different trauma reactions to adults. This second possibility is supported by the observations of avoidant behaviours with a number of children during individual trauma focused sessions. More research is needed to explore the nature of young children's trauma responses to domestic violence.

This would be aided by the use of standardised tools which assess young children's trauma responses and yield diagnostic information, thus allowing for greater comparison and more rapid gathering of valid knowledge. As part of the current study a questionnaire was developed to assess pre-school children's trauma responses to witnessing domestic violence (PTSQ). This proved to be an effective tool both clinically with mothers for gathering information and research wise for applying the diagnostic criteria to assess for PTSD. With more funding, future work could be carried out on this questionnaire to assess validity and reliability for standardisation.

The most frequently reported symptoms on the PTSQ included more trouble paying attention, regression in behaviours such as toileting and language, and new separation anxiety. Feeling jumpy and nervous and more aggression were the next most frequently reported symptoms. The only other research to report on specific symptoms also found new fear of separation among the top 4 symptoms (Levendosky et al., 2002). More clinginess was also reported by mothers as a primary concern in a study using focus group interviews with women (DeVoe & Smith, 2002). Some of the other reported symptoms differed markedly in frequency however, e.g. only 3% showed a loss of previously acquired developmental skills compared to 62% of

our sample; only 8% showed a decreased ability to concentrate compared to 62% of our sample. The other study reported on children witnessing violence in the community, thus it may be that children moving to and living in a refuge do show different symptoms in response to both the violence and the effects of the move and new surroundings. The other study also used slightly different criteria and questions for their assessment (DSM-IV and CBCL), which they concluded were perhaps not the most appropriate for use with the pre-school population. This may therefore have influenced the different responses. Again, this supports the need for standardised tools and consistent criteria for understanding the effects of woman abuse on young children.

In order to better understand the relationship between domestic violence, the effects on the mother and the effects on the pre-school child, we looked at the relationship between the child's experience of PSTD and the mother's levels of PTSD, anxiety and depression. The only significant result showed that children with PTSD had mothers who scored significantly higher on the Beck Anxiety Inventory. This may be due to anxiety being manifest in more externalising and transmittable behaviours which are therefore more easily picked up by young children. Or, it may be that mothers who are over-anxious over-report symptoms in their children, or just notice more of their children's symptoms. Relying solely on maternal report is a limitation of this study, and future research would benefit from additional ways of assessing PTSD in child, such as direct observation.

There was no relationship found between mothers PTSD or depression and the child's PTSD. However, it is difficult to draw conclusions from this because there is no real variability for the women, nearly all of whom have moderate to severe PTSD and depression. All we can say at present is that the child's experience of PTSD is independent and does not appear to depend on that of the woman. It may be that it is more directly affected by the level of the child's own experience of trauma (e.g. severity, frequency, whether mother's life is perceived as threatened), by predisposing factors in child (e.g. temperament), or by the mother's own parenting capacity, such as emotional availability, following the violence.

There may also be protective factors at play. Osofsky (1995) suggests 3 main resilience factors when it comes to dealing with the effects of violence. These include having a supportive person in the environment, having a protected place in the neighbourhood that provides a safe haven from violence exposure and having individual resources (adaptable temperament or intelligence) to find alternative ways of coping with violence. All of these, apart from temperament, would appear less available to younger than older children or adults. Pre-schoolers are less likely to be in contact with any other people, due to isolation as part of the violence and no access to nursery until three to four years of age (thus also no access to a 'safe haven'). However, it is still worth investigating these factors in relation to infants and young children to investigate the processes by which we may better support families in protecting young children from the effects of domestic violence.

