PROFESSIONAL DOCTORATES

Examining trauma systems in children exposed to domestic violence

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Award date:
2006

Awarding institution:
Bangor University

Examining Trauma Symptoms in Children Exposed to Domestic Violence

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This thesis is submitted as part fulfilment for the degree of the Doctorate in Clinical Psychology

Contents

Acknowledgements

I would like to thank Dr Elizabeth Burnside for her supervision and support of this research, despite the long distance between us! I would also like to thank Dr Dave Daley for his advice and guidance on the analysis strategy. I am grateful to Dr Robert Jones for his constructive feedback on the numerous drafts, and Lynn Moran for all her help organising the essentials in the early stages.

This research would not have been possible without the help of Fiona Gwinnet, Stella Pratt, Jo Birks and Ann Branson, who all dedicated time they did not have to find suitable participants for the study. I am also grateful to Wendy Archer for her unfailing support throughout.

I have to thank my fellow trainees who helped keep me going through the rough patches, despite experiencing their own difficulties. Thanks also to Christine Armstrong and Karl Hunter who provided lots of love and support, and put up with my grumps and stresses without question; and Sarah Clarke who inspired me in the very beginning.

Finally, I have to thank all the women who agreed to complete the questionnaires, despite the sensitive nature of the study.

SECTION 1

Ethics Proposal

1. Title of Project

Examining Trauma Symptoms in Children Exposed to Domestic Violence.

(This study, if approved, proposes to use participants from the Isle of Wight, the investigator's home area, and will recruit with help from the Isle of Wight Children and Family Services and the Island Women's Refuge).

2. Name of Investigator(s)

Gillian Hunter
Trainee Clinical Psychologist
NWCPP
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Dr Elizabeth Burnside
Research Tutor
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University of Wales, Bangor

3. The potential value of addressing this issue

This study proposes to build upon existing child trauma research in two ways. The first is to examine the level of trauma symptoms in children who have been exposed to domestic violence. There is a paucity of research within this area, although age, duration and severity of the violence have found to be important variables in posttraumatic stress disorder (PTSD) development (Graham-Bermann & Levendosky, 1998).

The second aim of this research is to examine the theory that multiple forms of maltreatment will lead to greater trauma symptomatology (Trickett, 1998). To date, no studies have specifically examined trauma by comparing three groups of children: physically abused, physically abused/witnesses, and witnesses only, with a non-exposed comparison.

This study will combine a community and refuge sample, which will include children at crisis point and those who may have been away from violence within the home for a number of years. This will be important in tracking the development and duration of PTSD symptoms in children who have been exposed to maternal violence in some form. The study will also aim to

provide further support to the proposal by Levendosky et al., (2002) that current PTSD criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, American Psychiatric Association, [APA] 1994) may not be the most suitable diagnostic guideline for young children.

4. Brief background to the study

Research has indicated that children exposed to domestic violence experience problems in a variety of functional domains including: difficulties in socio-emotional adjustment (Hughes, 1988; Sternberg et al., 1993), increased levels of internalising (e.g. anxiety, depression and somatic symptoms) and externalising (e.g. aggression, non-compliance, disobedience) behaviour problems (Jaffe et al., 1986; Graham-Bermann, 1996; Shipman, Rossman & West, 1999), low self esteem (Hughes & Barad, 1983), attainment of lower academic scores (Moore & Pepler, 1989) and cognitive delays (Margolin & Gordis, 2000). However, studies examining trauma specific symptomatology are relatively rare, with a variety of methodological differences including either community or refuge populations, with a combination of pre-school and school age children (Chemtob & Carlson, 2004; Graham-Bermann & Levendosky 1998; Kilpatrick, Litt & Williams, 1997; Lehmann, 1997; Levendosky, Huth-Bocks, Semel & Shapiro, 2002; Rossman, 1998).

<u>Trauma</u>

A diagnosis of PTSD in the DSM-IV requires a person to have experienced or witnessed an event/s that involved actual or threatened death or serious injury. In children, the psychological effects of trauma have been known to be associated with physical abuse (Goodwin, 1986) and through witnessing violence between others (Graham-Bermann & Levendosky, 1998). Children exposed to domestic violence can experience intense fear, helplessness and over stimulation by observing their mother being victimised (Silvern & Kaersvang, 1989).

Results from previous trauma studies found that between 3% and 56% of the samples met the criteria for a diagnosis of PTSD, despite a high percentage of the children exhibiting trauma symptoms (Graham-Bermann & Levendosky 1998; Lehmann, 1997; Levendosky, Huth-Bocks, Semel & Shapiro, 2002). Methodological differences can account for the variation, but some authors also propose that there is a clinical difficulty in diagnosing PTSD, particularly in younger children using the current diagnostic criteria outlined in the DSM-IV (Levendosky *et al.* 2002). One of the main difficulties centres on the 'Avoidance' category, which may be more complex for a younger child to display than an adult or older child, as a result of developmental limitations in the child's cognitive and emotional capacities. It is possible that PTSD symptoms in children may manifest in different ways which highlights a more global clinical issue, in that current diagnostic guidelines may not be the most suitable diagnostic tool for this disorder in children. Consequently, children with trauma symptoms may not be having their needs met through clinical assessment and intervention (Graham-Bermann & Levendosky, 1998).

Another difficulty in examining trauma symptoms in children exposed to domestic violence is the re-traumatising effect. Since exposure to domestic violence is unlikely to be a single, unitary event, child observers are more likely to exhibit symptoms similar to children who have experienced cumulative stressors, such as: physical or sexual abuse, rather than children observing one single traumatic event (Graham-Bermann & Levendosky, 1998).

Theory

Historically, research into the effects of domestic violence on children tended to combine samples, with a mixture of exposed only children together with children who had also been the victim of physical abuse. Studies from the Eighties onwards started to examine the transactional models of effect and theories outlining how multiple stressors increased vulnerability to developmental and psychological problems were proposed (Rutter, 1983;

Sameroff & Seifer, 1983; Trickett, 1998). For example, Rutter (1980) put forward the notion that cumulative family stressors increased the risk of children developing psychopathology and behavioural problems. Of the six main family stressors he included; father unskilled/semi skilled, overcrowding within the family, mother's mental health, instability of the child's environment, i.e. been in local authority care, conviction of father and marital discord. Rutter theorised that two or more of these stressors was enough to increase a child's vulnerability to behavioural adjustment fourfold.

Studies of documented domestic violence have highlighted similar family characteristics such as: high family numbers, poverty, relational discord, maternal psychopathology and social isolation (Coulton, Korbin, Su & Chow, 1995; Zigler & Hall, 1989) which is one explanation for the increased levels of psychosocial and behavioural problems exhibited by children living within violent families. As a result of the theory of cumulative stressors, an increased number of studies began to separate physically abused and witnessed children from witnesses only (Hughes, Parkinson & Vargo, 1989; Davis & Carlson, 1987; O'Keefe, 1995; Shipman *et al.* 1999). For example; when physically abused/witnessed children were compared to witnesses only children (and a comparison of non-exposed), Hughes *et al.* (1989) found greater rates of internalising and externalising behaviours in the abused/witnessed group, providing evidence for her "double whammy" hypothesis. Similarly, findings by O'Keefe (1995) suggested that adjustment problems are related to the cumulative effect of a child's exposure and victimisation to violence when compared to witnessed only children.

Alternative findings were reported by Sternberg *et al.* (1993) who examined depression and behaviour problems between three groups and a comparison: physically abused only, physically abused/witnessed and witnesses only. Their results confirmed previous findings that children who were witnesses only were not affected as much as the physically abused or physically abused/witnessed groups, although the differences were not considered reliable.

However, when the physically abused only and physically abused/witnessed groups were compared, findings were similar across the measures, which suggested that exposure to domestic violence and physical victimization does not necessarily produce greater problems than physically abused only. This finding by Sternberg and colleagues is in contrast to the theory of multiple stressors (Rutter, 1980; Trickett, 1998) but given the rarity of studies separating these groups it is unwise to draw any concrete conclusions at this stage.

This study therefore hopes to explore the theory of multiple stressors in greater detail by examining trauma symptoms exhibited by children who have been exposed to domestic violence and other stressors and comparing symptom severity.

5. The hypotheses

Hypothesis 1: There will be a significant difference in trauma symptoms between the physically abused/witnessed group when compared to a comparison.

Hypothesis 2: There will be a significant difference in trauma symptoms between the physically abused/witnessed group and the witnesses only group.

Hypothesis 3: The severity, frequency and duration of violence will be a significant predictor in the severity of trauma symptoms displayed by each of the target groups.

Hypothesis 4: The study will aim to explore the differences between physically abused only children and physically abused/witnessed children in relation to trauma symptoms.

6. Recruitment of participants

The study will aim to recruit mothers of children aged between 3 and 12 years for four target groups:

(i) Comparison

(ii) Witnesses to domestic violence

(iii) Witnesses to domestic violence and also physically abused

(iv) Physically abused only

This age range has been chosen because the main trauma questionnaire has norms for children within this range. Where possible, participants will be encouraged to complete the questionnaire on the youngest child in their family to lower the effects of developmental factors on the overall data.

In cases where the mother is unavailable, i.e. child in foster care or cared for by relatives, the primary caregiver will be asked to complete the questionnaires, only if they have been in care of the child for a period of six months or more.

A minimum of 15 participants will be required for each group. It is hoped and expected that numbers will exceed this limit. Discussions with the managers involved in the recruitment of participants have confirmed the possibility of exceeding this target.

The recruitment of participants will come from three sources:

(i) The Isle of Wight Children and Family Services (specifically, the Quality Assurance Team). Provisional agreement has been provided by Kate Freeman, Service Manager for Quality Assurance and John Evans, Child Protection Co-ordinator – (01983) 525790.

(ii) The Island Women's Refuge (including women currently residing in the Refuge and those who have been resettled, but are still on the Floating Support Scheme). Provisional agreement has been provided by Fiona Gwinett, Refuge Manager – (01983) 825981. Social Services and the Refuge will liaise to ensure no participants are duplicated within the course of the study.

(iii) Self referrals via a newspaper advertisement, flyers in G.P. surgeries and local schools who may be willing to pass a flyer on to parents will be used to recruit mothers of children for the non-exposed comparison group. This procedure will be delayed slightly to ensure the best possibility of recruiting matched participants.

7. Research Design

This study will be non-experimental, where data regarding trauma history and symptomatology will be collected concurrently from caregivers of three target groups of children and a comparison group. The between subjects aspects will explore differences between the four groups, where as correlational analysis will be used to explore the relationship between variables (severity, duration and frequency of violence, age, gender etc.) and trauma symptoms within subjects.

8. Procedures employed

To ensure validity of the different groups involved in the study, a coding system outlining the definition of (i) physical abuse only, (ii) witnesses only, and (iii) physical abuse and witnesses to domestic violence, will be discussed and agreed with the Isle of Wight Children and Family Services and the Refuge before any data collection begins.

Approved definitions will then be circulated to the Quality Assurance Team and refuge workers who can begin to identify appropriate participants (Appendix B).

Once identified, the potential participant will be contacted by their social or refuge worker and asked if they would like to take part in the study. An information sheet and consent form outlining the purpose of the study will be read out to the potential participant over the phone (Appendix A). If the participant agrees, the social or refuge worker will send the questionnaire pack to the participant's home address for completion. The pack will include: the information sheet and consent form x 2, 3 questionnaires, and a self addressed envelope to return the pack direct to the researcher.

- If the participant has literacy problems they will be offered help by their social or refuge worker to complete the questionnaires.

Before the questionnaire has been sent out, the social or refuge worker will complete a Screening Checklist and return this direct to the researcher. This will help ensure that the participant (identified only by a number which will correspond to the questionnaire pack) is placed in the appropriate group. A screen is also contained in the Background Information Questionnaire completed by the participant, which will hopefully match the Screening Checklist by the social or refuge worker.

For recruitment of the comparison group an advert will be placed over several weeks in the Isle of Wight County Press and Weekly Ad (local newspapers) asking for mothers whose children have not been exposed to domestic violence to take part in a study. Similarly, if some local schools agree, flyers will be provided for children to take them home to their parents. Respondents to the advertisement/flyer who are considered suitable after a telephone screen and are read out an amended version of the information sheet and consent form over the telephone, will then be sent the questionnaire to their home address with the self addressed envelope to return the completed pack back to the researcher.

Mothers from the comparison group with literacy problems who are unable find their own help to complete the questionnaires will be excluded from the study to reduce risks of compromising anonymity by having to meet the researcher.

Child Protection Issues

It will be made clear from the initial contact by the social and refuge workers that any undisclosed current risk of harm to a child will mean that local Child Protection Procedures will have to be followed. This message will be repeated in the information sheet and consent form.

In addition, if it becomes clear from the completed questionnaires that a child is currently at risk of harm the following procedure will be implemented. The researcher will speak directly to John Evans, the Child Protection Co-ordinator at the Isle of Wight Children and Family Services and give the participant's number. The participant will then be able to be tracked down through a list kept at the Family Centre or the Refuge. John Evans is willing to take responsibility for ensuring that the appropriate child protection procedures are followed in accordance with the local authority procedures.

In circumstances where it becomes clear that the mother only is currently at risk, for example, if she is physically abused by a partner who does not live in the family home and the abuse takes place away from the children the following procedure will be implemented. John Evans will track this participant (by the same method above) and speak to them directly and offer supportive advice and help. This will include the offer of support from the Island Women's Refuge.

These procedures will ensure that the participants in all the target groups still remain anonymous to the researcher.

For the comparison group it will be made explicit from the first contact that any evidence of current risk of harm to the child disclosed direct to the researcher, will result in child protection procedures being employed. It will be confirmed at the outset before any questionnaires are sent that there is no current risk to the child. If a woman calls the researcher and does disclose a current risk, she will be offered support and help through the Island Women's Refuge. The researcher can make this initial contact and thereafter any child protection issues will be taken forward by Fiona Gwinett, the Refuge Manager.

On the slim chance that the completed questionnaires from the comparison group reveal any risk or harm to the child, the participant will be contacted via the postal address they provided and a child protection referral will be made via John Evans, Child Protection Co-ordinator who will follow this through.

9. Measures employed

It is proposed that 3 measures will be used in the study (Appendix C).

1. Background Information Measure

This questionnaire has been designed by the researcher and will collect appropriate demographic and qualitative information from the mother/caregiver. In brief it will include:

(i) Information about the mother/caregiver: age, ethnicity, socioeconomic status, information about past violent relationship/s (i.e. duration, length of time since last relationship) and whether childhood abuse was experienced by the mother.

(ii) Information about the perpetrator: relationship to the child (i.e. father, stepfather etc.) and whether there was only one perpetrator.

(iii) Information about the child: age, gender, ethnicity, siblings, birth order, whether the child has received a psychiatric (e.g. ADHD, Conduct Disorder, etc.) or learning

disabled diagnosis. Children registered as learning disabled will be excluded from the study to reduce the risk of developmental delays influencing the results.

(iv) A screen for stressful life events will also be included for the mother/caregiver to complete about the child. This has been designed by the researcher and is based on theoretically driven research of stressful life events pertinent to children (Abidin, 1995, Rutter, 1983, Sandberg et al., 1998).

2.. Trauma Symptom Checklist for Young Children (TSCYC, Briere, J. 2005, Psychological Assessment Resources)

This TSCYC is a 90 item report measure designed to be completed by the parent/caregiver of a child aged between 3 - 12 years. The measure contains two reporter validity scales and eight clinical scales. Norms and clinical cut offs will be available in the manual.

Since the TSCYC has just been published in March 2005 there are no reported studies using this measure at present. Despite this, it has been chosen for use in this study as it is the only trauma specific questionnaire available that can be completed by the caregiver of a child. This measure is also considered appropriate for use with the control group and it would be expected that a lower level of trauma specific symptomatology is found in children who have not been exposed to domestic violence and/or physical abuse.

A paper on reliability and construct validity has been published by the author and colleagues (Briere, Johnson, Bissada et al, 2001). Initial reports demonstrate that the individual clinical scales of the TSCYC have good to excellent reliability, and the measure is correlated with various trauma exposure such as childhood sexual abuse, physical abuse and witnessing domestic violence. Alpha internal consistency for the clinical scales ranged from .81 for Sexual Concerns to .93 for PTSD-Total, with an average scale alpha of .87. Another recent paper examining reliability and validity of the TSCYC by Gilbert (2004) confirmed the findings of

Briere et al.'s paper, reporting good to excellent levels of internal consistency for the clinical scales.

3. Severity of Violence Against Women Scales (SVAWS, Marshall, L., 1992, Plenum Publishing Corporation).

The SVAWS is a sensitive assessment devised to evaluate male violence against women in terms of their experiences, including threats of violence, violent acts and sexual abuse. There are 46 items under nine categories which can be scored on a four point scale (1 – never, 2 – once, 3 – a few times & 4 – many times). Items from each category can be added together to produce a frequency score, with higher scores indicating more frequent abuse. Internal consistency (alpha) of the measure was reported at .96 (Marshall, 1992).

This measure will be used in all groups including the comparison, which will help confirm that no or minimal violence has occurred, therefore strengthening the validity of the comparison group. In cases where the child is being looked after, this measure will not be completed by a foster carer or legal guardian.

The SVAWS has been used by several researchers such as Levendosky et al., (2002) who found good to excellent reliability, after combining the nine scales into four specific categories: threats of violence, mild, severe and sexual violence (reliability alpha was .93, .95, .97 and .85 respectively).

10. Qualifications of the investigators to use the measures

The measures do not require any specific training to administer, and will be sent direct to the participants for completion.

11. Venue for investigation

The measures will be completed in the participant's home or at the organisation who has recruited the participant.

12. The duration of the study

Data collection will begin once ethical approval has been provided and continue until February 2006. The final project will be submitted around June 2006.

13. Data Analysis

All data will be entered into an SPSS programme and be cleaned for missing data and outliers. It is proposed that one way ANOVA's will be used to examine differences between the groups. If numbers are sufficient, exploratory regression analysis will be used to examine predictors of trauma symptoms (gender, age, frequency and severity of violence).

14. Potential hazards to participants/investigators

A small risk to the investigator has been identified:

Researcher being exposed to the consequences of physical abuse and domestic violence regarding children. It is expected that the reality of actually seeing how children suffer from physical abuse and domestic violence will be upsetting.

Reflection on this issue will be explored through supervision and vouchers for counselling may be used if deemed appropriate.