Finally it may be that a child's experience of PTSD is mediated more by the actual attachment relationship between mother and child. It is well known that the relationship between a very young child and his/her main caregivers is the most important context for infant development. Individual differences in parent-child interactions have been shown to be predictive of subsequent child social and emotional adaptation (Scheeringa & Zeanah (2001). Research has also shown that young children cannot manage threat on their own and are dependent on their primary attachment figures to provide them with protection; their regulatory functioning including their stress response system has been shown to be dependent on this relationship

(Scheeringa & Zeanah, 2001). Thus, this very dependent relationship may be a major influence on young children's reactions to trauma. Future research should explore the impacts of domestic violence upon young children's attachment, and explore how this may impact on children's experiences of PTSD, and other problems. To date, only one study has specifically explored the effects of domestic violence on attachment, finding that these infants have more disorganised attachment styles (Levendosky et al (2003).

Emotional and behavioural difficulties

Using the CBCL we found that the pre-school children were experiencing internalising and externalising behaviour problems much more than would be expected in a normative sample of children this age. More than half (56%) of this sample of children were in the borderline/clinical range for concern for total problems, with exactly half of the children in the borderline/clinical range for internalising problems and slightly fewer at 38% for externalising problems. Based on the CBCL norms, we would expect only 16% of children to be in this range.

Looking at the subscales of the CBCL, this sample of children appeared to have particular difficulties with somatic complaints, anxiety/depression and attention problems. Due to limited verbal expression at this age (and also possibly as a result of living with violence), it is likely that many of the emotional and psychological difficulties experienced by these children manifest in somatic complaints, such as upset stomachs and other aches and pains. It may also be that many of the women, all of whom had PTSD, were experiencing high levels of avoidance of reminders of the violence and were therefore consciously or unconsciously not allowing their children to express any of their own feelings or thoughts. Thus, these become expressed physically for young children via somatic complaints.

It is possible that the attention difficulties experienced are a symptom of the PTSD. This highlights the importance for practitioners to be aware of PTSD as a possible effect on young children living with domestic violence, as it is possible and even likely that children are being mistakenly diagnosed with and treated for Attention Deficit Disorder (ADD/ADHD). Perry (2000), comments that children with PTSD as a primary diagnosis are often misdiagnosed with ADHD or ODD (Oppositional Defiant Disorder) or Conduct Disorder as the clinician is often unaware of domestic violence and ongoing traumatic stressors. It may be that the high levels of anxiety experienced are contributable to the mother's anxiety being transmitted to the child or this may be a direct result of a young child witnessing the harm or threatened harm of their mothers.

Only one other study has assessed the effects of witnessing domestic violence on pre-school children using the CBCL (Groves et al., 2000). They used a much larger sample of 70 children, compared to our 16 (for the CBCL). However the findings were not too dissimilar. They only reported on clinical range concerns (rather than borderline as well) and found 27.7% for externalising problems compared to our 25%, and 26.5% for internalising compared to our figure of 38%. They also only reported on 3 to 5 year olds whereas our sample includes children aged from 1 to 4 years. These preliminary findings all suggest however that pre-school children, from as early as 1 year old, are showing significant behavioural difficulties which are likely to be a direct or indirect result of witnessing violence perpetrated against their mothers.

Significant correlations between the PTSQ and the CBCL suggests that those children rated by their mothers as having more post-traumatic stress symptoms are also rated as having more internalising and more overall problem behaviours on the CBCL. This could be due to report

bias of their mothers, i.e. mothers who report difficulties with their children report them across all areas. Or it may be that children who are affected by the violence are literally affected in all ways possible, whereas those children who are somehow protected, are protected from any effects. This suggests the need for more research into other ways of assessing the needs of children apart from relying solely on maternal-report, such as direct observation. Teacher report is another method of gathering information about children, but this is impossible for young children not accessing outside education provision. If it is the case that these children are actually experiencing a multiple effects, then this finding demands that we pay attention to the population of young children who are apparently being severely affected by witnessing violence at home.