15. Potential offence/distress to participants

A number of potential risks for participants have been identified:

Risk 1: Participant becoming distressed whilst completing questionnaires. It will be made clear to all participants through their initial contact with either: social workers, refuge workers or the researcher that they are under no obligation to participate in the study even when they have received the pack of questionnaires. Participants will be forewarned through the information sheet that they may find the questionnaires distressing or that they may trigger unpleasant memories. A general domestic violence helpline number will be provided in the information pack that would provide support to the participant if required. The appropriate social worker, refuge worker or support worker will also be available to offer further support.

Risk 2: Participant revealing previously unknown (to services) physical abuse of a child. Since the researcher is only likely to speak directly to mothers in the non-exposed comparison group, this risk is considered minimal. However, if anyone contacts the researcher through a flyer or newspaper advertisement, it will be made explicit in the first telephone conversation that any disclosure of physical abuse or harm to a child will be reported directly to Social Services, where the appropriate child protection policy will be followed in conjunction with the Isle of Wight NHS Trust and the Isle of Wight Social Services. (Please see section 8 Procedures employed).

Risk 3: Staff meeting participants who may need help completing questionnaires. If a participant requires help to complete the questionnaires due to literacy problems and they have been recruited from Social Services or the Refuge, the appropriate lone worker policy will be adhered to. However, it is unlikely to be the researcher helping the participant in this case. As

stated previously, mothers from the comparison group with literacy problems are likely to be excluded from the study to reduce risks of meeting and compromising anonymity.

16. Procedures to ensure confidentiality

The investigators will have no access to the identity of the participants from any of the three core target groups. All participants will be identified by their appropriate social or refuge worker who will send the questionnaire pack direct to the participant's home address. Each pack will be numbered in order to ensure that if a participant wishes to withdraw from the study they can contact their social or refuge worker, who can pass this number on to the investigator.

Those participants recruited direct from newspaper adverts by the investigator do not have to give full names. Equally, they will be given a number when the questionnaire pack is sent to their home, so they can contact the researcher if they wish to withdraw from the study. Addresses of participants from this group will be destroyed shortly after the questionnaire pack has been sent.

All the questionnaires will be completed anonymously and the results will be kept confidential from any social or refuge worker.

All data will be held in a locked filing cabinet in accordance with local Trust and University of Wales, Bangor policies.

17. How consent is obtained

Verbal consent will be obtained first over the telephone before any questionnaire pack is sent out. Written consent will be included in the pack. Any unsigned consent forms will result in data being excluded from the study.

Welsh translations will not be needed as all participants are being recruited from the Isle of Wight.

18. Information for Participants

An information sheet and consent form will be read out to potential participants by their social or refuge worker over the phone. If the participant then gives verbal consent to take part, the information sheet is included in the questionnaire pack sent to their home address, with two consent forms, one of which will be returned to the researcher in the completed pack. The other remains with the participant.

A slightly amended version of the information sheet will be used for the comparison group.

19. Approval of relevant professionals

Subject to this study gaining ethical approval by the School of Psychology at Bangor, provisional agreement has been provided by The Children and Family Services, and the Island Women's Refuge, to help identify potential participants.

20. Payments to: participants/investigators/departments/institutions

No payments are required.

21. Equipment required and its availability

No equipment is required.

22. What arrangements you are making to give feedback to participants

Individual feedback will be offered to each participant if they request it via tick box on the consent form. A summary of the findings from each of the completed questionnaires will be provided and sent back to either the Isle of Wight Children's and Family Services, or Island Women's Refuge in a sealed envelope, with just the participant's number on. This number on the envelope can be matched to a list both organisations will keep, and they can forward the

envelope on to the appropriate participant. Both services have agreed to cover the cost of sending this information out.

In cases where it is clear from the questionnaire measures that the child is experiencing difficulties the following pathway will be followed. Firstly, a clinical cut off will be decided between the researcher and her supervisor. (This is not possible to provide at the moment until the TSCYC manual arrives from America). Those children who score above the clinical cut off which is suggestive of a clinical problem will be encouraged in their individual feedback to access C.A.M.H.S via their G.P.

The results of the study as a whole will be forwarded to the Isle of Wight Social Services, Island Women's Refuge and Isle of Wight Library for the participants to access in due course. Details of this will be provided on the information leaflet.

23. Does the proposal conform to BPS Guidelines on Ethical Standards in research?

This research project will be carried out in accordance with guidelines laid down by the British Psychological Society and the procedures determined by the School of Psychology at Bangor.

Signed

Gillian Hunter, Trainee Clinical Psychologist_____

Dr Elizabeth Burnside, Research Supervisor _____

AMENDMENT TO ETHICS PROPOSAL (24.11.05)

(Additions highlighted in bold print) – Sections 6 & 8

6. Recruitment of participants

The study will aim to recruit mothers of children aged between 3 and 12 years for four target groups:

(i) Comparison

(ii) Witnesses to domestic violence

(iii) Witnesses to domestic violence and also physically abused

(iv) Physically abused only

This age range has been chosen because the main trauma questionnaire has norms for children within this range. Where possible, participants will be encouraged to complete the questionnaire on the youngest child in their family to lower the effects of developmental factors on the overall data.

In cases where the mother is unavailable i.e. child in Foster Care or cared for by relatives, the primary caregiver will be asked to complete the questionnaires, only if they have been in care of the child for a period of six months or more.

A minimum of 15 participants will be required for each group. It is hoped and expected that numbers will exceed this limit. Discussions with the Managers involved in the recruitment of participants have confirmed the possibility of exceeding this target.

The recruitment of participants will come from three sources:

(iv) The Isle of Wight Children and Family Services (specifically, the Quality Assurance Team). Provisional agreement has been provided by Kate Freeman, Service

Manager for Quality Assurance and John Evans, Child Protection Co-ordinator – (01983) 525790.

(v) The Island Women's Refuge (including women currently residing in the Refuge and those who have been resettled, but are still on the Floating Support Scheme). Provisional agreement has been provided by Fiona Gwinett, Refuge Manager – (01983) 825981. Social Services and the Refuge will liaise to ensure no participants are duplicated within the course of the study.

(vi) **Southern Focus Trust, a part government/part charity funded organisation based in Portsmouth. Initial discussions with Stella Pratt, Departmental Services Manager (Women's Services) have indicated she and her support workers have provisionally agreed to take part in the study by helping with recruitment - pending further ethical approval. Contact Number 023 92862776**

(vii) Self referrals via a newspaper advertisement, flyers in G.P. surgeries and local schools who may be willing to pass a flyer on to parents will be used to recruit Mothers of children for the non exposed comparison group. This procedure will be delayed slightly to ensure the best possibility of recruiting matched participants.

8. Procedures employed

To ensure validity of the different groups involved in the study, a coding system outlining the definition of (i) physical abuse only (ii) physical abuse and witnesses to domestic violence and (iii) witnesses only, will be discussed and agreed with the Isle of Wight Children and Family Services, Refuge **and Southern Focus Trust** before any data collection begins.

Approved definitions will be then circulated to the Quality Assurance Team and refuge and **support** workers who can begin to identify appropriate participants.

Once identified, the potential participant will be contacted by their social, **support** or refuge worker and asked if they would like to take part in the study. An information sheet and consent form outlining the purpose of the study will be read out to the potential participant over the phone or in a one to one meeting. If the participant agrees, the social, **support** or refuge worker will send/give the questionnaire pack to the participant's home address for completion. The pack will include: the information sheet & consent form x 2, 3 questionnaires, and a self addressed envelope to return the pack direct to the researcher.

- If the participant has literacy problems they will be offered help by their social, **support** or refuge worker to complete the questionnaires.

Before the questionnaire has been sent out, the social, **support** or refuge worker will complete a Screening Checklist and return this direct to the researcher. This will help ensure that the participant (identified only by a number which will correspond to the questionnaire pack) is placed in the appropriate group. A screen is also contained in the Background Information Questionnaire completed by the participant, which will hopefully match the Screening Checklist by the social, **support** or refuge worker.

<u>Child Protection Issues</u>

It will be made clear from the initial contact by the social, **support** and refuge workers that any undisclosed current risk of harm to a child will mean that local Child Protection Procedures will have to be followed. This message will be repeated in the information sheet and consent form.

In addition, if it becomes clear from the completed questionnaires that a child is currently at risk of harm the following procedure will be implemented: The researcher will speak directly to John

Evans, the Child Protection Co-ordinator at the Isle of Wight Children and Family Services and give the participant's ID number. The participant will then be able to be tracked down through a list kept at the Family Centre or the Refuge. John Evans is willing to take responsibility for ensuring that the appropriate child protection procedures are followed in accordance with the local authority procedures.

If the same concerns are highlighted for a participant in Portsmouth, it has been provisionally agreed that the following will happen: The researcher will speak to Stella Pratt, Departmental Services Manager, Women's Services who will track the participant via an ID number recorded in their office and contact Portsmouth Social Services (023 92839111) or a specific Child Protection Service at Portsmouth Police (023 92891524) for further advice and/or action. Stella will take responsibility for following these procedures through.

In circumstances where it becomes clear that the mother only is currently at risk, for example, if she is physically abused by a partner who does not live in the family home and the abuse takes place away from the children the following procedure will be implemented. John Evans will track this participant (by the same method above) and speak to them directly and offer supportive advice and help. This will include the offer of support from the Island Women's Refuge. **Alternatively, if the mother is from the Portsmouth area, Stella Pratt will follow the same procedure outlined above.**

These procedures will ensure that the participants in all the target groups still remain anonymous to the researcher.

On the slim chance that the completed questionnaires from the comparison group reveal any risk or harm to the child, the participant will be contacted via the postal address they provided and a child protection referral will be made via John Evans, Child Protection Co-ordinator who will follow this through. **It is extremely unlikely that any participants for this group will be recruited from the Portsmouth area.**

AMMENDMENT TO DESIGN OF STUDY (5.12.05)

In December 2005 it became apparent that it was extremely unlikely that it was going to be possible to recruit any participants for the physically abused only group. Recruitment of this group was solely reliant on the help of the Isle of Wight Children and Family Services who had not provided any cases, and were unlikely to provide any in the future. The Child Protection Co-ordinator had expressed his dissatisfaction with the lack of cases, but reasoned that the teams involved were short-staffed and had other priorities.

It was therefore decided to drop this group from the study, (which meant dropping Hypothesis 4) and concentrate on the Isle of Wight Women's Refuge and the Southern Focus Trust organisation to recruit participants for the two remaining target groups: physically abused and witnessed domestic violence and witnesses only. Everything else in terms of design, procedures, and potential risks stayed the same, so it was not necessary to amend the ethics proposal further.

The remaining groups to be included in the study were as follows:

Group 1 – Comparison

Group 2 – Witnesses to domestic violence only

Group 3 – Witnesses to domestic violence and also physically abused

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SECTION 2

Appendices

Appendix A

Information sheet & consent form

Examining Trauma Symptoms in Children Exposed to Domestic Violence

Research Information Sheet and Consent Form

Who is conducting this study?
The main Researcher in this study is Billie Hunter, a Trainee Clinical Psychologist under the supervision of Dr Liz Burnside, from the University of Wales, Bangor. The Researcher is also being helped by the Isle of Wight Children and Family Services and the Island Women's Refuge.

What is this study about?
The aim of the study is to explore whether children who have been exposed to domestic violence are showing signs of trauma. The study will ask Mothers or Caregivers with a child aged between 3 and 12 years to complete some questionnaires. The study will also be interested in children who may have been physically abused or have never been exposed to any kind of violence. This is because it is important to have different groups of children who have had different experiences, so the results can be compared. Unfortunately, children who may have also experienced sexual abuse will have to be excluded from this study. If this is the case, then you will not be required to complete these questionnaires.

Why should I take part?
Your contribution to this study will help provide further information about the effects of difficult experiences on children. This knowledge can be used by psychologists and other professionals working with children, to help them understand how children react and to ensure that the most effective treatments can be offered.

What do I have to do?
If you want to take part in this study you will have to:

- Sign this consent form
- Complete 3 questionnaires about one child in your family or care
- Return the questionnaires in the self addressed envelope to the researcher

If you have more than one child in your family or care, you will only need to complete one set of questionnaires. It is recommended that you consider thinking about the youngest child; however, this will be your decision.

What are the questionnaires about?
Background Information Sheet (yellow questionnaire). This measure has 20 questions and will ask for some general details about you and the child. It also contains some statements that you need to tick Yes or No about current and past relationships.
Severity of Violence Against Women Scales (green questionnaire). This measure has 46 statements for you to grade regarding the amount of conflict you experienced within the last year of your relationship.
Trauma Symptom Checklist for Young Children. This measure has 90 questions and comes with an answer booklet. It aims to identify any possible trauma symptoms the child may be experiencing.

How long will it take?
It will vary for different people, but it should take no longer than an hour to complete the questionnaires.

Do I have to take part?
You are under no obligation to take part – this is completely voluntary. Even if you have completed the questionnaires and returned them back to the Researcher, you can withdraw your personal information from the study. To do this you would need to contact your Social Worker or Refuge Worker. Details are provided below.

What will happen to my questionnaire pack?
When you have completed the questionnaires, you just put them in the envelope provided and return them to the Researcher. There will be no cost to you. The Researcher will collect this information and analyse the results. Your individual information will be entered into a computer programme under a number to ensure that you remain anonymous. When the study is finished (approximately June 2006), all the data will be destroyed after a significant period.

Who will get to see my questionnaires?
The questionnaires will be completely anonymous. Only the Researcher and her Supervisor will have access to each individual questionnaire.

All of the information that you provide will be confidential; however, there is an important exception. If you reveal direct to the Researcher that your child is currently at risk of harm, then the Researcher will have to forward this information on to Social Services.

What if I need help to complete the questionnaires?
If you need help to complete the questionnaires you can ask a friend or family member you trust, or if you have a Social Worker or Refuge Worker you can contact them on the numbers below.

How can I find out the results of this study?
The results of the study will be forwarded to the Isle of Wight Children and Family Services; Island Women's Refuge and the Isle of Wight Library. Results will be available from July 2006. You can also get individual feedback, please tick the box on the consent form and a summary of your findings will be sent via your Social or Refuge worker. (They will not get to see your personal results).

What else do I need to know?
You need to know that completing the questionnaires may be upsetting because they are asking about any potential violence that you and/or your child/children may have experienced. A confidential Domestic Violence Helpline number is provided below. Remember that you can also speak to a Social Worker or Refuge Worker (if you have one).

Domestic Violence Help Line (24hrs)	0808 2000 247
Isle of Wight Samaritans	(01983) 521234
Isle of Wight Social Services	(01983) 525790
Isle of Wight Refuge	(01983) 825981

Please note: any complaints concerning the conduct of this research should be should be addressed to C.F. Lowe, Head of School, School of Psychology, University of Wales, Bangor, Gwynedd, LL57 2DG.

IF YOU ARE WILLING TO TAKE PART IN THIS STUDY, PLEASE SIGN ONE OF CONSENT FORMS AND RETURN THIS IN THE ENVELOPE WITH THE COMPLETED QUESTIONNAIRES.
REMEMBER TO KEEP HOLD OF THIS INFORMATION SHEET AS IT CONTAINS CONTACT NUMBERS FOR YOU

Consent Form

I confirm that I have read the information sheet provided by the researcher and give my consent to take part in this study.

I understand that my data can be withdrawn from this study on my request.

I am aware of how to get access to the overall results of this study when it is finished.

Signed:_____

Please tick if you would like individual feedback posted to you ☐

Participant Copy Only

Appendix B

Protocol & guidelines for organisations involved in the study

Guidelines for Identifying Potential Participants for Inclusion in the following study:

Examining Trauma Symptoms in Children Exposed to Domestic Violence

The following guidelines are aimed to help you identify participants who may be suitable for inclusion in this study.

This study aims to recruit mothers, or in some cases, primary caregivers with a child, who meet the criteria for one of three target groups listed below. The groups are set to include children who have been:

Group 1 Physically abused only

Group 2 Witnessed domestic violence without any evidence of physical abuse

Group 3 Physically abused and also witnessed domestic violence

Group Definitions & Criteria

Group 1 - Physically Abused only

Definition

Physical Abuse

Physical abuse is defined as physical behaviour that does, or has the potential to do, physical harm to the subject. This must include contact either between the perpetrator and the subject or an object and the subject, provided that the perpetrator has caused this contact. (Salter et al., 2003)

Physical abuse may involve hitting, shaking, throwing, poisoning burning or scalding, drowning, suffocating, or otherwise causing physical harm to a child (Safeguarding our Children, 2004).

Restraint is defined as a positive action by the perpetrator, involving physical contact between the subject and a device such as rope or flex which has been specifically employed by the perpetrator to prevent the subject's free movement (Salter et al., 2003).

Detailed descriptions of behaviours that constitute physical abuse are given below.

Criteria for Group 1 - Physically Abused only

Evidence of any of the descriptions outlined below, on **two or more** occasions, will be enough to classify the child as meeting criteria for Group 1 (or 3). The physical abuse must be committed by an adult male perpetrator. Descriptions taken from Salter et al. (2003).

Minor marks below the neck / no clear description

- The male perpetrator inflicted minor marks on the child's body during a spanking; there were no marks to the neck or head. The term 'minor marks' includes redness, or use of the term minor marks, but not bruising of any kind.
- The perpetrator held the child in order to restrain him, but not by the head or neck. For a definition of 'restraint' see the top of this section.
- The perpetrator was reported to have spanked the child with an open hand or an object likely to inflict only minor marks in most cases (e.g. a soft belt, a ruler, a table tennis bat), with the child sustaining such marks on or below the shoulder.

Non minor marks below neck

- The caregiver inflicted a bruise or bruises to the child's body from an incident.
- The caregiver spanked the child with an object likely to leave a non minor mark (e.g. a hair brush, a belt buckle, an electric cord).

Examples

- The child sustained welts on the back after being beaten with a hair brush.
- The child was beaten with an electric cord, resulting in numerous marks.

Marks or restraint to neck or above / serious bruising, minor lacerations, minor burns

- The perpetrator inflicted marks on the child's head, face, or neck (e.g. a black eye).
- The perpetrator used restraint (see definition) on the subject involving contact with the subject on the head or neck.
- The perpetrator's rough handling of the child resulted in serious bruising or minor lacerations (e.g. require stitches or minor medical attention) .
- The perpetrator inflicted minor burns (e.g. minor cigarette burns) to the child's body.

Examples

- The child received a hand print on the neck after the parent grabbed him.
- The child had a black eye resulting from being punched in the face.
- Small circular burns on the child's hands were identified as cigarette burns.

Serious injuries but not hospitalised / <24 hrs hospitalisation / asphyxiation

- The perpetrator hit the child with an object (e.g. a baseball bat, a telephone) likely to result in serious injury (e.g. non-minor lacerations, second degree burns, fractures, or concussion), or threw the child against the wall, but injuries that were sustained did not require hospitalisation, according to available medical information.
- The perpetrator attempted to choke or smother the child, but no emergency medical care was required.
- The perpetrator inflicted serious burns (second degree) to the child's body, but the injury did not require hospitalisation
- The perpetrator inflicted an injury that required some hospital care, such as treatment in a casualty department, but did not require hospitalisation for more than 24 hours (e.g. stitches, fractures, non-minor sprain).

Examples

- The child was beaten with a board that had nails in it. The child received bruises and cuts.
- The child was thrown downstairs, and fractured one arm.
- The child was severely burned by the parent and was treated in a casualty department.

Twenty four hours or more hospitalisation / permanent damage

- The perpetrator inflicted an injury to the child that required hospitalisation for more than 24 hours (e.g. internal injuries) and/or that was permanently physically damaging, or disfiguring (e.g. resulting in brain damage, severe scarring, crippling).

Examples

- The child was set on fire, resulting in severe burns that were permanently disfiguring.
- The child was hospitalised for one week for internal injuries and evidence of a shaken infant syndrome.

Frequency of Physical Abuse

There must be evidence of at least two or more episodes of physical abuse for the child to be included in the study.

If a child has experienced one episode only, then they are to be excluded from the study.

If the child experienced one episode only with one male perpetrator but then experienced another episode of physical abuse from another male perpetrator, they can be included in the study.

Number of Perpetrators of Physical Abuse

As above; a child experiencing physical abuse from more than one male perpetrator can be included in the study.

Group 2 – Witnessed Domestic Violence with no evidence of Physical Abuse

Definitions

Two definitions are provided. The first concerns 'Domestic Violence' against the mother. Please ensure that the mother meets the definition for domestic violence before they are approached.

If you are going to approach a Foster Carer or Primary Carer of a child, please ensure that the one of the categories in the 'Exposure to Domestic Violence' criteria is met for the target child.

Domestic Violence

Domestic violence constitutes many forms including many controlling and threatening behaviours, which may not necessarily result in physical harm. The following three lists contain some of the verbal and active behaviours which constitute domestic violence against a female victim by a male perpetrator.

For the purpose of this study, if the mother has experienced any of the behaviours under the headings of **'Threatening Behaviours'** and **'Physical Violence'** on **two occasions or more** occasions, this will meet the domestic violence criteria. If the mother has experienced behaviours from the **'Controlling Behaviours'** only, then they will have to be excluded from the study.

Please note that the following lists are not exhaustive and cannot contain all behaviours relating to domestic violence, so please use your own judgement or contact the researcher if you are unsure: bh303@hotmail.com

Controlling Behaviours

Timing her movements
Isolating her from friends and family
Making others too scared to contact her
Turning friends and Family against her
Getting his family or friends to intimidate her
Continually finding fault with tasks she has done
Breaking valued objects
Preventing her from working
Accompanying her everywhere
Following her everywhere
Making her work long hours
Making her sleep on the floor
Taking her money
Making decisions for her

Threatening Behaviours

Threats of physical violence
Threats of future physical violence
Threats to use weapons or objects
Threats to take the children away
Threats to self harm or commit suicide
Threats to burn her
Threats to harm or kill the children
Threats of sexual violence
Threats to kill her
Threats to harm or kill pets
Threats to destroy her possessions

Physical Violence

Slapping
Hitting
Smacking
Punching
Hitting with objects
Shoving
Kicking
Holding her down
Holding her against a wall

Banging her head
Biting
Strangling
Stabbing
Hurting the children in front of her*

Bruising
Broken bones
Suffocating
Forcing her to hurt herself

Black eyes
Shaking
Throwing objects at her
Rape

*** Please note this would place the child into Group 3**

Exposure to Domestic Violence

For this study, the term 'Exposure' to domestic violence will be used as it does not assume that the child actually was a direct witness or observer to the violence (Holden, 2003).

Criteria for Group 2 - Exposure to Domestic Violence only

The following criteria are taken from Holden's (2003) taxonomy of Children's Exposure to Domestic Violence. **Please note: For a child to be included they must have experienced any of the categories below on TWO or more occasions.**

Type of Exposure	Definition	Examples
Intervenes	The child verbally or physically* attempts to stop the assault	Asks parents to stop, attempts to defend Mother
Victimized	The child is verbally or physically* assaulted during an incident	Child is intentionally injured, or accidentally hit by thrown object
Participates	The child is forced or "voluntary" joins in the assaults	Coerced to participate; used as spy; taunting Mother
Eyewitness	The child directly observes the assault	Watches assault or is present to hear verbal abuse
Overhears	The child hears, though does not see, the assault	Hears yelling, threats, or breaking of objects
Observes the initial effects	The child sees some of the immediate consequences of the assault	Sees bruises or injuries; police; ambulance; damaged property
Experiences the aftermath	The child faces changes in his/her life as a consequence of the assault	Experiences maternal depression; change in parenting; separation from Father; relocation
Hears about it	The child is told or overhears conversations about the assault	Learns of the assault from Mother, sibling, relative, or someone else

* If the child was accidentally physically injured on two or more occasions this would meet the criteria for Group 3.

Group 3 – Physically Abused and Witnessed Domestic Violence

Definition

Physical Abuse

As it is described for Group 1

Exposure to Domestic Violence

As it is described for Group 2

Criteria for Group 3 – Physical abuse and witnessed domestic violence

Please ensure that the Criteria outlined above for Groups 1 & 2 are met.

General Guidelines

Identifying the Mother (The Participant)

The mother must have a child aged between 3 and 12 years who will meet the criteria for one of the three target groups (definitions described above).

Children aged less than 3 years and older than 12 cannot be included in the study.

If the mother has more than one child, she should be encouraged to complete the pack of questionnaires concerning her youngest child – as long as this child meets the appropriate criteria.

Mothers who are being recruited for Groups 1 and 3 (where there has been physical abuse), should be excluded if there is any evidence that they were one of the perpetrators of the abuse.

If the Child is now in Foster Care or with another Caregiver

If you can identify a child from one of the three target groups but they are no longer living with their mother, the Primary Caregiver of the child can be asked to complete the questionnaires.

This is only if they have been caring for the child full time for a **period of six months** or more.

The Perpetrator

In this study, the perpetrator of any physical abuse and/or domestic violence **must be an adult Male.** This can include a husband or partner who was residing in the family home with the mother and her child(ren) for a **period of one month** or more.

Children who have been exposed to multiple male perpetrators can be included in the study.

If the main perpetrator of the abuse has been an older or younger sibling of the child, this will be grounds for exclusion. However, if the child has been physically abused by a main male perpetrator and also physically injured by another sibling they can be included in the study.

E.g. 1. If two children from the same family had been physically abused by a male perpetrator and subsequently the younger child was also physically injured by the aggressive behaviour of the older child in a separate incident, this could be included in Group 1 (or Group 3, if there was evidence of domestic violence occurring as well).

Evidence of Child Sexual Abuse

If there is any evidence that child sexual abuse has occurred, even if the child meets the criteria for any three of the target groups, they will have to be **excluded** from the study.

Evidence of Neglect

If the primary category is Neglect and the child does not meet the criteria for Groups 1-3 from the descriptions above, they will have to be **excluded** from the study.

One episode of Physical Abuse/Domestic Violence

If there is clear evidence that a child has been physically abused on one occasion only, they will not meet the criteria for Group 1 or 3 and will have to be excluded from the study.

Exception: If there is evidence that a child has been physically abused on one occasion by a male perpetrator, and then again by another male perpetrator, they can be included in Group 1.

There must be evidence from verbal or written report of **two or more** occasions of physical abuse and/or domestic violence. If the mother has been a victim of domestic violence on one occasion only, then the child will not meet the criteria for Group 2 or Group 3.

E.g. If a child is exposed to domestic violence in the home on multiple occasions and has also been accidentally been injured, i.e. by a flying object on one occasion, then this would not meet the criteria for Group 3, but would meet the criteria for Group 2. However, if there is evidence that the child has been injured either intentionally or accidentally on two or more occasions, this would meet the criteria for Group 3.

Appendix C

Measures

- Background Information Measure
- Severity of Violence Against Women Scales (SVAWS)
- Trauma Symptom Checklist for Young Children (TSCYC)

Background Information Measure

This questionnaire has two parts.

- **Questions 1 – 11 are designed to gather some information about you, and your current and past relationship/s that may have involved violence.**
- **Questions 12 – 20 are related to the child that you have agreed to think about during this study.**

1. Your Age: _____

2. Ethnic Group: (please tick)

Asian Bangladeshi ☐ Asian Indian ☐ Asian Pakistan ☐ Black African ☐ Black Caribbean ☐

Chinese ☐ Mixed race ☐ White ☐ Other: _____

3. Marital status: (please tick)

Married ☐

Living with partner ☐

Divorced ☐

Single ☐

4. Your Level of Education: (please tick)

Did not finish Secondary School ☐

Finished Secondary School ☐

College ☐

University ☐

5. What is your (combined with partner, if applicable) yearly income?_____

6. As a CHILD were YOU exposed to any of the following:

Domestic Violence YES ☐ NO ☐

Physical Abuse YES ☐ NO ☐

7. As an ADULT with a child/children, have you ever been involved in a violent relationship with a man? YES ☐ NO ☐ **(If NO please go to question 12)**

8. Was this the only violent relationship you and your child/children have been involved with?

YES ☐ NO ☐ **If YES please state the number of violent relationships** _____

9. What was the man's relationship to the child? (NOTE: If there has been more than more violent partner please use the appropriate number of ticks to represent each man)

Father ☐ Stepfather ☐ Live in partner ☐ Other: _____

10. Below are some statements about domestic and physical violence. Please tick all those boxes which apply to the child you are completing this questionnaire about:

The child heard verbal threats made to you while they were in the same room. YES☐ NO ☐

The child heard verbal threats made to you while they were in a different room. YES☐ NO ☐

The child was threatened directly through gesture or verbal threats. YES☐ NO ☐

The child saw the aftermath of a violent exchange between you and your husband/partner i.e. bruises, black eyes. YES☐ NO ☐

The child witnessed you being pushed, shoved or slapped. YES☐ NO ☐

The child witnessed you being punched or hit with an object. YES☐ NO ☐

The child was in another room when you were pushed, shoved or slapped. YES☐ NO ☐

The child was in another room when you were punched or hit with an object. YES☐ NO ☐

The child was directly pushed, shoved or slapped. YES☐ NO ☐

The child was directly punched or hit with an object. YES☐ NO ☐

Please turn over……

10. cont....

The child received a physical injury such as: bruising or black eyes. YES☐ NO ☐

The child received a physical injury such as: a burn, cut or broken bone. YES☐ NO ☐

11a. If you are currently married or living with a partner would you classify this as a violent relationship? YES ☐ **(go to 11.c)** NO ☐ **(go to 11.b & 11.c)**

11b. If answered NO Please state how long ago the relationship ended.
Year(s)_____ Month(s) _____

11c. Please state the total length of time you have been involved in a violent relationship over the child's lifetime:
Year(s)_____ Month(s)_____

Questions about the child

12. Age of child. Years_____ Month(s)_____ **13. Gender (Please tick)** Male ☐ Female ☐

14. Ethic Group: (please tick)

Asian Bangladeshi ☐ Asian Indian ☐ Asian Pakistan ☐ Black African ☐ Black Caribbean ☐

Chinese ☐ Mixed race ☐ White ☐ Other:_____

15. Has the child received formal diagnoses of:

Learning Disability ☐ ADHD ☐ Conduct Disorder ☐ Other (please state) _____

16. aTo the best of your knowledge has the child ever been sexually abused? YES ☐ NO ☐

16.b. If YES please state whether Social Services were involved_____

17. Is the child currently taking any medication? Please provide details

_____

18. Does the child have any siblings? YES ☐ NO ☐ **(if NO go to question 21)**

19. Number of siblings:_____ **20. Birth order of child (i.e. 1st of 3, 2nd of 2)**_____

21. During the last 12 months, have any of the following occurred in your immediate family?

Separation or divorce	YES ☐	NO ☐
Marital/partner reconciliation	YES ☐	NO ☐
A new relationship	YES ☐	NO ☐
Marriage	YES ☐	NO ☐
Pregnancy	YES ☐	NO ☐
Birth of a sibling	YES ☐	NO ☐
Financial Worries	YES ☐	NO ☐
Moved House	YES ☐	NO ☐
Alcohol or drug problem	YES ☐	NO ☐
Death of close family friend	YES ☐	NO ☐
Child entered a new school	YES ☐	NO ☐
Trouble with teachers at school	YES ☐	NO ☐
Legal Problems	YES ☐	NO ☐
Death of immediate family member	YES ☐	NO ☐
Serious illness or injury	YES ☐	NO ☐

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

Severity of Violence Against Women Scales (Marshall, 1992)

- During the **past year,** you and your partner may have experienced anger or conflict. Below is a list of behaviours your partner may have done during the past 12 months. Describe how often your partner has done each behaviour by circling the appropriate number from the scale on the right.

- If you have separated from a violent partner for more than a year please complete the form describing the anger and conflict in the **last year** you were together.

  Please state how long ago the relationship ended: _____year(s) _____months

- **If you have never experienced any conflict within your relationship please still complete this form even if every answer is never.**

- If you are the Foster Carer or Guardian of a child then you **do not need** to complete this questionnaire.

  (Please tick) I am a Foster Carer ☐ I am the Legal Guardian ☐ Other _____

	SCALE (Please circle)	1 never	2 once	3 a few times	4 many times
Symbolic Violence					
Hit or kicked a wall, door or furniture		1	2	3	4
Threw, smashed or broke an object		1	2	3	4
Drove dangerously with you in the car		1	2	3	4
Threw an object at you		1	2	3	4
Threats of mild violence					
Shook a finger at you		1	2	3	4
Made threatening gestures or faces at you		1	2	3	4
Shook a fist at you		1	2	3	4
Acted like a bully towards you		1	2	3	4
Threats of moderate violence					
Destroyed something belonging to you		1	2	3	4
Threatened to harm or damage things you care about		1	2	3	4
Threatened to destroy property		1	2	3	4
Threatened someone you care about		1	2	3	4
Threat of serious violence					
Threatened to hurt you		1	2	3	4
Threatened to kill himself		1	2	3	4
Threatened to kill you		1	2	3	4
Threatened you with a weapon		1	2	3	4
Threatened you with a club like object		1	2	3	4
Acted like he wanted to kill you		1	2	3	4
Threatened you with a knife or gun		1	2	3	4

Please turn over.....

	1 never	2 once	3 a few times	4 many times
Mild violence				
Held you down, pinning you in place	1	2	3	4
Pushed or shoved you	1	2	3	4
Grabbed you suddenly or forcefully	1	2	3	4
Shook or roughly handled you	1	2	3	4
Minor Violence				
Scratched you	1	2	3	4
Pulled your hair	1	2	3	4
Twisted your arm	1	2	3	4
Spanked you	1	2	3	4
Bit you	1	2	3	4
Moderate Violence				
Slapped you with the palm of his hand	1	2	3	4
Slapped you with the back of his hand	1	2	3	4
Slapped around your face and head	1	2	3	4
Serious violence				
Hit you with an object	1	2	3	4
Punched you	1	2	3	4
Kicked you	1	2	3	4
Stomped on you	1	2	3	4
Choked you	1	2	3	4
Burned you with something	1	2	3	4
Used a club-like object on you	1	2	3	4
Beat you up	1	2	3	4
Used a knife or gun on you	1	2	3	4
Sexual Violence				
Demanded sex whether you wanted to or not	1	2	3	4
Made you have oral sex against your will	1	2	3	4
Made you have sexual intercourse against your will	1	2	3	4
Physically forced you to have sex	1	2	3	4
Made you have anal sex against your will	1	2	3	4
Used an object on you in a sexual way	1	2	3	4

Comments:

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS MEASURE

TSCYC™ Item Booklet

John Briere, PhD

Please read all of these instructions carefully before beginning. Mark all of your answers on the accompanying Answer Sheet and write only where indicated. DO NOT write in this Item Booklet.

On the Answer Sheet, please write the date and the child's name, gender, race, age, and living situation in the spaces provided. Also, please write your name, your gender, and your relationship to the child in the spaces provided.

The following items have to do with things the child does, feels, or experiences. Please indicate how often each of the following things has happened **in the last month**.

Circle 1 if your answer is *Not At All*; it has not happened at all in the last month. (1) 2 3 4

Circle 2 if your answer is *Sometimes*; it has happened in the last month, but has not happened often. 1 (2) 3 4

Circle 3 if your answer is *Often*; it has happened often in the last month. 1 2 (3) 4

Circle 4 if your answer is *Very Often*; it has happened very often in the last month. 1 2 3 (4)

If you make a mistake or change your mind, **DO NOT ERASE!** Make an "X" through the incorrect response and then draw a circle around the correct response.

Example: 1 (~~2~~) 3 (4)

Please answer each item as honestly as you can. Be sure to answer every item. You can take as much time as you need to finish all of the items.

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The following items have to do with things the child does, feels, or experiences. Please indicate how often he or she has done, felt, or experienced each of the following things in the last month.

1. Temper tantrums
2. Looking sad
3. Telling a lie
4. Bad dreams or nightmares
5. Living in a fantasy world
6. Seeming to know more about sex than he or she should
7. Being easily scared
8. Not wanting to go somewhere that reminded him or her of a bad thing from the past
9. Worrying that his or her food was poisoned
10. Flinching or jumping when someone moved quickly or there was a loud noise
11. Being bothered by memories of something that happened to him or her
12. Worrying that someone might be sexual with him or her
13. Not wanting to talk about something that happened to him or her
14. Not doing something he or she was supposed to do
15. Breaking things on purpose
16. Talking about sexual things
17. Having trouble concentrating
18. Blaming himself or herself for things that weren't his or her fault
19. Acting frightened when he or she was reminded of something that happened in the past
20. Pretending to have sex
21. Worrying that bad things would happen in the future
22. Arguing
23. Getting into physical fights
24. Drawing pictures about an upsetting thing that happened to him or her
25. Not noticing what he or she was doing
26. Having trouble sitting still
27. Playing games about something bad that actually happened to him or her in the past
28. Seeming to be in a daze
29. Having trouble remembering an upsetting thing that happened in the past
30. Using drugs
31. Fear of the dark
32. Being afraid to be alone
33. Spacing out
34. Being too aggressive
35. Touching other children's or adults' private parts (under or over clothes)

Please indicate how often the child has done, felt, or experienced each of the following things <u>in the last month</u>.