Development

Our findings suggest that young children's speech and language development is negatively affected through witnessing domestic violence. Children appeared to be achieving at similar levels to their peers in all other areas we assessed, i.e. posture and large movements, vision and fine movements, and social behaviour and play. Although 3 other studies have reported poorer cognitive performances from pre-school children witnessing domestic violence, only one other piece of research has reported on findings from specific developmental areas of functioning (Groves et al., 2000; Huth-Bocks et al., 2001; Webb et al., 2001). Strikingly, Huth-Bocks et al. (2001) found that three to five year olds who had witnessed domestic violence also had significantly poorer verbal abilities, but not visual-spatial abilities, than non-witnesses, after controlling for socio-economic status (SES) and child abuse. One of the limitations of the comparison group we used and the analysis we did was that we were not able to control for factors such as SES. The similar results from the Huth-Bocks study, who did control for this factor, suggest that domestic violence may directly affect young children's verbal abilities, above and beyond other risk factors.

There are a number of feasible explanations for this result. Verbal skills and language knowledge have been shown to be more influenced and affected by environmental experiences than visual-spatial skills (Huth-Bocks et al., 2001). Living in a violent home environment, in an atmosphere of unpredictability and fear, is not likely to be conducive to imitating and trying out new sounds and words. The use of language at home as a model may also play a significant part, with nearly all women reporting constant shouting and verbal abuse from their partners. Young children are very egocentric in their thinking and believe that they are the cause of many events which happen. If they uttered a sound before a violent episode began they may have concluded it was their fault and ceased to utter any more. Many one and two year old children who come into Refuge are not only delayed in their language, but are often making no sounds at all. Perhaps they learn to be still, quiet and almost invisible in the belief they can prevent any harm coming to their mothers.

Children's language development may also be indirectly affected via the effects of depression upon their mothers. In their research, Huth-Bocks et al. found that maternal depression was directly related to verbal abilities in the preschool population. They suggested that depressed mothers may be more withdrawn and less verbally interactive and stimulating with their children, which was likely to have an impact on verbal abilities rather than any other types of intellectual abilities. Other research supports this hypothesis, showing that depressed mothers tend to be less verbal, less positive, and less responsive to their children (Downey & Coyne, 1990, in Huth Bocks et al., 2001).

These results suggest a slight decrease from two to four years of age in the gap in verbal ability with their peers. That is, perhaps as children get older they do start to catch up. This may be due to them having access to more input which is external to the home, such as attending a nursery. Lally & Segal (1994) comment on the importance of a 'safe haven' for very young children, and on how the childcare setting can provide such a sanctuary for infants and toddlers who live in violent environments. However, for young children, they also highlight the need to help parents select *quality* child care settings and suggest that we need to work towards increasing the supply of quality childcare available.

Limitations and conclusions

There are a number of limitations to the current study that warrant consideration. Assessments of the child's trauma symptoms and emotional and behavioural difficulties relied on maternal-report, and it is possible that mothers give over- or under-estimates of severity and frequency of symptoms in self- reporting. Research suggests that women are often unaware of the amount of violence their children witness and they minimize its effects on children (Levendosky et al., 2002). Given this, it is likely women underreported symptoms. However, factors such as a woman's own anxiety and guilt may lead to her over-reporting symptoms in her child. Future research could enhance reliability and accuracy of assessments, particularly of pre-schoolers where we cannot rely on verbal report, by adding direct observation of the child to the repertoire of assessment tools.

Research also suggests that findings from refuge samples of children are not generalisable to all children experiencing domestic violence. However, it is suggested that one of the reasons for this is that children will also be suffering from the trauma of loss of friends, family, school and other familiar ways of life, thus exacerbating their level of trauma. This may not be the case for pre-school children, who have not yet developed these networks, and as such may not feel such a loss, or displacement. For young children, the most important factor will be the stability and consistency of their relationship with their primary caregiver. However, living in a refuge with other families who may also be suffering from the effects of recent domestic violence, may contribute to heightened levels of trauma. The aim was to assess effects on the children as soon as they arrive at Refuge, however this was not always possible so we cannot know whether factors arising from living in a refuge contributed to the effects we found. Future research with pre-school children will also need to consider these factors within the context of pre-school children's development and not simply in terms of refuge versus community sample populations.