36. Suddenly seeing, feeling, or hearing something bad that happened in the past
37. Hearing voices telling him or her to hurt someone
38. Staring off into space
39. Changing the subject or not answering when he or she was asked about a bad thing that happened to him or her
40. Having a nervous breakdown
41. Not laughing or being happy like other children
42. Crying at night because he or she was frightened
43. Hitting adults (including parents)
44. Being frightened of men
45. Not being able to pay attention
46. Seeming to be a million miles away
47. Being easily startled
48. Watching out everywhere for possible danger
49. No longer doing things that he or she used to enjoy
50. Becoming frightened or disturbed when something sexual was mentioned or seen
51. Not sleeping for two or more days
52. Not paying attention because he or she was in his or her own world
53. Making mistakes
54. Crying for no obvious reason
55. Not wanting to be around someone who did something bad to him or her or reminded him or her of something bad
56. Being tense
57. Worrying about other people's safety
58. Becoming very angry over a little thing
59. Drawing pictures about sexual things
60. Pulling his or her hair out
61. Calling himself or herself bad, stupid, or ugly
62. Throwing things at friends or family members
63. Getting upset about something in the past
64. Temporary blindness or paralysis
65. Getting upset about something sexual
66. Not going to bed at night the first time he or she was asked
67. Fear that he or she would be killed by someone
68. Saying that nobody liked him or her
69. Crying when he or she was reminded of something from the past

Please indicate how often the child has done, felt, or experienced each of the following things <u>in the last month</u>.

70. Saying that something bad didn't happen to him or her even though it did happen
71. Saying he or she wanted to die or be killed
72. Acting as if he or she didn't have any feelings about something bad that happened to him or her
73. Whining
74. Not sleeping well
75. Worrying about sexual things
76. Being frightened by things that didn't used to scare him or her
77. Hallucinating
78. Acting like he or she was in a trance
79. Forgetting his or her own name
80. Getting upset when he or she was reminded of something bad that happened
81. Avoiding things that reminded him or her of a bad thing that had happened in the past
82. Acting jumpy
83. Making a mess
84. Acting sad or depressed
85. Being so absent-minded that he or she didn't notice what was going on around him or her
86. Not wanting to eat certain foods
87. Yelling at family, friends, or teachers
88. Not playing because he or she was depressed
89. Being disobedient
90. Intentionally hurting other children or family members

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TEXT CUT OFF IN ORIGINAL

TSCYC Answer Sheet

John Briere, PhD

2

Date: / /

[redacted] _____ Child's gender: ☐ Male ☐ Female Child's race: _____

Child's age: _____ Child's living situation: ☐ Home ☐ Residential center ☐ Other (*describe*) _____

[redacted] _____ Rater's gender: ☐ Male ☐ Female

Rater's relationship to child: ☐ Biological parent ☐ Adoptive parent ☐ Foster parent ☐ Other legal guardian
☐ Residential childcare worker ☐ Other (*describe*) _____

1. Does this child live with you? ☐ Yes ☐ No If yes, how long has he/she lived with you? _____years _____months
2. On average, how many hours do you spend in the same place (for example, at home) with him/her each week, not counting when he/she is asleep?

☐ 0-1 hr. ☐ 2-5 hrs. ☐ 6-10 hrs. ☐ 11-20 hrs. ☐ 21-40 hrs. ☐ 41-60 hrs. ☐ Over 60 hrs.

Fill in the information above. Follow the instructions in the TSCYC Item Booklet and enter your ratings on this sheet. Indicate your ratings by circling the appropriate number for each item.

1	Not At All	2	Sometimes	3	Often	4	Very Often

1	1 2 3 4	19	1 2 3 4	37	1 2 3 4	55	1 2 3 4	73	1 2 3 4
2	1 2 3 4	20	1 2 3 4	38	1 2 3 4	56	1 2 3 4	74	1 2 3 4
3	1 2 3 4	21	1 2 3 4	39	1 2 3 4	57	1 2 3 4	75	1 2 3 4
4	1 2 3 4	22	1 2 3 4	40	1 2 3 4	58	1 2 3 4	76	1 2 3 4
5	1 2 3 4	23	1 2 3 4	41	1 2 3 4	59	1 2 3 4	77	1 2 3 4
6	1 2 3 4	24	1 2 3 4	42	1 2 3 4	60	1 2 3 4	78	1 2 3 4
7	1 2 3 4	25	1 2 3 4	43	1 2 3 4	61	1 2 3 4	79	1 2 3 4
8	1 2 3 4	26	1 2 3 4	44	1 2 3 4	62	1 2 3 4	80	1 2 3 4
9	1 2 3 4	27	1 2 3 4	45	1 2 3 4	63	1 2 3 4	81	1 2 3 4
10	1 2 3 4	28	1 2 3 4	46	1 2 3 4	64	1 2 3 4	82	1 2 3 4
11	1 2 3 4	29	1 2 3 4	47	1 2 3 4	65	1 2 3 4	83	1 2 3 4
12	1 2 3 4	30	1 2 3 4	48	1 2 3 4	66	1 2 3 4	84	1 2 3 4
13	1 2 3 4	31	1 2 3 4	49	1 2 3 4	67	1 2 3 4	85	1 2 3 4
14	1 2 3 4	32	1 2 3 4	50	1 2 3 4	68	1 2 3 4	86	1 2 3 4
15	1 2 3 4	33	1 2 3 4	51	1 2 3 4	69	1 2 3 4	87	1 2 3 4
16	1 2 3 4	34	1 2 3 4	52	1 2 3 4	70	1 2 3 4	88	1 2 3 4
17	1 2 3 4	35	1 2 3 4	53	1 2 3 4	71	1 2 3 4	89	1 2 3 4
18	1 2 3 4	36	1 2 3 4	54	1 2 3 4	72	1 2 3 4	90	1 2 3 4

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Appendix D

Copies of approval letters and emails

Rhaglen Seicoleg Clinigol
Gogledd Cymru

Ysgol Seicoleg
Prifysgol Cymru, Bangor
Bangor, Gwynedd LL57 2DG

Ffacs: (01248) 383718

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North Wales Clinical Psychology Programme

School of Psychology
University of Wales, Bangor
Bangor, Gwynedd LL57 2DG

Fax: (01248) 383718

Our Ref: DD

March 23, 2005

Llyth-el/E-mail: d.daley@bangor.ac.uk
Llinell Uniongyrchol/Direct line: (01248) 388067

Dear Billie

Re: Examining trauma symptoms in children exposed to domestic violence

Thank you for your LSRP proposal which I enjoyed reading. I am pleased to inform you that your study has been granted approval. Approval for this study has been given with the understanding that you

1) Revise and resubmit your costs, including costs for your telephone screen. It may not be possible to reimburse you for expenses incurred during the study, which are not included in your proposal.

2) Please discuss with your supervisor the implications of the wide developmental age of your participants. What is the developmental significance of abuse and exposure?

3) Confirm in writing the academic attainment and crime questions before the start of the study.

4) Comply with any relevant research governance and Local NHS ethics committee approval before conducting your research.

5) Act ethically and professionally in the conduct of your research. Your supervisor will be asked to complete a checklist monitoring a number of ethical and professional issues to be submitted with your thesis.

6) I strongly advise you to work with your supervisor to ensure that you comply with relevant Data Protection legislation in this work. Adherence with data protection is your personal responsibility. I would suggest that you consult the data protection officer in your Trust/or at UWB if you are in any doubt.

7) This approval for the project to form part of your doctoral studies is given on the understanding that there will be no alterations to the stated protocol. Clinically-related research often necessitate such changes, but their implications for your qualifications must be considered carefully. Therefore, please ensure that you discuss with me any revisions that may be needed before you implement them. Any agreed revisions will need to be confirmed and approved in writing.

8) It is not possible for NWCPP to support vouchers for participants. However it will be possible (subject to ethical approval) for NWCPP to fund a small prize draw of £30 to enhance recruitment for your study. I encourage you to discuss this with your supervisor.

Rhaglen Seicoleg Clinigol Gogledd Cymru

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Prifysgol Cymru, Bangor
Bangor, Gwynedd LL57 2DG

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Bangor, Gwynedd LL57 2DG

Fax: (01248) 383718

Good luck with your study and please remember that I am always available to offer research advice and support should you need it

Yours sincerely

Dave Daley

Dr Dave Daley
Senior Research Tutor

CC Dr Liz Burnside

From: Kath Chitty <pss090@bangor.ac.uk>
Subject: Ethics
Date: 8 June 2005 09:13:25 BST
To: Billie Hunter <billiehunter73@hotmail.com>, Elizabeth Burnside <e.burnside@bangor.ac.uk>

Dear Colleagues

Examining Trauma Symptoms in Children Exposed to Domestic Violence

Your research proposal referred to above has been reviewed by the School of Psychology Research Ethics Committee and they are satisfied that the research proposed accords with the relevant ethical guidelines.

If you wish to make any substantial modifications to the research project, please inform the committee in writing before proceeding. Please also inform the committee as soon as possible if participants experience any unanticipated harm as a result of taking part in your research, or if any adverse reactions are reported in subsequent literature using the same technique elsewhere.

Good luck with your research.

Kath Chitty
Coordinator -School of Psychology Research Ethics Committee

Kath Chitty
Admissions Secretary
School of Psychology
University of Wales
Bangor, Gwynedd LL57 2AS
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billiehunter73@hotmail.com Printed: 06 May 2006 12:47:09

From : Paula Gurteen <p.gurteen@bangor.ac.uk>
Sent : 08 December 2005 15:57:04
To : "Billie Hunter" <billiehunter73@hotmail.com>
CC : d.daley@bangor.ac.uk, e.burnside@bangor.ac.uk
Subject : Re: DClinPsy Research Project

Dear Billie,

Amended proposal no. 662: Examining trauma symptoms in children exposed to domestic violence

Thank you for submitting your amended proposal. This has been considered on behalf of the School of Psychology Research Ethics Committee, and approved, subject to us receiving confirmation (by email or letter) from Stella Pratt at the new venue, confirming her support and access to the proposed new sample.

I would be grateful if you could forward this confirmation to me for our records.

Many thanks,

Paula.

On 25 Nov 2005, at 10:38, Billie Hunter wrote:

> Hi Paula
>
> Two issues:
>
> (i) I submitted my ethics proposal which was given approval a number of months ago (via Kath Chitty). Unfortunately I have lost the email confirmation of this, so I was wondering if there was a record your end that could be forwarded to me as proof of ethical approval. I never received any letter just an e mail.
>
> (ii) I need to request an amendment to the proposal regarding recruitment of my participants. I believe I need to ask Micheala Swales for this, so I would be grateful if the following could be forwarded to her for consideration.
>
> For a number of months I have been struggling with recruitment of Mothers whose children had been exposed to domestic violence. I am working with the Isle of Wight Refuge and Isle of Wight Children and Family Services. To help with recruitment I would like to involve another agency. This is the Southern Focus Trust based in Portsmouth. This is a part Government/ part charity organisation who have provisionally agreed to help since the majority of their work is supporting women exposed to domestic violence. There are also close links to several of Portsmouth's Refuges.
>
> The exact same procedures will be employed for the recruitment of potential participants if approval is given.
>
> I have attached a copy of the ethics proposal as well as an amendment outlining the changes.
>
> I shall look forward to hearing back from you and would be grateful if this could be as soon as possible as I would like to get started asap given the decreasing time frame!
>
> Many Thanks
>
> Billie Hunter
> Trainee Clinical Psychologist
>
> _____
> MSN Messenger 7.5 is now out. Download it for FREE here. http://messenger.msn.co.uk
> <Ethics.doc><AMENDMENT TO ETHICS PROPOSAL.doc>

Paula Gurteen
Deputy Administrator
School of Psychology

msn® Hotmail®

billiehunter73@hotmail.com Printed: 06 May 2006 12:44:14

From : Gemma Green <Gemma.Green@sft.org.uk>
Sent : 07 November 2005 14:31:09
To : "Billie Hunter" <billiehunter73@hotmail.com>
Subject : RE: Research Project

Hi Billie

Apologies for it taking so long for me to get back in touch with you. Stella and I would like to meet with you to discuss the project as we would like to be part of it.

What is your availability?

Stella currently also manages our women's refuge so we could discuss the project as a whole in our meeting.

Kind Regards,

Gemma

Gemma Green
Domestic Violence and Abuse Outreach Team Leader and Helpline Co-ordinator
Women and Young People's Service
Tel: 07795 113999

24 hour Helpline: 0800 5876 500

-----Original Message-----
From: Billie Hunter [mailto:billiehunter73@hotmail.com]
Sent: 07 November 2005 09:49
To: Gemma Green
Subject: Research Project

Hi Gemma/Stella (I would be grateful if you could forward this on to Stella)

I was just wondering if you had any further thoughts about helping out with the research study into trauma symptoms of young children exposed to domestic violence. I would be happy to answer any questions you may have in terms of your role and I'm happy to come and speak to you at any point.

I was also wondering if you had a contact for the Refuge in Portsmouth (if there is one) so I could contact them and possibly get them on board too. I am keen to get as much information as possible as this is such a grossly under-researched area, particularly in this country.

I am actually away in wales this week, meeting with my supervisor to talk about the project but you can still email or phone. My mobile is 07812442925

I hope to hear from you soon

Kind Regards

Billie Hunter

msn® Hotmail®

billiehunter73@hotmail.com Printed: 08 May 2006 17:51:19

From : Stella Pratt <Stella.Pratt@sft.org.uk>
Sent : 08 May 2006 13:41:50
To : "Billie Hunter" <billiehunter73@hotmail.com>
Subject : FW: Billie Hunter

STELLA PRATT

Acting Service Manager

Women & Young People Services

Tel 02392 794351 / 02392 862776

Mob 0771 777 4458

-----Original Message-----
From: Stella Pratt
Sent: 01 March 2006 15:41
To: 'p.gurteen@bangor.ac.uk'
Subject: Billie Hunter

Good Afternoon,

my name is Stella Pratt and i am currently manager of the Portsmouth Refuge for Women and children fleeing Domestic Violence,

i am writing to confirm that i am happy to support Billie Hunter in her research project titled "Examining Trauma Symptons in Children exposed to Domestic Violence"

I confirm that we have access to suitable participants who will be able to be used in the study.

if you require any other information please do not hesitate in contacting me on the numbers below.

STELLA PRATT

SECTION 3

Literature Review

Posttraumatic Stress Disorder in Infancy and Early Childhood: Detection, Diagnosis and Aetiology.

Gillian Hunter[1]
Elizabeth Burnside
University of Wales, Bangor

This review examines current literature regarding posttraumatic stress disorder (PTSD) in infants and young children, with special reference to the suitability of the DSM–IV diagnostic criteria against an alternative set produced by Scheeringa and colleagues (1995). The difficulties of detecting and diagnosing PTSD within a younger cohort are highlighted in terms of both psychological and neurobiological symptomatology. Questions are raised as to whether a culture of mis-diagnosis has developed, given the lack of sensitive diagnostic guidelines and measurement tools, which need to account for developmental limitations. The effects of trauma on infant brain maturation are discussed, with links made to adult psychopathology. Aetiological factors are explored, but limited evidence specific to early childhood makes it difficult to provide any solid conclusions. Recommendations for further research are made with a special focus on continuing the comparisons between DSM-IV and the alternative criteria as a means to best diagnose PTSD within a younger cohort. Further evidence is needed in relation to the three main cluster categories (re-experiencing, avoidance and arousal) of PTSD and how these may manifest differently across the developmental spectrum.

Keywords: *child; infant; PTSD*

---

[1]Author's Note: This review was conducted as part fulfilment for the degree of Doctorate in Clinical Psychology at the University of Wales, Bangor.

Tel: 44 (0)1248 382205
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Introduction

Over the past fifteen years, there have been repeated calls for further investigation of infant and early childhood posttraumatic stress disorder (PTSD); however, this area still continues to be grossly under-researched (Scheeringa *et al.*, 1995, Levendosky *et al.*, 2002). Evidence from the limited number of studies available indicates infant PTSD does exist, although there are some distinct developmental differences in the clinical manifestation of the disorder when compared to older children, adolescents or adults (Salmon & Bryant, 2002). Developmental changes in the first few years of life are rapid, with limited cognitive and linguistic functions, in addition to the exposure of complex relational influences. As such the context for the development of psychopathology may vary considerably within this cohort (Zeanah *et al.*, 1997). Considering this, the clinical assessment of infant and early childhood PTSD must include these developmental influences, which may be subject to change, depending on the child's maturation (Salmon & Bryant, 2002; Scheeringa & Zeanah, 2001). This paper will review the current literature on this topic and consider where future research may be needed.

When PTSD was initially recognised as a distinct diagnostic category in the Diagnostic and Statistical Manual of Mental Disorders – Third Edition (DSM-III), developmental considerations were not given precedence (American Psychiatric Association, [APA], 1980). As research on childhood PTSD developed, the later revised version (DSM III-R) and current edition (DSM-IV) did provide some guidance on the manifestation of the disorder in children (APA, 1987; 1994). Despite this, there are concerns that the current criteria continue to lack sensitivity in relation to trauma symptomatology in infants and young children (Scheeringa *et al.*, 1995).

Diagnosis of PTSD

A PTSD diagnosis requires a person to have experienced or witnessed an event/s that involved actual or threatened death or serious injury, with a response that evoked intense fear, helplessness or horror (criterion A, APA, 1994). In addition, evidence is required of a number of items from the following triad of cluster symptoms. Criterion B involves re-experiencing of the traumatic event; examples provided by the DSM-IV for children include: repetitive play, frightening dreams or persistent trauma specific re-enactment. The second main cluster group (criterion C) concerns persistent avoidance of stimuli associated with the trauma and emotional numbing. This cluster of symptoms is particularly problematic inasmuch as infants and young children are unlikely to be able to avoid a stressor, and developmental limitations prevent them from understanding, interpreting and expressing internal cognitive and emotional states. The third cluster category (criterion D) includes persistent symptoms of increased arousal, such as: exaggerated startle response, difficulty concentrating, irritability, outbursts of anger or difficulty falling or staying asleep (APA, 1994). Sleep related problems have been identified as a key factor in trauma research with very young children, with fears of the dark, bad dreams, nightmares and repeated waking through the sleep cycle being particularly relevant (Benedek, 1985). The DSM-IV also requires symptoms to be present for a minimum of one month and to be impacting on various areas of an individual's daily functioning.

Currently, 8 out of the 19 items relating to the three main cluster groups (criteria B, C, & D) require a verbal confirmation from the individual as to their own internal state (Scheeringa *et al.* 1995). This factor makes it difficult for the clinician to detect PTSD symptomatology in young children, without developmentally sensitive diagnostic guidelines and age appropriate assessment instruments (Cohen, 1998, Scheeringa *et al.*, 1995). It also raises a number of questions about the suitability of the current DSM diagnostic criteria for younger children. In particular, can the required number of symptoms in each of the three main cluster categories

be realistically applied to ensure the appropriate assessment of younger children? Or has a culture of under- or mis-diagnosis developed within this cohort? (Cohen *et al.*, 2001; Green, 1991).

Prevalence of Childhood PTSD

Determining prevalence rates for childhood PTSD is difficult due to a lack of epidemiological studies (Davis & Siegel, 2000). Presently, the majority of research concentrates on school age children and adolescents. In the United States, older adolescent studies have estimated rates between 6.3% (Reinherz *et al.*, 1993) and 9.2% (Breslau *et al.*, 1991). Lower rates have been offered by one European study at 1.6%, which suggests cultural influences may be impacting on PTSD development (Essau *et al.*, 1999). Alternatively, the different methodologies and measurements used across studies could account for the variation among prevalence rates. This calls for a more appropriate "gold standard" of measurement to be developed for children, and in particular more guidelines for assessing younger children (Cohen *et al.*, 2001).

Childhood PTSD research has identified the type of trauma experienced as being an important factor in the development of the disorder. Rates for pre-adolescent children exposed to war have ranged between 27% (Saigh, 1991) and 33% (Arroyo & Eth, 1985). More deliberate forms of interpersonal trauma such as sexual or physical abuse have produced variable rates: from no children being considered to be in the clinical range (Sirles *et al.*, 1989) to 21% (Famularo *et al.*, 1992) to 90% (Kiser *et al.*, 1989), while children exposed to a combination of interpersonal trauma (physical and sexual abuse) have had a reported prevalence rate of 28% (Adam *et al.*, 1992). In contrast, Pelcovitz *et al.* (1994) have found lower rates of PTSD with physically abused adolescents (9%), causing the authors to speculate that sexual abuse is the greater risk. This was confirmed in a review by Kendall-Tackett *et al.* (1993) with sexually abused children and adolescents being more symptomatic than physically abused children.

One of the most comprehensive studies of psychopathology found in young children was conducted by Lavigne and colleagues (1996), who examined prevalence rates and correlates of possible psychiatric disorders among 510 pre-schoolers. Results indicated an overall prevalence of behaviour problems to be at 8.3%, with a possible diagnosis of an Axis I disorder (DSM-III-R) being at 21%, of which 9.1% were classified as severe. These results are comparable to those found with older children, although the severity rate is somewhat lower with pre-schoolers. The most common Axis I diagnosis was Oppositional Defiant Disorder (ODD) with a rate of 16.8%, of which 8.1% was considered to be severe. Highest rates were found among 3-year-olds (22.5%) with a reduction occurring by 5 years of age (15%). Attention Deficit Hyperactivity Disorder (ADHD) was found in 2% of the sample with a high co-morbidity with other diagnoses, in particular ODD. Conduct Disorder occurred in 0.2% of the sample, while Attention Deficit Disorder (ADD) was found in 0.4%. Rates for emotional disorders were considered low, at less than 1%. These included Avoidant Disorder at 0.7%, Separation Anxiety Disorder at 0.5%, Simple Phobia at 0.6% and Depression not otherwise specified at 0.3%. The rate for PTSD was considered the lowest at 0.1%.

The authors also highlighted some developmental differences with regard to prevalence rates. There was a significant increase in DSM diagnoses between ages 2 to 3 years. This could be indicative that this particular developmental stage is one of the most critical times in understanding the onset of psychiatric development in pre-school children. Equally, the relatively low rates of emotional disorders found within this cohort were interesting, given that other studies suggest higher rates are found with older children. The paucity of studies examining pre-school psychopathology makes it difficult to draw solid conclusions, however Lavigne *et al.'s* study does tentatively suggest the possibility of developmental changes impacting on the organisation and expression of internalising symptoms within this age group, which, in turn, further complicates the assessment procedure for the clinician.

Co-morbidity

Distinguishing PTSD from other diagnoses in early childhood is fraught with difficulty, therefore co-morbidity rates or multiple diagnoses tend to be high, possibly as a result of PTSD symptoms being misinterpreted in favour of another disorder during the assessment process. At the Center for the Study of Childhood Trauma in Chicago, co-morbid diagnoses have been found in 85% of the Centre's population (Perry, 1994). In a sample of older children (aged 6 to 17 years) PTSD was found to be significantly correlated with anxiety, suicidal ideation, ADHD, psychotic disorders and mood disorders (Famularo *et al.*, 1996). Anxiety disorders are often considered the most significant, where fears relating to the trauma event can develop into specific or social phobias. Alternatively, children may experience difficulties controlling non-trauma related fears, therefore generalised anxiety disorder has also been found as a co-morbid or main diagnosis (Perrin *et al.*, 1996). In cases where a child has experienced a significant loss, complicated bereavement or pathological grief reactions may also be evident (Harris-Hendriks *et al.*, 1993). Behaviour problems are less common in older children with an increase in internalising problems becoming more apparent, but younger children who have been exposed to violence or conflict situations are at increased risk of developing co-morbid behavioural problems (Pelcovitz *et al.*, 1994). This is particularly interesting given the high rate of ODD diagnosed in Lavigne *et al.'s* (1996) sample. Although the authors did not isolate pre-schoolers exposed to violence, the high percentage of ODD could suggest that a culture of mis-diagnosis may already be developing.

Evidence of PTSD in pre-schoolers

Scheeringa *et al.*, (1995) conducted some innovative research in three phases, aimed at developing a more suitable set of diagnostic criteria for PTSD in infancy and early childhood. The first phase of their research involved applying the current DSM-IV criteria to twenty

previously published cases of severely traumatised infants aged less than 48 months. Results indicated that none of the cases could qualify for a PTSD diagnosis. During the second phase, the authors developed an alternative 23-item set of criteria. This included the introduction of some developmentally sensitive modifications, such as: the omission of the second part of DSM-IV criterion A, regarding the child's initial reaction to the trauma on the premise that without an eyewitness account, this could not be reliably guaranteed to have happened. The authors also reduced the required number of symptoms in two of the three main cluster groups (criterion C & D). A new symptom within criterion C was also introduced; the loss of previously acquired developmental skills, e.g. toileting or speech, and other criteria which required more sophisticated cognitive and language skills were deleted altogether. In addition, a new criterion E was introduced which included new symptoms such as: the development of a new separation anxiety, aggression and new fears unrelated to the trauma stressor (Scheeringa *et al.*, 2003, see Table 1 for a breakdown of the alternative criteria).

The third phase of the research examined the reliability and validity of both the DSM-IV and the alternative criteria by applying it to twelve new cases, using four independent raters. When the DSM-IV criteria were applied, three of the raters gave a nil diagnosis of PTSD to all twelve cases, while the fourth rated a possible six. With the alternative criteria, nine of the twelve cases were rated by three of the four raters as being suitable for a PTSD diagnosis. The fourth rated a possible six cases. The authors concluded from this study that the assessment of infants and young children required a more behavioural focus with less reliance on the subjective experiences of the child, highlighting that, "thoughts and feelings, are impossible or very difficult to rate reliably in preverbal or barely verbal children" (Scheeringa *et al.*, 1995, p.199). This research also helped dispel some of the dated professional scepticism that had previously developed, which suggested children's limited cognitive capacities served as a

protective mechanism whereby traumatic events would not be remembered or could be easily forgotten (AACAP, 1998).

Scheeringa and colleagues' research was the first preliminary systematic attempt to question the DSM-IV's criteria for young children and to offer an alternative. For this reason, it would be easy to adopt the proposed alternative criteria as a possible "gold standard" for use with infants and young children. Based on these early findings, the Zero to Three National Center for Infants, Toddlers and Families (1994) developed specific guidelines for assessing trauma in young children from birth to three years. However, it is important to consider that Scheeringa *et al.'s* initial study had a number of significant limitations. Namely, the results were developed from a small sample size (n = 32) of published case studies based on a single clinician's interpretation, which is open to bias. There are also a number of methodological weaknesses such as: the different type of stressors used across the cases, which ranged in severity from dog bites to witnessing a murder, the lack of a control group and the fact that cases had not been randomly selected.

In an attempt to address some of these limitations, Scheeringa *et al.* (2001) replicated the 1995 study, whereby 15 traumatised and 12 at-risk infants were assessed by caregiver interview, observation, interaction and formal assessment measures. The results were then assessed by two blind raters using the DSM-IV and the alternative criteria. Results confirmed the previous findings that the DSM-IV was not as sensitive as the alternative criteria, with only 3 cases compared to 9 cases meeting a potential PTSD diagnosis. The authors also found that parental reporting was the most valid form of information gathering but warned that focused and skilled questioning was important to ensure parental accuracy (Scheeringa *et al.*, 2001). Reliance on parental reporting with infants and young children can often be problematic due to a number of confounding variables. For instance, depending on the type of trauma experienced, parental reports can become biased as a result of their own level of distress

(Salmon & Bryant, 2002). As such, it has been suggested that parental trauma symptomatology should be assessed first before embarking on the assessment of the younger child's symptoms (Scheeringa & Zeanah, 2001). Links have also been made to the attachment style of the mother-child dyad, with more insecurely attached mothers being less willing to discuss negative emotional states with their children (Farrar *et al.*, 1997; Zeanah *et al.*, 2000). In cases of child sexual abuse, domestic violence or physical abuse, a parent may be reluctant to disclose accurate details pertaining to their child's level of distress, depending upon their own experiences in relation to the trauma event/s (Salmon & Bryant, 2002). Overall, in cases where young children are involved, the need for collateral reporting with extended family members or pre-school teachers or carers should become a primary consideration during the assessment for any clinician (Scheeringa *et al.*, 2001).

Evidence in support of the alternative set of PTSD criteria has been endorsed by other findings. Levendosky *et al.* (2002) examined possible trauma symptoms in a sample of pre-school children aged between 3 and 5 years (n = 62), who were currently living in households exposed to domestic violence. Maternal reporting was used to assess the trauma symptoms in the children, using an adapted version of the PTSD scale from the Child Behavior Checklist (CBCL, Wolfe, Gentile & Wolfe, 1989), and a second measure developed by the authors termed the PTSD-PAC, which included some of the age appropriate criteria produced by Scheeringa *et al.* (1995). Results confirmed that pre-school children can exhibit PTSD symptoms within each of the diagnostic clusters of re-experiencing, avoidance and hyperarousal. In particular, there was a greater degree of re-experiencing symptoms with 85% of the sample from the PTSD-PAC and 92% from the CBCL showing at least one symptom as required by the DSM-IV. Similarly, in the hyperarousal category which requires at least two symptoms for diagnosis, 39% (PTSD-PAC) and 91% (CBCL) were identified. Detection of symptoms was most problematic within the category of avoidance, with only 3% (PTSD-PAC) and 47% (CBCL) meeting the required 3

symptoms. Overall, from the sample, only one child qualified for a PTSD diagnosis using DSM-IV criteria based on the findings from the PTSD-PAC. This increased to 24% when applying the results of the PTSD scale from the CBCL. When the alternative set was applied to the sample, 26% (PTSD-PAC) and 50% (CBCL) could be classified with PTSD diagnosis, raising further questions about the DSM-IV's suitability for use within this cohort.

The authors highlighted what they termed a "developmental phenomenon" in relation to the avoidant category (Levendosky *et al.*, 2002, p.160). Rather than exhibit avoidant symptoms in the same way that adults and older children may do, pre-school children were assessed as becoming more "clingy" and attached to their mothers, which included an increase in separation anxiety. This factor had previously been endorsed by the findings of Scheeringa *et al.'s* (1995) study leading to the development of a new cluster group (criterion E). Difficulties in identifying avoidant symptoms have also been demonstrated as a distinct feature in school age children in a previous study (Graham-Bermann & Levendosky, 1998). Levendosky *et al.* (2002) hypothesized that this phenomenon may indicate that children are simply less prone to the avoidant symptoms as a result of developmental limitations. Alternatively, it may be that current measurements along with the DSM-IV criteria are simply not sensitive enough to detect the unique clinical manifestation of early childhood PTSD.

Levendosky *et al.'s* study (2002) also highlighted an association between re-experiencing symptoms and externalising behaviour problems. It was suggested that the child's parasympathetic response system may become aroused by the re-experiencing episode, resulting in aggression turned inward or displayed within interpersonal relationships.

Further support for Scheeringa *et al.'s* (1995) alternative criteria was provided by Ohmi *et al.* (2002) who examined the responses of 32 pre-schoolers following a one off gas explosion at their nursery. Mothers of the children were interviewed ten days, six months and one year after the trauma to assess symptomatology using a modified version of the Child Post-Traumatic

Stress Disorder Reaction Index (CPTSD-RI) which was adapted using the alternative criteria (Scheeringa *et al.*, 1995). Results once again confirmed findings that the DSM-IV was not sensitive enough to detect PTSD in young children. None of the children qualified for a diagnosis, despite a significant number exhibiting trauma related symptoms. As in previous studies, when the alternative set was applied, 8 out of the 32 children met the criteria for diagnosis six months after the explosion. In addition, this was the first study to find significant gender differences with pre-schoolers, with girls demonstrating more PTSD symptoms when compared to boys, supporting the findings of previous studies conducted with older children and adolescents (Green *et al.*, 1991; Stallard *et al.*, 1998). The findings from this Japanese study may have been influenced by cultural factors and therefore further research would help clarify if cultural influences are impacting on the pre-school expression of PTSD with female children.

Impact of Trauma on Childhood Development

The studies outlined above demonstrate that PTSD symptomatology in pre-schoolers can be evident in both single and multiple trauma event/s. Terr (1991) was one of the first researchers to suggest how this may relate to childhood PTSD profiles. Single event trauma (Type I) is caused by the psychological response to the one off event, while the coping mechanisms required to deal with multiple trauma (Type II), such as repeated sexual or physical abuse, may lead to more chronic and enduring PTSD symptomatology, which has clear implications for treatment. Other researchers, such as Rossman *et al.* (1997) have reported findings in support of this theory with older children, but research in relation to infants and young children is again limited by a dearth of studies.

Very little is known about the pathophysiology that underlies the physical symptoms of childhood PTSD (Ornitz & Pynoos, 1990). Perry (1994) conducted some innovative research

which outlines how hormonal and neurotransmitter responses to prolonged and severe stress in the first years of life may be impacting on brain maturation. Such changes are likely to influence the complex stress-mediating central nervous system (CNS), and in particular, the regulation of brainstem catecholamines, which are, in part, responsible for autonomic functions. In a study examining the resting heart rates of 34 children diagnosed with severe PTSD, 85% of the children had a resting heart rate greater than 94 beats per minute (bpm) with 40% having a rate over 100bpm. An age comparable group of un-traumatised children has been reported at 84bpm (Matthews *et al.*, 1987).

Gender differences in brain structure have also been found in children and adolescents with PTSD. Sixty one children (mean age 11.74) all exposed to maltreatment (neglect, physical, sexual and/or emotional abuse) prior to 5 years of age were given a magnetic resonance imaging (MRI) scan to examine differences in brain maturation. The sample was matched with a group of non-maltreated controls. Results indicated that maltreated males in the sample had more adverse brain development when compared to females, although delayed maturation of the prefrontal cortex was found with both sexes. Maturation of this structure parallels the acquisition of inhibitory control of the amygdala and related nuclei and circuitry, which are responsible for the regulation of fear and anxiety behaviours, in addition to impulse control. Perry's results suggest that children exposed to trauma prior to five years of age appear to be at increased risk of experiencing altered development in brain structures that are responsible for the regulation of a number of behavioural and emotional systems. He goes on to speculate that a child brought up in an unstable, unpredictable or traumatic environment will develop a poorly organised and dysregulated CNS, making the child more susceptible to severe symptomatology in adulthood if exposed to further psychosocial stressors. This would support the stress-diathesis model, which suggests that individuals with a prior vulnerability as a result of childhood trauma experiences are more likely to develop psychopathology if exposed to a

stressor in later life. Indeed, there has been research to indicate that significant trauma in early childhood has been moderately correlated with adult diagnoses of Borderline Personality Disorder (Ogata *et al.*, 1990; Golier *et al.*, 2003), Conversion Disorder (Sar *et al.*, 2004) and Depersonalisation Disorder (Simeon *et al.*, 2001). However, one must remain cautious before attempting to argue for direct causal inferences between early childhood exposure to trauma and delayed brain maturation, or indeed a direct link to later psychopathology in adulthood, until further research proves to be more conclusive. An alternative argument could be hypothesized: where children experiencing a developmental delay in the brain structures responsible for the regulation of arousal and impulsivity, may be exhibiting behaviours more likely to place them at risk of trauma exposure. Children born in unpredictable and unstable households, as Perry proposes are likely to be at greater risk of being traumatised through abuse (see Risk Factors section below) than children with the same developmental delays who may be brought up in more stable and understanding familial environments.

Risk Factors

Research into the risk factors for childhood PTSD can be divided into two sections. Firstly, factors found to be associated with the risk for exposure to a trauma are considered to be: behavioural problems, gender (male), extraversion and a family history of psychiatric problems (Davis & Siegel, 2000). The second category is related to risk of PTSD development. These risk factors have been found to be: age, early separation from parents, gender (female), exposure to life stressors including separation or divorce, and poor housing (Pynoos *et al.*, 1994).

Age

Children experiencing trauma prior to age 11 have been found to have three times the risk of developing PTSD when compared to older cohorts (Davidson & Smith, 1990). In contrast, it has been argued that the strains associated with adolescent development may make them more vulnerable to developing trauma if exposed to a relevant stressor (Davis & Siegel, 2000; Green *et al.*, 1991). Such inconsistencies within the literature should prompt caution when citing age as a specific risk factor. Given how the current diagnostic criteria and a lack of developmentally sensitive measurement tools may be impeding PTSD research with very young children, it is unwise to rely too heavily on age as a primary risk factor. Foy *et al.* (1996) warn that many studies are based on small sample sizes, and assuming a simple linear correlation between age and PTSD symptoms is too simplistic.