Small sample size, particularly for the CBCL, also means more research needs to be done with larger groups of pre-school children to validate the effects found here.

As this research was carried out in the context of clinical work, it makes it less reliable as the needs of the clients always had to take priority. This affected, for example, the timing of the filling in of assessment forms such as the CBCL and PTSQ. Developmental checklists used from previous employees in the play-centre also raised questions about the reliability of information collected on these children.

Despite these limitations there is still a significant body of evidence here indicating that pre-school children are indeed negatively affected by exposure to domestic violence. Trauma symptoms are a common reaction, as are the presence of emotional and behavioural

difficulties. Speech and language development appears to be delayed, or disrupted, a finding supported by at least one other piece of research.

These are particularly concerning findings due to the lack of attention this population of young children has received to date. No other UK studies have reported on trauma symptoms in pre-school children exposed to domestic violence, yet what literature there is suggests that these children are potentially at great risk of negative, life-altering consequences. As Perry (2000) states '*an event that lasts a few months in infancy can rob a child's potential for a lifetime*'. He reports that untreated PTSD or post-traumatic stress symptoms remit at a very low rate and appear to contribute to a range of neuropsychiatric problems throughout life. Considering there is still a belief that pre-school children are too young to understand or remember their exposure to domestic violence, there remains considerable work to be done in educating, researching and changing life outcomes for these vulnerable young children.

As part of this study interventions were implemented with the aim of enabling pre-school children to both recover from their experiences and to develop new skills such as empathy, development of which may have been disrupted due to witnessing violence. Although it has not been possible to report quantitative outcomes from the individual sessions with children, individual sessions with mothers, and empathy groups with children, qualitative reports thus far indicate such support is proving to be effective. Tragically, studies suggest the majority of trauma victims receive no intervention. Less than half of all confirmed cases of child maltreatment receive any therapeutic or support services and statistics for children who witness domestic and community violence are much worse (Kaufman & Henrich, 2000). According to these authors, effective intervention is, however, within reach, as has been shown in the current research. There is an urgent need for funding, commitment and collaboration in order to develop these innovative practices and ensure they are not lost.

As a final note, perhaps we can learn from what appears to be an exciting and innovative initiative in the US, where it appears there is recognition of the gravity of the problem for young children exposed to violence and where there is a national collaborative response. In response to the emerging statistics and research on the prevalence and impacts of children's exposure to violence the US Department of Justice, in collaboration with other partners, have developed a 'Safe Start Initiative' (Kracke, 2001). The purpose of this initiative is to prevent and reduce the impact of family and community violence on young children (primarily from birth to age 6) and their families. The goal is to expand existing partnerships among service providers in key areas such as early childhood education/development, health, child welfare, family support, substance abuse prevention, domestic violence/crisis intervention, law enforcement, courts, and legal services. The aim of this is to create a comprehensive service delivery system that will meet the needs of children and their families at any point of entry into the system. This is a 5 year pilot project with the resulting plans expected to meet the prevention, intervention and treatment needs of young children exposed to violence. With many early childhood expert service providers in the UK, including early childhood educators, health visitors, midwives, speech and language therapists, and other professional disciplines there is a good basis for an initiative to change the outcomes for these vulnerable young children, and the future society they will create.

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Appendix 1 PTSQ Questionnaire

Name…….Age……..
Today's date……..

Tell me about the most recent traumatic event that happened to your child or that your child witnessed…….
……
……
When did it happen (begin to happen)? For how long?……

Do you think your child felt frightened……. or helpless? ……..

Thinking about your child's behaviour in the past 2 weeks, please tick the box that best describes the response you think that YOUR CHILD would give.