Gender

There has been a trend among research studies examining childhood PTSD that has suggested females are more likely to exhibit trauma symptomatology than males (Ostrov *et al.*, 1989). This has included those exposed to a variety of traumas including: violence (Cauffman *et al.*, 1998), natural disasters (Shaw *et al.*, 1996), a gas explosion (Ohmi *et al.*, 2002), bus accident resulting in death of peers and teachers (Milgram *et al.*, 1988), witnessing the sexual assault of mothers (Pynoos & Nader, 1987), and cancer survival (Stuber *et al.*, 1997). There is also evidence to indicate that females may experience more chronic and enduring symptomatology than their male counterparts (Helzer *et al.*, 1987). Theories about why females may be more at risk are rare. In Pynoos and Nader's (1987) study it was postulated that females were able to identify more with their mother after witnessing mother assault, which in turn increased their anxiety about future violation. A difference in relation to the type of trauma symptoms exhibited between the sexes has also been found (Ackerman *et al.*, 1998). For

example, female children reported more internalising symptomatology, whereas males demonstrated greater externalising trauma symptoms (impulsivity, aggression, hyperactivity). Given Perry's (1994) research which highlighted that males exposed to abuse prior to 5 years of age had significantly more adverse brain development than females, this may be one potential explanation for the higher levels of externalising behaviour problems being exhibited. In addition, one could argue that males are at a higher risk of being mis-diagnosed with a behavioural disorder as a result of gender differences in the manifestation of PTSD.

Culture

The literature indicates that PTSD occurs across wide cultural and ethnic domains, although there are some interesting findings indicating how cultural issues may impact on the disorder's presentation. For example, one study found greater parental conflict within their sample of traumatised children who came from Hispanic descent which resulted in greater trauma symptomatology when compared to white or African American children (Wasserstein *et al.*, 1998). A lack of further research in this area prevents drawing any conclusions, but it is worthy of future investigation.

Proximity to Stressor

One critical feature of childhood PTSD is proximity to the trauma exposure. For example, Hardin, *et al.* (1994) examined over one thousand adolescents after experiencing the effects of a hurricane and found the closer individuals were to the destruction, the greater the degree of anxiogenic and depressiogenic symptomatology displayed. In two separate studies with unrelated stressors, Pynoos and colleagues (1987, 1993) confirmed exposure proximity was an important factor in determining the severity of PTSD symptoms. In the 1987 study it was found that children closest to and at greater threat of a sniper were more likely to develop PTSD

symptoms if they had been in the playground area compared to those in the school building. In the 1993 study which examined children exposed to an earthquake, those closest to the centre were at greatest risk of developing symptoms. Once again, studies examining this factor with young children are lacking within the literature.

Risk & Resilience

Given the range of risk factors already identified, Foy and colleagues proposed a PTSD Etiological Hypothesis which incorporated a combination of environmental and individual influences in the development and maintenance of childhood PTSD (Foy *et al.*, 1992). Of particular relevance is when there is evidence of a dual exposure between parent/s and child. Parental PTSD symptomatology has been found to be a significant mediating factor in the development of childhood PTSD (Foy *et al.*, 1996). This appears to be regardless of the trauma typology, indicating that parental coping strategies for dealing with the aftermath of trauma will be an essential feature to mediate against PTSD development in children (Lyons, 1987). In contrast, there are some who have found no relationship between childhood PTSD and parental support (Parker *et al.*, 1995). Foa and Riggs (1993) propose a cognitive explanation for why some children may develop PTSD and others do not. This perspective is similar to adult theories, which indicate pre-trauma schemas developed by the child can be challenged or confirmed depending on their early infancy and childhood experiences. A child who already has schemas relating to the self as vulnerable and the world being a dangerous place is more likely to be primed for PTSD symptomatology. To date, no developmentally sensitive explanations have been proposed to account for the development of PTSD in very young children.

Summary and Future Directions

This review confirms previous claims that infant trauma research continues to be neglected within the wider field of childhood PTSD. There is a lack of formally recognised diagnostic guidance and measurement, which would aid clinicians in the assessment and detection of the disorder. Consequently, the assessment of traumatised infants and young children remains a complicated process with a real possibility of a mis-diagnosis occurring in favour of a more accepted and a better researched behaviour problem. This review highlights that further research is needed to continue the work currently provided by a select and dedicated group. Scheeringa and colleagues (1995, 2001, 2003) have attempted to provide clinicians with a more appropriate set of diagnostic criteria, which specifically targets the distinct manifestation of PTSD in infancy and early childhood. Early indications are encouraging, suggesting that the alternative criteria appear to have more sensitivity and specificity in detecting a potential PTSD diagnosis within a younger cohort. Research has demonstrated that each of the three main cluster symptoms required by the DSM-IV criteria, re-experiencing, avoidance and arousal, can be detected in a younger cohort if developmental issues are considered. This requires that the number of symptoms within in each category are reduced and other exceptions are applied. It would be wise for future research to examine each of the cluster categories in more detail to determine whether the triad of primary symptoms can be refined further to aid the assessment of early childhood PTSD. Provisional findings are already indicating that the avoidance category is somewhat problematic, in that it appears more difficult to detect as a result of developmental limitations (Levendosky *et al.*, 2002). In contrast, others propose that the hyperarousal category (criterion D) may be the clearest indicator of trauma specific symptomatology within a younger cohort (Perry, 1994). Further confirmation will also be required to examine the introduction of the new cluster category proposed by Scheeringa *et al.* (1995, 2001), such as separation anxiety, new aggression and unrelated fears.

More research needs to be conducted on prevalence rates of early childhood PTSD with special attention to children under five years of age. As more suitable guidelines for diagnosing develop, it will be interesting to see how other early childhood diagnoses such as ODD, ADHD, ADD, and Conduct Disorder begin to fare. Examination of PTSD manifestation across gender and culture will also be worthwhile areas to research. To date, the evidence is suggestive that females are more symptomatic, but more studies examining specific differences in presentation between the sexes will be of notable value to the assessment process to help reduce possible mis-diagnosis.

One main priority relates to further investigation of the neurobiological consequences of early childhood trauma. The potential risks that multiple trauma poses to brain maturation needs further exploration particularly before one can begin making causal links between early childhood trauma and adverse brain development and/or the direct link to adult psychopathology in later life. If children do suffer adverse brain development can they then go on to develop the appropriate skills of affect regulation and impulse control through psychological intervention? Overall, this area remains in its infancy and further longitudinal studies will be required to investigate the long-term consequences of early childhood exposure to trauma.

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Table 1*

Comparison of Two Sets of Criteria for Posttraumatic Stress Disorder: DSM-IV and the Alternative Criteria for Infancy and Early Childhood

DSM –IV Criteria	Alternative Criteria
A The person has been exposed to a traumatic event in which both of the following were persistent:	**A**
(1) The person experienced, witnessed, or was confronted with an event/s that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.	(1) Same.
(2) The person's response involved intense fear, helplessness, or horror. Note: In children this may be expressed instead by disorganised or agitated behaviour.	(2) Deleted.
B The traumatic event is persistently reexperienced in at least one of the following ways:	**B** Reexperiencing. One item needed:
(1) Recurrent and intrusive distressing recollections of the event including images, thoughts or perceptions. Note: in young children repetitive play may occur in which themes or aspects of the trauma are expressed.	(1) Posttraumatic play: compulsively repetitive, represents part of the trauma, fails to relieve anxiety and is less elaborate and imaginative than usual play. (2) Play re-enactment: represents part of the trauma but lacks the monotonous repetition and other characteristics of posttraumatic play. (3) Recurrent recollections of the traumatic event other than what is revealed in play, and which is not necessarily distressing.
(2) Recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content.	(4) Nightmares: may have obvious links to the trauma or be of increased frequency with unknown content.
(3) Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children trauma specific re-enactment may occur.	(5) Episodes with objective features of a flashback or dissociation.
(4) Intense psychological distress as exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.	(6) Distress at exposure to reminders of the event.
(5) Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.	
C Persistent avoidance of the stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by at least three of the following:	**C** Numbing of responsiveness. One item needed:
(1) Efforts to avoid thoughts, feelings or conversations associated with the trauma.	Deleted.
(2) Efforts to avoid activities, places, or people that arouse recollections of the trauma.	Deleted.
(3) Inability to recall an important aspect of the trauma.	Deleted.
(4) Markedly diminished interest or participation in significant activities.	(1) Constriction of play. Child may have constriction of play and still have posttraumatic play or play re-

(5) Feelings of detachment or estrangement from others. (6) Restricted range of affect (e.g. unable to have loving feelings). (7) Sense of foreshortened future (e.g. does not expect to have a career, marriage, children, or a normal life span).	enactment. (2) Socially more withdrawn. (3) Restricted range of affect. Deleted. (4) Loss of acquired developmental skills, especially language regression and loss of toilet training.
D Persistent symptoms of increased arousal (not present before the trauma) as indicated by at least two of the following: (1) Difficulty falling or staying asleep. (2) Irritability or outbursts of anger. (3) Difficulty concentrating. (5) Hypervigilance. (6) Exaggerated startle response.	**D** Increased arousal. One item needed: (1) Night terrors. (2) Difficulty going to sleep which is not related to being afraid of having nightmares or fear of the dark. (3) Night waking not related to nightmares or night terrors. Deleted. (4) Decreased concentration: marked decrease in concentration or attention span compared to before the trauma. (5) Hypervigilance. (6) Exaggerated startle response. **E** New fears and aggression. One item needed: (1) New aggression. (2) New separation anxiety. (3) Fear of toileting alone. (4) Fear of the dark. (5) Any other new fears of things or situations not obviously related to the trauma.
E Duration of the disturbance (symptoms in criteria B, C, and D) is more than 1 month. **F** The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.	**F** Duration of disturbance greater than 1 month. Deleted.

* Reproduced from Scheeringa, Zeanah, Drell & Larrieu, (1995) paper.

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Manuscript Submission Guidelines:

Manuscripts should be submitted in triplicate to Jon R. Conte, Editor, JOURNAL OF INTERPERSONAL VIOLENCE, School of Social Work JH-30, University of Washington, 4101 15th Avenue NE, Seattle, WA 98195. Manuscripts should not exceed 22 typed double-spaced pages, including references, tables, and figures. References must conform to the Publication Manual of the American Psychological Association (Fourth Edition). All artwork must be camera ready. Authors should include their name, affiliation, mailing address, and telephone number. Each manuscript should include an abstract and biographical statement. A copy of the final revised manuscript saved on an IBM-compatible disk should be included with the final revised hard copy. Submission of a manuscript implies commitment to publish in the journal. Authors submitting manuscripts to the journal should not simultaneously submit them to another journal, nor should manuscripts have been published elsewhere in substantially similar form or with substantially similar content. Authors in doubt about what constitutes prior publication should consult the editor.

SECTION 4

Research Paper

Examining Trauma Symptoms in Children Exposed to Domestic Violence.

Gillian Hunter and Elizabeth Burnside

This exploratory study examined trauma symptoms in children exposed to domestic violence through maternal completion of the Trauma Symptom Checklist for Young Children (TSCYC). Data was organised into a witnessed only group (n=19), or physically abused & witnessed group (n=12) depending on the child's experience of violence. A comparison group (n=24) was also included. Analyses revealed a significant difference in trauma symptomatology across the three groups, with a clear difference between the witnessed only group and comparison. The physically abused & witnessed group demonstrated elevated levels of trauma when compared to the witnessed only group. An examination of the three main trauma categories indicated there were significant differences between the two target groups in relation to arousal symptoms, and a difference approaching significance for re-experiencing symptoms. No difference was found between the target groups in the avoidance category. Recommendations for further research between these two groups of children are made with special attention to the three main posttraumatic symptoms of re-experiencing, avoidance and arousal. Implications for clinical practice are also discussed.

Keywords: *children; trauma; domestic violence; TSCYC*

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Introduction

Since the mid 1980's there has been an emergence of studies which have focused on the psychological effects of domestic violence on children across the developmental spectrum (Wolfe *et al.*, 2003). Research has demonstrated that children exposed to domestic violence can experience a number of associated problems. These include: difficulties with social and emotional adjustment (Hughes & Graham-Bermann, 1998), substance abuse (Epstein *et al.*, 1998), internalising and externalising behaviour problems (Jaffe *et al.*, 1986; Graham-Bermann, 1996; Shipman, Rossman & West, 1999), or school related difficulties (Moore & Pepler, 1989). Trauma specific studies remain in the minority, perhaps as a result of the difficulties diagnosing posttraumatic stress disorder (PTSD) in children, whose symptoms may deviate from the diagnostic criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association [APA], 1994; Scheeringa *et al.*, 1995). Factors that may contribute towards such a complex display of trauma symptoms include: the severity and chronicity of violence exposure (Lehmann, 1997; Levendosky *et al.*, 2002), and the relational dynamics between the child, maternal caregiver and male perpetrator. This can produce complicated issues regarding the child's ability to trust, in addition to feelings of guilt, self-blame, or betrayal (Creamer, 1990; Dutton & Painter, 1993; Terr, 1990).

In the UK the true extent of familial violence is unknown due to under-reporting. Despite this, 52% of all child protection cases in England and Wales have been found to involve some form of domestic violence (Department of Health, 2005). Given the link between childhood exposure to violence and the later revictimization of women in adulthood, or the increased association of male victims potentially becoming a future perpetrator, early interventions are imperative to try and interrupt these cycles of continued abuse (Herman, 1992; Hughes & Rau, 1984 cited in Hughes, 1988; Straus, Gelles & Steinmetz, 1980).

Research has shown that being a witness to threats of or direct abuse of a parental figure can overwhelm a child to the degree that they can exhibit clinical levels of trauma symptomatology (Kilpatrick, Litt & Williams, 1997). Some researchers have suggested that the arousal category is the most symptomatic in both school age and pre-school children (Graham-Bermann & Levendosky, 1998; Levendosky *et al.*, 2002; Perry, 1994). In contrast, the avoidant category has been found to be the least symptomatic (Levendosky *et al.*, 2002).

Research in this area is complicated by a number of associated stressors that are commonly found within violent families. These include: single parenting, financial strain, substance misuse by family members, and unstable living arrangements (Rutter, 1983). These have been widely recognised as major risk factors for the development of child psychopathology (Sameroff & Seifer, 1983). Moreover, children exposed to domestic violence who face the additive stressor of also being physically abused, are considered to be at an increased risk of demonstrating elevated levels of psychopathology (Trickett, 1998). This so called 'double whammy' has been associated with more increased levels of anxiety, depression and behaviour problems, than witnessed only children, and a comparison (Hughes, 1988; Hughes, Parkinson & Vargo, 1989, O'Keefe, 1995). To date, little is known whether differences exist between these two groups of children in relation to PTSD symptomatology.

Previous studies of trauma in children exposed to domestic violence have been limited by a number of methodological complications. These have included: the lack of a comparison group (Saunders, 2003), reliance on only one informant (Wolfe *et al.*, 2003), or limiting the population sample to children residing in a refuge (Sternberg *et al.*, 1993). Higher levels of trauma appear to be more prevalent in refuge populations, possibly as a result of the additional cognitive and emotional stressors associated with the 'here and now' crisis of moving from the familial home (Graham-Bermann & Levendosky, 1998; Kilpatrick, Litt & Williams, 1997; Lehmann, 1997; Rossman *et al.*, 1997).

The frequency, severity and duration of violence have been cited as being major predicting factors of PTSD development in pre-school and school age children (Graham-Bermann & Levendosky, 1998; Lehmann, 2000; Levendosky *et al.*, 2002.). In contrast, others have found that the intensity and frequency of violence were not significantly associated with trauma severity in school age children (Kilpatrick & Williams, 1998).

Currently, there are no studies available which have examined trauma specific symptomatology between abused witnesses and witnessed only children. It is possible that the findings from previous trauma studies have been influenced by their use of a combined sample of children with a varied range of experiences (i.e. witnesses and abused witnesses together). This makes it more difficult to gain a true reflection concerning how children exposed to violence may be responding. Alternatively, it is difficult to know how abused witnesses may be reacting, and whether their treatment needs will be different from their witnessed only peers. Considering that over half of the known cases of domestic violence in the UK involved children who had also been the victim of physical abuse (Farmer & Owen, 1995), researching whether differences exist between these two groups will be of value to clinicians and other professionals. This will allow a clearer picture to emerge regarding where interventions for both sets of children may need to be focused.

The aim of this exploratory study was to examine whether the multiple stressors of being an abused witness to domestic violence would demonstrate significant differences in trauma symptoms, when compared to a group of witnesses only, and a comparison. Based on previous research it was expected that witnessed only children would produce significantly higher levels of trauma, when compared to a comparison.

This study also aimed to investigate if the frequency and duration of violence were associated with trauma severity displayed by children in both of the main target groups.

In addition, this study included a newly published trauma specific measure (Trauma Symptom Checklist for Young Children, [TSCYC]; Briere, 2005). This allowed data to be taken from children who were younger than those typically used in previous studies on this topic.

Methodology

Participants

Data from 59 mothers who resided in the community or in a domestic violence refuge, across both rural and urban geographical locations were collected (See Table I for demographic characteristics). Inclusion criteria for the target groups required the mother to have a child between 3 and 12 years of age who had been exposed to either (i) domestic violence, or (ii) domestic violence and physical abuse, on at least two occasions within the last three years by a male perpetrator only. Children were excluded from the study if: (i) they were currently being seen by child services, (ii) had a learning disability, (iii) had been sexually abused, or (iv) if the primary perpetrator was a male sibling or a female. Data relating to 4 children were excluded from the study for: exceeding the age limit, having a prior diagnosis of a learning disability, being exposed to sexual abuse, and over-reporting symptoms on the trauma questionnaire as measured by one of the internal validity scales. The final sample (n = 55) consisted of the following three groups: comparison (group 1; n = 24; mean age 7.88; 13 female, 11 male), witnesses only (group 2; n = 19; mean age 7.68; 10 female, 9 male), and physically abused & witnessed (group 3; n = 12; mean age 8.83; 6 female, 6 male). Recruitment occurred over a 10 month period.

Measures

(i) Background Information Measure

This questionnaire was designed by the researcher and collected appropriate demographic and qualitative information about the mother/caregiver, target child and perpetrator/s (Appendix C). The measure included two screens: (i) to examine potential grounds for exclusion, and (ii) to collate information about other potential stressful life events the child may have been exposed to within the last year. This was based on theoretically driven research of stressful life events pertinent to children such as: separation or divorce, birth of a sibling, or death of an immediate family member (Abidin & Brunner, 1995; Rutter, 1983; Sandberg *et al.*, 1998).

(ii) Trauma Symptom Checklist for Young Children (TSCYC)

The TSCYC (Briere, 2005, Appendix C) is a 90 item report measure designed to be completed by the caregiver of a child aged between 3 and 12 years. It contains two reporter validity scales, which assess the caregiver's rating style for any potential under-reporting (Response Level [RL]), or over-reporting (Atypical Responses [ATR]). Eight clinical scales are included: Posttraumatic Stress-Intrusion (PTS-I), Posttraumatic Stress-Avoidance (PTS-AV), Posttraumatic Stress-Arousal (PTS-AR), *(Posttraumatic Stress-Total [PTS-TOT]),* Sexual Concerns (SC), Dissociation (DIS), Anxiety (ANX), Depression (DEP) and Anger/Aggression (ANG). Each item is rated on a 4 point scale [from 1 (not at all) to 4 (very often)] depending on how often it has occurred in the previous month.

Separate age norms are provided for males and females: (i) 3-4 years, (ii) 5-9 years, and (iii) 10-12 years, based on a standardized sample of 750 children from the United States. Initial reports demonstrate that the individual clinical scales of the TSCYC have good to excellent reliability, and the measure is correlated with various trauma experiences, including physical abuse and the witnessing of domestic violence (Briere *et al.*, 2001). Alpha internal consistency

for the clinical scales ranged from .81 for Sexual Concerns to .93 for PTS Total, with an average scale alpha of .87. Test-Retest reliability with 33 individuals from the initial standardization sample produced a median coefficient of .88.

Excellent reliability levels for each of the PTS factors were found in this study: PTS-I, .92; PTS-AV, .93; PTS-AR, .92; (PTS-TOT, .97).

(iii) Severity of Violence Against Women Scales (SVAWS).

The SVAWS (Marshall, 1992) is a sensitive assessment devised to evaluate male violence against women in terms of their experiences (Appendix C). There are 46 items under nine categories which can be scored on a four point scale [from 1 (never) to 4 (many times)]. Items from each category can be added together to produce a frequency score. Internal consistency of the measure was reported at .96 by the author. The SVAWS has been used by several researchers, such as Levendosky *et al.* (2002), who combined the nine scales into four specific categories: threats of violence, mild violence, severe violence and sexual violence (reliability alpha was .93, .95, .97 and .85 respectively). In this study excellent levels of reliability were found in the categories of: threats of violence .98; mild/moderate violence .97; severe violence .95; and sexual violence .92.

Procedure

Several women's refuges and an organisation involved in the support of women exposed to domestic violence were approached to help recruit potential participants. The agencies were provided with a pathway document outlining a standardised procedure on how to distribute the questionnaires (Appendix B). To ensure the validity of the children required for the study, a guideline document containing clear definitions was also provided (Appendix B). Potential child

protection issues were discussed with all agencies and official procedures would be followed if considered necessary. (No child protection referrals were made as a result of the study).

Potential participants were contacted by the appropriate agency and asked if they would like to be involved. An information sheet outlining the purpose of the study was read out, ensuring everyone was given the same information (Appendix A). After agreement, the participant was sent the questionnaire pack to their home, or was offered an uninterrupted space to complete the questionnaires at the designated agency. The pack included: the information sheet, consent form, 3 questionnaires, and an envelope to return the pack direct to the researcher. The researcher had no direct contact with the participants from the target groups in order to preserve their anonymity. The designated agency recorded the participant's details against a number which corresponded to the questionnaire pack. This enabled feedback to be returned confidentially to the participant if required. The support worker at the agency also completed a separate screening sheet from information they gained through verbal or written report to verify the potential target group the child would belong to.

Participants for the comparison group were recruited through flyers distributed in a number of newsagents and across two main housing association funded communities, asking mothers to contact the researcher direct. Respondents were interviewed briefly on the telephone to assess suitability and if appropriate, were sent the questionnaires to their home address with an envelope to return the completed pack to the researcher.

Analysis Strategy

Descriptive statistics were used to examine the demographic and qualitative information using means, standard deviations or percentages.

The one sample Kolmogorov-Smirnov test was applied to determine whether the data met the appropriate assumptions for parametric testing. The TSCYC PTS-TOT score ($Z = 1.62$; $p =$

0.01) and SVAWS – Total Violence score (Z = 2.06; p = 0.001) did not meet these assumptions, therefore the Kruskal-Wallis analysis of variance was used between the three groups. In addition, post hoc comparisons using Mann-Whitney analyses were performed to examine potential differences between the comparison and the witnessed only groups (groups 1 & 2), comparison and physically abused & witnessed groups (groups 1 & 3), and witnessed only and physically abused & witnessed groups (groups 2 & 3).

To test measures of association between the violence variables and PTS factors the Spearman's rank correlation was applied.

All data was analysed using the Statistical Package for Social Sciences (SPSS) version 11.0 software package (SPSS, 2005).

Multiple Testing

Due to the exploratory nature of this study and limited sample size, it was decided not to adjust the alpha levels in the main analyses, despite multiple comparisons being conducted. Although it is recognised a correction test (e.g. Bonferroni) would reduce the likelihood of making a Type I error, others have argued that such stringent reductions also run the risk of possibly making a Type II error (Perneger, 1998). As such, the conventional $p < 0.05$ was accepted throughout the analyses.

Results

A total of 96 questionnaire packs were distributed of which 59 were returned completed, providing a total response rate of 57.29% (after exclusion criteria were applied). Seventy four per cent of the combined target groups were living in the community and 26% in a women's refuge. The demographic characteristics of the whole sample were analysed by the appropriate

test depending on (i) the parametric status of the data, and (ii) the type of data collected. This information can be found in Table I.

Table I inserted here

From Table I it is possible to see that there was a significant difference between groups in relation to ethnicity. Observation of the data would suggest that the difference was as a result of the higher percentage (25%) of mixed race mothers and children in the physically abused & witnessed group, despite this accounting for a small number of cases (n = 3). Precautions were taken to control for this variable, but this was complicated due to a number of factors (See Limitations in Discussion section).

PTSD Symptomatology in Children

Posttraumatic stress mean scores from the TSCYC can be found in Table II. A Kruskal-Wallis analysis was performed to examine any differences across the three groups in relation to the PTS-TOT score. The comparison group scored lowest, followed by the witnessed only group and then the physically abused & witnessed group. The results indicated a chi-square result of 24.18 with an associated probability value of 0.001. A post hoc Mann-Whitney analysis between the witnessed only and physically abused & witnessed groups demonstrated that the difference was approaching significance ($Z = -1.85$; $p = 0.06$), although not acceptable at the 0.05 level. Further Mann-Whitney analyses between the comparison and the witnessed only indicated a clear difference between PTS-TOT scores ($Z = -3.59$; $p < 0.001$), as did an analysis between the comparison and physically abused & witnessed groups ($Z = -4.308$; $p < 0.001$).

Table II inserted here

PTS Factors

There was a significant difference between the three groups when examining the Intrusion (PTS-I) scale scores ($p < 0.001$). Post hoc testing between the witnessed only and physically abused & witnessed group was indicative of a difference approaching significance ($U = 68$, $Z = -1.87$, $p = 0.06$). The avoidance category (PTS-AV) demonstrated a significant difference across the three groups ($p < 0.001$), with the post hoc Mann-Whitney revealing a non-significant result between the two target groups ($U = 80.5$; $Z = -1.37$; $p = 0.18$). In the arousal category (PTS-AR), a significant result was demonstrated across all three groups ($p < 0.001$) and between the two target groups ($U = 63$; $Z = -2.07$; $p = 0.04$). Post hoc Mann-Whitney analyses were conducted between the comparison and witnessed only groups (groups 1 & 2), and the comparison and physically abused & witnessed groups (groups 1 & 3), across all three cluster categories. These indicated that both target groups differed significantly from the comparison group ($p < 0.001$).

No differences in relation to gender were found between the two target groups with each of the PTS factors. Due to the small sample within this study, analyses examining potential differences across ages were not applied.

Clinical Levels of PTSD

T scores of 70 or higher on the PTS-TOT clinical scale are likely to reflect severe levels of trauma symptomatology, with *T* scores in the 65-69 range suggesting mild to moderate posttraumatic stress (Briere, 2005). A total of 12 children (63.16%) in the witnessed only group had PTS-TOT scores in the clinical range, of which 11 were classified as severe. In the physically abused & witnessed group a total of 10 children (83.33%) demonstrated clinical levels of trauma symptomatology, of which 8 were classified as severe. None of the children in the comparison group displayed any symptomatology indicative of a clinical level of PTSD.

Violence Characteristics

The violence scores as experienced by the mothers within the sub categories of: threats of violence, mild/moderate violence, serious violence and sexual violence for each group can be found in Table III. Higher scores equate to more frequent occurrence of violence. A total violence score was also obtained. Kruskal-Wallis analyses revealed that there was a significant difference across the three groups ($p < 0.001$) within each of the sub categories. Further Mann-Whitney analyses of each category between the witnessed only and physically abused & witnessed groups produced non-significant results. Mann-Whitney analyses between the comparison group and each of the target groups demonstrated a clear difference in relation to all four violence sub-categories and total violence scores ($p < 0.001$).

Table III inserted here

Correlations

Spearman's rho correlations are presented in Tables IV and V. No significant correlations were demonstrated between any of the violence variables and PTS factors in the witnessed only group. In the group of physically abused & witnessed children, a number of correlations were identified at the 0.05, 0.01 and 0.001 level.

Table IV inserted here

Table V inserted here

The duration of violence exposure was found to be significantly different between the witnessed only and physically abused & witnessed groups ($t = -2.4$; $df = 29$; $p = 0.02$), with the latter being

exposed to violence for a greater amount of time. To examine whether the duration of exposure was associated with the level of trauma, correlations were conducted between violence duration and each of the PTS factors and PTS total score. Results indicated it was unlikely that duration of violence was a predictor of trauma symptoms (PTS-I, r = .11, p= 0.55; PTS-AV, r = .31, p = 0.09; PTS-AR, r = .13, p = 0.49; PTS-TOT, r = .39, p = 0.39).

Correlations between the PTS factors and the time elapsed since the child was exposed to domestic violence found two weak, but significant associations (PTS-AV, r = -.38; p = 0.04 and PTS-TOT score; r = -.37; p = 0.04), suggesting that greater avoidance and a larger total number of trauma symptoms were related to more recent exposure.

Stressful Life Events

A significant difference was found across the three groups in relation to the number of stressful life events experienced within the last year (F = 5.04; p = 0.01), but not between the two target groups (t = -.42; df = 29; p = 0.67). When this variable was correlated with each of the PTS factors and PTS total score, weak associations were found with no significant results.

Discussion

PTSD Symptomatology Between Groups

Preliminary findings from this exploratory study have indicated that children dually exposed to domestic violence and physical abuse can demonstrate higher levels of posttraumatic stress symptoms, when compared to witnesses only. In this study, 83% of abused witnesses were considered to be in the clinical range. This finding offers further support to the 'double whammy' hypothesis proposed by Hughes *et al.* (1989), which suggested that the cumulative effect of being an abused witness can produce higher levels of psychopathology. Currently, the lack of studies that have specifically examined trauma symptoms in physically abused and

witnessed children, make it impossible to compare findings. However, clinically higher levels of anxiety, depression and behaviour problems have been found in previous studies, when these children have been compared to witnesses only (Hughes, 1988; Hughes, Parkinson & Vargo, 1989; O'Keefe, 1995; Sternberg *et al.*, 1998).

This study also confirmed previous findings that children who are exposed to domestic violence can exhibit clinical levels of posttraumatic stress symptoms that are significantly different to non-exposed children. Over half of the witnessed only group (63%) were considered to be in the clinical range, as measured by the TSCYC (Briere, 2005). This result falls midway between previous findings using community samples: 13% (Graham-Bermann & Levendosky, 1998) and 95% (Kilpatrick, Litt & Williams, 1997). The fact that this study used a combined sample of refuge and community based mothers, may have impacted on the results to some degree, as similar clinical levels have been found with refuge only samples (Lehmann, 1997; Rossman *et al.*, 1997).

A clear difference was found between the two target groups in relation to the arousal set of symptoms on the TSCYC. Although arousal symptoms have been found to be significantly different when pre-school witnesses and non-witnesses were compared (Levendosky *et al.*, 2002), this is the first preliminary finding to indicate that physically abused and witnessed children may be more symptomatic than their witnessed only peers. This has clear implications for clinical practice. Children being exposed to physical abuse within domestic violence households may be demonstrating higher levels of inattention, concentration difficulties, hyperactivity or startle responses, which may manifest as external behaviour problems within the home and school based environments. This finding is in line with other literature which suggests that the arousal category appears to be the clearest, general indicator of trauma symptomatology in young children (Perry, 1994).

The intrusion scale of the TSCYC demonstrated the lowest mean score in both target groups. This finding could indicate that intrusive symptomatology may be more difficult to detect in children, despite the TSCYC incorporating age appropriate examples, such as: drawing pictures about upsetting events from the past (Item 24) or play re-enactment (Item 27). However, some of the other items within this category are highly reliant on caregiver inference, for example: being bothered by memories (Item 11), or seeing, feeling, or hearing something bad that happened in the past (Item 36), which may be too difficult to be sensitively detected by caregiver report. Despite the lower mean score, a comparison between the two target groups revealed that the difference between the intrusive scores was approaching significance. This finding is still clinically relevant in that it suggests that children exposed to physical abuse in addition to witnessing maternal violence are potentially at risk of experiencing greater levels of intrusive symptoms than their witnessed only peers. It could be that the experience of being a direct victim of violence is more difficult to process cognitively and emotionally, than being an observer of violence. Further research will be needed in order to clarify this issue, as it has not been reported as a significant finding in other literature.

The avoidant category demonstrated the least significant difference between the two target groups. Previous research has suggested that PTSD symptomatology in pre-school and school age children manifests differently than adolescents and adults, whereby avoidant symptoms are exhibited to a lower degree as a result of developmental limitations (Graham-Bermann & Levendosky, 1998; Levendosky *et al.*, 2002). This study did not support these claims, with the intrusive category being the least symptomatic. Methodological differences may account for this finding, in that the TSCYC may be more sensitive in detecting avoidant symptoms than the measures used in previous studies. In addition, this finding can tentatively suggest that avoidant behaviours in younger children may be manifesting in a similar and distinctive manner regardless of the violence experience. It would be useful in future research to compare different

types of traumatic experiences (e.g. physical abuse, sexual abuse, community violence, and neglect) with special attention being given to any differences displayed in relation to avoidant symptomatology.

PTSD in relation to Experiences of Violence

Previous literature has suggested that the frequency of violence exposure can be a significant indicator of trauma symptomatology in children (Graham-Bermann & Levendosky, 1998; Lehmann, 2000). In this study no significant associations were found within the witnessed only group in relation to frequency of maternal violence. This could suggest that witnessing domestic violence in any capacity, regardless of its frequency, may be having a traumatising effect on some children. Moreover, the length of time that the children in both target groups had been exposed to violence was not found to be significantly associated with any of the trauma symptoms. This could indicate that even a small amount of exposure has the potential to produce lasting effects of trauma in some children. Similar findings have been endorsed by Kilpatrick and Williams (1998) who reported that the intensity and frequency of violence were not considered significant predictors of PTSD in children. However, these results need to be treated cautiously, as the small sample size used in this study and also in Kilpatrick and William's study (n=31), limits the generalizability of this finding until further research is conducted. One explanation for the finding in this study could be that both of the target samples may have only contained a few participants who were actually exposed to violence for a small amount of time. Further research is therefore needed to compare children who have been exposed to violence for different lengths of time, in order to produce firmer conclusions regarding how this is related to trauma symptoms.

Interestingly, some strong associations were found in the physically abused and witnessed group between maternal violence experiences and PTSD symptoms. In particular, the arousal

symptoms were highly correlated with maternal experiences of mild to moderate violence and severe violence. Since no associations were found between these variables in the witnessed only group, it is possible that another variable had influenced this finding for the physically abused and witnessed group. That other variable may be the children's own 'victim status'. Children who have observed their mother being abused and believe they may also be abused themselves, could be responding to perceived threats by being extra vigilant and 'on guard' within the familial environment. This may continue even after the threat of violence has been removed. Unfortunately, this study did not record the extent to which children in group 3 had been physically abused, as such further research is recommended to examine the relationship between the frequency and severity of child physical abuse and PTSD symptoms.

Limitations

The main criticism of this study relates to the small sample size, which limits its generalizability. The study was also limited by relying on one informant, which has been identified as a major concern within domestic violence studies (Kilpatrick & Williams, 1998; Sternberg *et al.*, 1993; Wolfe *et al.*, 1985). Although verification of the children's experiences were screened by a support worker, collateral reporting of the trauma symptoms would have highlighted any differing perspectives. The issue of under- or over-reporting was addressed to some degree by the TSCYC which incorporates two reporter validity scales (Briere, 2005). This allowed the researcher to remove any cases with unsuitable responses. In this study, one set of data was removed from group 3 for having a *T* score above 90.

A further limitation of the study relates to some significant differences found with the demographic variable of ethnicity. The low numbers and type of data collected prevented further analyses to control for this variable. Initially, the three ethnic minority cases in the physically abused and witnessed group were removed and data analyses repeated to see

whether this impacted on the results. It was found this did make a difference (PTS total score differences between groups 2 & 3 changed from 0.06 to 0.09), but it was also considered that by reducing the data in the physically abused and witnessed group down to only 9 participants, the reduction in power could also explain any differences in significance levels. As such, it was considered more appropriate to include these cases, but recommended that future research attempts to control for this variable.

Conclusion

Children exposed to domestic violence can experience clinical levels of posttraumatic stress. When children are also physically abused, the risk of trauma appears to be greater. In particular, these children can experience significantly higher levels of arousal symptomatology. Given that secrecy and fear often occur within domestic violence households, clinicians who are assessing children with elevated levels of arousal should be extra vigilant regarding a potential PTSD diagnosis. This is especially important even when a significant period of time has elapsed since the mother and child may have been away from violence. It is also recommended that the elevated levels of arousal symptoms and associated behaviours found within these children should be prioritised in therapeutic intervention, in addition to any intrusive symptomatology.

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Table I. Means, standard deviations and percentages on demographic variables of mothers and children in comparison and target groups.