During the past 2 weeks	No	Not much	Sometimes	A lot
1. I repeat parts of what happened in my play with my toys				
2. I am more quiet and withdrawn				
3. I have more trouble paying attention or sitting still than before				
4. I complain of feeling sick or funny				
5. I feel more jumpy and nervous				
6. I am less interested in doing things that I used to enjoy				
7. It feels like I don't have any feelings – like I never feel sad, happy or cross				
8. I keep playing the same things over and over				
9. I repeat the things that I heard my Mum and Dad saying when they were angry				
10. I can't do or say some things that I could before, e.g. toileting, talking, eating/I have started to do some of the things that I had grown out of, e.g. in toileting, eating, talking, behaviour – sucking thumb				
11. I have bad dreams				
12. Before I go to sleep at night I have to ask my Mum to check that windows are closed, doors are locked and that there are no men in the house/I have to check the house or the street to make sure I am safe				
13. I have trouble falling asleep or staying asleep				
14. I push or hit or kick more				

15.	I am more clingy to my Mum				
16.	I am scared of going to the toilet alone now				
17.	I am scared of the dark now				
18.	I have become scared of other things, e.g. strangers, TV programmes				
19.	I complain of feeling more aches and pains				
20.	Have you noticed any other changes?				

Appendix II Child semi-structured interview – possible questions

Mummy told me you came to live here because something bad happened at home. This is a special place where only Mum's and children can live. I'm really pleased that you are safe now. Sometimes Mum's and children feel sad and scared about what happened. Sometimes they feel better when they tell or show someone what happened.

Can we play together so you can show me what happened in your house?

Present range of activities to the child, e.g dolls house, small world dolls, pens/paper, puppets, phone, police car, ambulance, play dough etc.

Can you tell me/show me who lived with you and your Mum in your old house?

Can you tell/show me where you used to sleep? What about Mummy, What about Daddy?

Here is Daddy, he has come home from work...what does he say to Mummy? What does he do? What does he say to you? Then what happened?

Here is Mummy and Daddy in the kitchen…What do they say/do? What do you say/do? Then what happened?

Look at these faces…What was Mummy's face like when Daddy said/did…? Show me your face when Daddy/mummy said/did…?

Did the police/ambulance come to your house? What did they do?

Pretend you are a grown up now…what will you say/do to your Daddy?

Appendix III Women's semi-structured interview results

Ethnicity	Children	Women
Asian	1	5
Caribbean	0	2
African	0	5
White British	3	3
Black British	6	3
European	0	4
Mixed Race	14	1
Other	3	4
Total	27	27

Physical abuse	Perpetrator	Child witnessed	Child heard only
Drag/push	17	12	2
Pull hair	11	7	2
Slap	18	12	2
Throw objects	17	8	3
Punch	19	14	1
Kick	13	8	2
Strangle	11	5	2
Use weapons	1	1	0
Sexual assault	6	2	0
Other	4	1	0

Verbal abuse	Perpetrator	Child witnessed	Child heard only
Stupid, ugly, worthless	20	15	2
Slag, bitch, tart, whore	17	11	2
Useless mother	14	10	2
Useless partner	14	9	2
Shout to frighten or intimidate	25	22	2
Tell you what you can/can't do	16	10	2
Threaten to harm	16	12	2
Threaten to hurt using a weapon	7	4	2
Threaten to kill	14	8	2
Other	2	0	0

How often did the women experience abuse?

	Never	Sometimes	Often
Physical abuse	2	15	10
Verbal abuse	0	8	19

How often did the children witness abuse?

	Never	Sometimes	Often
Physical abuse	3	16	8
Verbal abuse	3	13	11

Child's Response	N
No emotional reactions	6
Fearful	15
Crying	21
Shocked/frozen	7
Angry	1
Try to protect mother	10
Hitting the perpetrator	2

Relationship between mother and perpetrator at time of leaving

Married and co-habiting	13
Unmarried and living apart	8
Unmarried and co-habiting	5
Married and living apart	1

How long?	<6 months	6mo-2yrs	2-5yrs	5-10yrs	10yrs+
Known perpetrator	0	3	17	6	1
Experience physical abuse	1	8	13	4	1
Experience emotional abuse	1	6	15	4	1