	Group 1 Comparison (n=24)	Group 2 Witnessed Only (n=19)	Group 3 Physically Abused & Witnessed (n=12)	Level of Significance across groups
MOTHER				
Mean Age (years)	33.75 (4.99)	32.58 (5.80)	34.08 (6.17)	0.71[1]
Ethnicity (%)				
White	95.83%	88.89%	75%	0.001[2]
Black African	-	5.56%	-	
Mixed Race	4.17%	5.56%	25%	
Marital Status (%)				
Married	50%	26.32%	25%	0.08[2]
Single	25%	15.79%	25%	
Divorced	-	15.79%	33.33%	
Separated	25%	42.11%	16.67%	
Level of Education (%)				
Did not finish School	17.65%	-	25%	0.36[2]
Finished School	29.41%	35.29%	25%	
College	11.76%	47.06%	33.33%	
University	41.18%	17.65%	16.67%	
Annual Income (%)				
Less than £20,000	30%	85.71%	66.67%	0.02[2]
CHILD				
Mean Age (years)	7.88 (2.87)	7.68 (2.60)	8.83 (2.79)	0.5[1]
Gender (%)				
Female	54.17%	52.63%	50%	0.69[2]
Male	45.83%	47.37%	50%	
Ethnicity (%)				
White	100%	84.21%	75%	0.001[2]
Black African	-	5.56%	-	
Mixed Race	-	10.53%	25%	
No. of life events within last year	2.21 (1.67)	3.36 (2.19)	4 (1.71)	0.01[1]
Time since last assault (years)	-	2.09 (1.52)	1.47 (1.19)	0.22[3]

Tests chosen dependent on whether parametric assumptions met using K-S test and type of data collected.

[1] = one way ANOVA performed
[2] = Chi Square analysis performed
[3] = Independent Samples t test performed

Table II. Means and standard deviations for scores on the PTS clinical scales of the TSCYC for the three groups.

PTS Scales from TSCYC	Group 1 Comparison (n = 24)	Group 2 Witnessed Only (n=19)	Group 3 Physically Abused & Witnessed (n=12)	p value between Gp's 1 & 2[1]	p value between Gp's 1 & 3[1]	p value between Gp's 2 & 3[1]
PTS Total	30.96 (2.99)	47.11 (15.76)	60.83 (21.2)	0.001	0.001	0.06
PTS – Intrusion	9.59 (.78)	14.21 (4.54)	18.67 (7.14)	0.001	0.001	0.06
PTS – Avoidance	9.42 (0.88)	15.47 (6.73)	19.33 (8.38)	0.001	0.001	0.18
PTS – Arousal	11.96 (2.24)	17.43 (6.34)	22.83 (7.38)	0.001	0.001	0.04

[1]Mann-Whitney analysis performed.

Table III. Mean scores and standard deviations for maternal experiences of violence as measured by the SVAWS across the three groups.

Mothers' experience of Violence (SVAWS)	Group 1 Comparison (n=24)	Group 2 Witnessed Only (n=19)	Group 3 Physically Abused & Witnessed (n=12)	Difference across 3 groups[1] (p value)	Mann Whitney U Gp's 2 & 3 only	Level of significance Between Gp's 2 & 3[2]
Threats	19.54 (0.98)	56.82 (12.79)	63.67 (9.93)	0.001	69.5	0.15
Mild/Moderate	12.04 (0.20)	35.71 (6.92)	37.18 (10.23)	0.001	73.5	0.35
Serious	9 (0.00)	21.75 (7.15)	25.5 (8.33)	0.001	65.5	0.16
Sexual	6 (0.00)	12.70 (5.17)	16.42 (5.38)	0.001	63.5	0.09
Total	46.58 (0.97)	124 (25.62)	141.64 (31.83)	0.001	49	0.13

[1] Kruskal-Wallis analysis performed
[2] Mann-Whitney analysis performed.

Table IV. Correlations[a] between maternal experience of violence and children's PTSD symptoms for Group 2 (Witnesses only).

Level of Violence (SVAWS)	Intrusion (TSCYC)	Avoidance (TSCYC)	Arousal (TSCYC)	PTSD –Total (TSCYC)
Threats	0.09	0.22	0.09	0.13
Mild/Moderate	0.26	0.38	0.27	0.27
Severe	0.27	0.45	0.34	0.36
Sexual	0.35	0.34	0.29	0.37
Total	0.27	0.23	0.09	0.20

[a] Spearman's rho

Table V. Correlations[a] between maternal experience of violence and children's PTSD symptoms for Group 3 (Physically abused & witnessed).

Level of Violence (SVAWS)	Intrusion (TSCYC)	Avoidance (TSCYC)	Arousal (TSCYC)	PTSD –Total (TSCYC)
Threats	0.58*	0.42	0.67*	0.61*
Mild/Moderate	0.76**	0.53	0.93***	0.80**
Severe	0.70**	0.75**	0.87***	0.78**
Sexual	0.50	0.40	0.57*	0.47
Total	0.69*	0.57	0.83***	0.76**

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

[a] Spearman's rho

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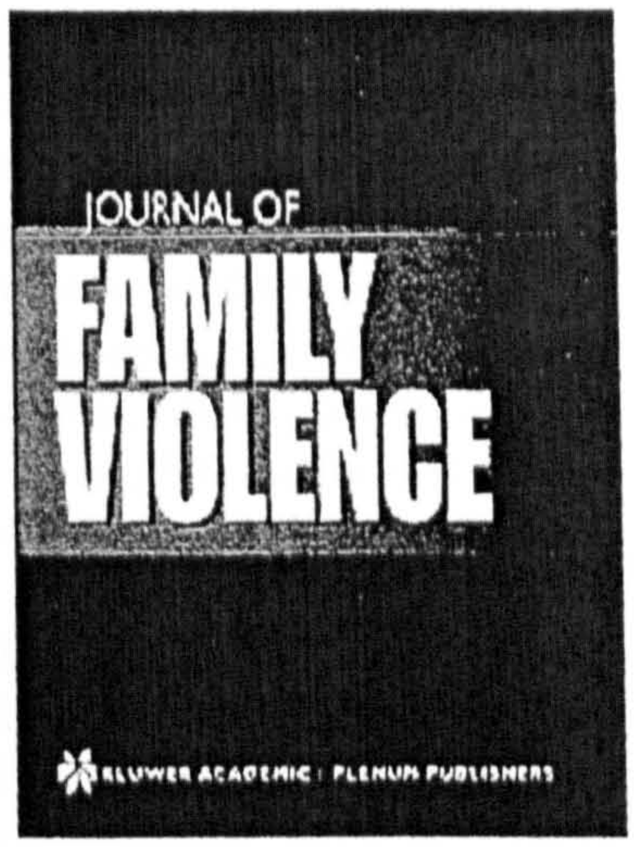

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SECTION 5

Contributions to Theory, Clinical Practice, and Learning

Examining Trauma Symptoms in Children Exposed to Domestic Violence

Contributions to Theory, Clinical Practice, and Learning

Gillian Hunter, Trainee Clinical Psychologist

Department of Clinical Psychology, University of Wales, Bangor

Implications for future research and theory

This study has confirmed previous findings which indicated children who are exposed to domestic violence can experience clinical levels of trauma symptomatology (Graham-Bermann & Levendosky, 1998; Kilpatrick, Litt & Williams, 1997; Lehmann, 1997). Furthermore, this study produced some preliminary results which suggested children who are physically abused within domestic violence households are at an increased risk of experiencing higher levels of trauma, when compared to witnesses only, or a non-exposed comparison. As this was an exploratory study, further research will be needed to confirm whether this initial finding remains consistent; although previous studies have demonstrated that dually exposed children are at an increased risk for more elevated levels of psychopathology, in particular more externalizing behaviour problems (O'Keefe, 1995).

There was a significant difference between the two target groups in relation to posttraumatic stress arousal. This cluster of symptoms was found to be most prevalent in both groups, indicating that arousal symptomatology may be the clearest indicator of posttraumatic stress found in children exposed to domestic violence. Other researchers have argued that arousal is a common feature evident in children exposed to trauma regardless of its typology, with autonomic nervous system (ANS) hyperarousal being a prominent feature of childhood PTSD (Perry, 1994). Consequently, behaviours associated with elevated arousal, such as: increased startle responses, decreased attentional capacity, decreased/poorer impulse control, sleep disruption and dysregulation of affect, are likely to be displayed by children who are living within domestic violence households. These behaviours are also commonly found in other childhood diagnoses such as: Attention Deficit Hyperactivity Disorder (ADHD) and Conduct Disorder; hence there is a possibility that child observers of violence may be at an increased risk of being mis-diagnosed as a result of the commonality of arousal symptoms across a number of childhood disorders. This issue has been discussed in the Section 3 of this thesis with special

reference to infants and young children; however, this issue could be further expanded to include school age children and is therefore worthy of further investigation.

Since all of the children included in this study were no longer considered to be in violent households (mean time since the last assault being at least one year), the results indicated that children exposed to domestic violence (and physical abuse) were still experiencing clinical levels of posttraumatic stress, well after a considerable period had elapsed since their last exposure to a traumatic event/s. Eighty three per cent of the physically abused and witnessed group and 63% of the witnesses only group were considered to have clinical levels of trauma. This is suggestive that PTSD symptoms in children exposed to domestic violence have the potential to become chronic and enduring if left untreated. This factor has already been highlighted by Terr (1991) who examined the impact of numerous traumas on children's responses. Terr argued that repeated and sustained trauma (Type II) such as, physical, sexual or exposure to violence requires different coping mechanisms than a single, unitary, one off trauma (Type I).

Since there were elevated levels of arousal symptomatology in both sets of children, one area for future research would be to gain a clearer understanding of the neurophysiological consequences of a Type II trauma, and in particular how sustained exposure to violence or physical abuse impacts on children's internal physiological systems. Examining any effects on the sympathetic and parasympathetic brain functions of young children will be of particular relevance (Prinz & Feerick, 2003). Any differences between physically abused and witnessed children against witnesses only, will be an important consideration given the significant finding related to arousal symptomatology found in this study.

Researchers have already made a link between childhood physical abuse and PTSD (Pelcovitz *et al.*, 1994), however; the link becomes less clear when a child has been dually exposed to physical abuse and also exposed to maternal violence. One has to consider whether it is the

cumulative effect of two significant stressors, e.g. witnessing parental violence and being a direct victim that is producing these elevated levels of trauma, when compared to witnesses only; or the impact of the physical abuse in isolation. One way to examine this issue would be to compare dually exposed children against physically abused children who have not been exposed to domestic violence. This was the initial plan proposed for this study, until it had to be abandoned due to difficulties finding suitable participants for a physically abused only group. Comparing these groups of children would certainly help clarify whether it is the cumulative effect of dual exposure that is producing elevated levels of PTSD, or whether the main influence is the impact of being physically abused. Childhood PTSD research is likely to benefit from investigating these different groups of children, and it is therefore recommended as a priority for further research within this field.

Implications for clinical practice

Assessment Issues

Although this was an exploratory study, the findings still have some important implications for clinical practice. The first area to consider concerns the clinical assessment of children exposed to domestic violence. None of the children in this study had been involved with child psychiatric services, despite the finding that a high percentage in each group (63% and 83%) were experiencing clinical levels of trauma. This could indicate that children who have lived in domestic violence households may be unlikely to gain access to immediate psychological treatment for potential posttraumatic symptoms. Although these children may have access to other professionals, such as: social workers, or support workers through maternal involvement in domestic violence organisations; it is possible that these professionals may not have had specific training in PTSD management and treatment of young children. There is a role therefore for clinical psychologists to educate and train professionals who may be the first point

of access with these children. If those professionals dealing with the 'here and now' crisis and those involved in the ongoing support of women and children had a greater understanding of trauma specific symptomatology, more children may gain access to psychological help at an earlier stage. This may help prevent posttraumatic symptoms becoming chronic and enduring.

In addition, it is also important to consider those children that may be presenting at services with behavioural disturbances. These children will need careful consideration during the assessment process, to ensure that a potential PTSD diagnosis is not ruled out prematurely. The secrecy and fear that often surrounds the physical abuse of a child (and exposure to domestic violence), means that professionals should be extra vigilant when children present with elevated arousal levels, especially when a potential stressor for these symptoms is unlikely to be volunteered by parental report.

Of particular relevance is when a family may have moved on from a violent household. Given the finding from this study that children can be experiencing posttraumatic symptoms well after the main stressor has been removed, it will be important for clinicians not to dismiss the potential impact that even a small amount of exposure to violence may be having on children.

Treatment Issues

Children who have lived in violent environments may be at an increased risk of experiencing trauma symptoms which can induce behaviours that can impact on their social, emotional, and academic functioning (Hughes & Graham-Bermann, 1998). As such, treatments need to be developed and researched to ensure these children's needs are being adequately addressed. To date, the majority of research tends to concentrate on older children and adolescents, and focuses on those treatments which are well researched within adult PTSD populations. These include pharmacological interventions using psychotropic medications and/or cognitive behavioural therapy ([CBT], Cohen, Mannariono & Rogal, 2001; March *et al.*, 1996). Empirical

research with younger children who have PTSD are rare, but some have suggested that play therapy can be a useful modality in treatment (Kaplan, 2002). This includes storytelling, role-playing and interpretation of trauma re-enactment to help younger children cognitively and emotionally process their experiences. Two studies have indicated that CBT is superior to non-directive play or supportive therapy in decreasing PTSD in abused children (Cohen & Mannarino, 1996, 1998), although a lack of studies comparing treatment modalities prevents making any firm conclusions about treatment efficacy.

This study demonstrated that arousal symptomatology was the most prevalent in both target groups, therefore addressing features associated with elevated arousal, such as: impulsivity, dysregulation of affect and elevated startle responses should be considered to be an important aspect of the therapeutic process.

Process/Personal issues

As a relative novice in the area of psychological research, conducting this project has been one the most challenging and difficult pieces of academia I have ever encountered. This journey has evoked a myriad of emotions that cannot fail to bring up a number of significant issues, which warrant some further reflection.

Change of Design

Like many researchers, I experienced that common problem relating to a lack of data. As I flew through the Ethics committee, and was reassured by the energetic and keen face of the top man at Social Services that cases would be arriving anytime soon, I smugly waited for my questionnaires to arrive. As the weeks progressed to months and nothing materialised, despite the numerous e mails that flowed between us, my smugness turned to anxiety, then to panic, then to all out fear, then to a strange sort of numbness. Unfortunately, my initial reliance on

Social Services had to be dismissed and a contingency plan activated, which involved re-designing the study slightly to account for the loss of one of the main groups and researching other options that would help provide potential participants for the study. I appreciate that Social Services are an extremely overworked and under-resourced organisation, but it was disappointing to be promised something that never materialised. I am therefore eternally grateful to the Southern Focus Trust organisation that joined at a later date, who upon meeting with me, clearly picked up on my desperation and despite being overworked and underpaid found the time to help recruit participants for the study.

I also realised with research that your initial estimates regarding potential data need to be realistic. Although recruiting women for domestic violence research is well recognised as a major difficulty (Wolfe *et al.*, 2003), I do not think I was prepared for the eventual struggle it became. Having to consider abandoning the study at a relatively late date was extremely anxiety provoking, but despite this, although the eventual sample size was small, I have realised through all my reading that this is not an uncommon feature with this type of research.

Research vs. Real People

Another important realisation for me throughout this journey was that it is very easy with research to lose sight of the fact that you are dealing with real people who are experiencing real problems. Instead they are transformed into a number, and their problems are reduced to a set of cells within a statistical package. I am grateful that throughout my analyses, I took the time to remind myself that these numbers represented children who had been exposed to traumatic experiences, and were suffering as a result. I imagine those who are involved on a daily basis with sensitive research material must find a way to balance the emotional aspects of research, against the multiple comparisons in the desire to get a significant result.

This leads me onto another related issue which is worthy of some reflection. One has to consider the ethical implications of asking mothers with children who have been exposed to violence, and in some cases physical abuse, to complete questionnaires about their children's experiences. Although researchers and clinicians can certainly benefit from gaining access to this sort of information; is this justification for the possible re-traumatising effect or increase in psychological distress completing questionnaires or interviews may have on women and children exposed to violence? My personal opinion is that it is, but there has to be conditions, the most important of which is to ensure that a level of support is available to these women and children. In this study the women were provided with numerous support helplines and were given a contact number for the researcher if they wanted to discuss their own individual results. No-one took this option, but I felt it was important that the women in this study were given this opportunity. What I found quite difficult was discovering the high levels of trauma that were found in the children from both of the main target groups, knowing there was no guarantee of ensuring these children would get access to further help. The women were encouraged to access support via their GP, which was suggested in the feedback letter, but that was where things ended. I have to acknowledge that this aspect of the study did leave me with an uncomfortable sense that these children were being abandoned. I am aware that you can only do so much, and I could not force these women to access services unless they wanted to. Again, I would say this is another example of the emotional pitfalls of conducting sensitive research and inexperienced researchers should be aware of these issues before undertaking such a project.

In the violence questionnaire (SVAWS, Marshall, 1992) there was some space left for comments to be made by the women, and although these were never intended to be used directly in the study, it was interesting to read what some women wrote. A mixture of statements were produced which ranged from: describing how difficult it had been to complete

the questionnaires, to personal statements describing relief and hope for the future in a life away from violence, or the fact that by completing the questionnaires it had helped 'make real' the level of violence to which the participant and their children had been exposed. An interesting study by Dean *et al.* (2004) assessed the acceptability of asking parents about their children's traumatic symptoms (n = 418) and found that 88% found it a pleasant or somewhat pleasant experience with only 2% reporting it to be a unpleasant or somewhat unpleasant experience. Such a positive parental response indicates that perhaps we are too cautious in approaching parents to help with sensitive research, which may be one reason why studies within this field are so limited.

Conclusions

Recruiting women with children who have experienced domestic violence to take part in studies is an incredibly difficult process. These women have lived in a silent world of secrecy and shame and a researcher is likely to be approaching them at an extremely vulnerable time. Domestic violence is a national issue and although some steps have been taken by the Government to bring this issue to the fore, much more work is needed on advertising to encourage women to come forward to seek help. From here, researchers need to be sensitive, but willing to assess the needs and vulnerabilities of women and children in relation to PTSD research. This exploratory study has produced some preliminary findings that reveal a high percentage of children exposed to domestic violence (and physical abuse) are at risk for posttraumatic stress. Considering the high percentage of domestic violence within the United Kingdom, further research investigating treatment efficacy, in addition to improved training and education of professionals working with children exposed to domestic violence will hopefully go some way in addressing the multifaceted problems familial violence brings to British culture.

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Statement of word count

Thesis component		Word Count
Title		9
Main Abstract		279
Ethics Proposal		4430
Literature Review		5256
Research Paper		4933
Critical Review		2552
	Total	**17,459**
Other components		
Contents section		183
Table – Literature Review		718
Tables – Research Paper		589
Abstracts:		
Literature Review		181
Research Paper		171
References:		
Ethics		864
Literature Review		1795
Research Paper		1153
Critical Review		423
Appendices – Information and consent forms		1033
Appendices – Protocol and Guideline documents		2677
Appendices – Measures		
Background Information Measure		808
Severity of Violence against Women Scales		656
Trauma Symptom Checklist for Young Children		741
	Total	**11,992**
	Overall Total	**29,451**