

Volume I

**The Long-Term Psychological Sequelae of
Childhood Experiences during
World War II**

Melinda J Waugh

Doctorate in Clinical Psychology

University College London

2001

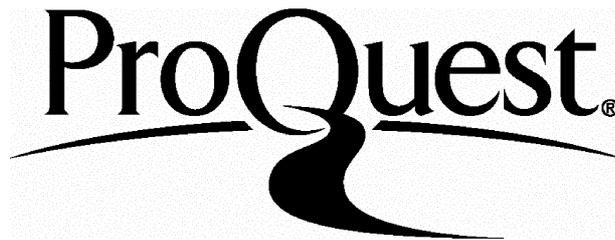
ProQuest Number: U644157

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest U644157

Published by ProQuest LLC(2016). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code.
Microform Edition © ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Contents

1.	Introduction	1
	Overview	1
	1.1 Psychological Impact of War on Civilians	3
	1.2 Evacuation	5
	1.3 Attachment	12
	1.4 Abuse and Neglect	16
	1.5 Post Traumatic Stress Disorder	26
	1.6 Current Study	42
2.	Methods	44
	2.1 Design	44
	2.2 Ethical Considerations	44
	2.3 Recruitment	45
	2.4 Participants	46
	2.5 Measures	47
	2.6 Procedure	52
	2.7 Data Analysis	53
3.	Results	54
	3.1 Data Preparation	54
	3.1.1 Assessment of Potential Confounding Variables	58
	3.2 Direct Effects	63
	3.2.1 Summary of Direct Effects.	69
	3.3 Relationships Between Key Variables when Controlling for Demographic Variables.	70
	3.3.1 Summary of Relationships Between Key Variables when Controlling for Demographic Variables.	72
	3.4 Breakdown of Effects of Evacuation and Abuse	73
	3.5 Mediation Analyses	77
	3.6 Path Analysis	88
	3.7 Summary of Mediation and Path Analyses.	91
4.	Discussion	92
	4.1 Limitations of the Study	102
	4.2 Clinical Implications	107
	4.3 Conclusions and Future Research	111
5.	References	113
6.	Appendices	129

Tables

Table 2.1	Demographic structure of the sample	47
Table 3.1	Frequencies and percentages of each attachment style ..	57
Table 3.2	Correlation of Age with IES-R & GHQ.	58
Table 3.3	ANOVA of Marital Status with IES-R & GHQ.	59
Table 3.4	Descriptive Statistics for Marital Status on GHQ & IES-R Scores	60
Table 3.5	Descriptive Statistics for Marital Status on Attachment Scores.	61
Table 3.6	t-test of Gender with IES-R & GHQ.	61
Table 3.7	Correlation of GHQ with IES-R.	63
Table 3.8	Correlation of Warex with IES-R and GHQ.	64
Table 3.9	t-test of Abuse with IES-R & GHQ.	65
Table 3.10	t-test of Attachment with GHQ and IES-R.	66
Table 3.11	t-test of Evacuation with GHQ, IES-R and Warex.	68
Table 3.12	ANOVA of Warex, Abuse and Attachment with IES-R & GHQ. (controlling for Age, Gender and Marital Status)	71
Table 3.13	Chi-Square of Evacuation with Type of Abuse.	74
Table 3.14	Of those <i>who were abused and evacuated</i> , when did the abuse take place?	74
Table 3.15	Chi-Square of Abused Before with Abused During Evacuation.	75
Table 3.16	Chi-Square of Abused Before with Abused During and After Evacuation.	76
Table 3.17	Mediation Analysis – IES as mediator between Warex & GHQ	78
Table 3.18	Mediation Analysis – IES as mediator between Abuse & GHQ.	80

Table 3.19	Mediation Analysis – Attachment as mediator between Abuse & GHQ..	..	..	..	..	..	..	82
Table 3.20	Mediation Analysis – IES as mediator between Attachment & GHQ	..	..	..	..	..	..	84
Table 3.21	Mediation Analysis – Attachment as mediator between Abuse & IES.	..	..	..	..	..	..	86

Figures

Figure 1	Path Analysis	90
----------	---------------	----	----	----	----	----	----	----

Abstract

The present study aimed to examine the long-term effects of war experiences, evacuation and possible childhood abuse on older adults who were children during World War II. Participants were recruited from the Evacuee Reunion Association and from adverts for volunteers in various local newspapers and a national magazine. Three hundred and forty-one volunteers who were children during WWII completed self-report postal questionnaires. Measures included Questionnaires on Evacuation Experiences, War Related Experiences, Childhood Abuse and Adult Attachment Styles, as well as the Impact of Event Scale-Revised and the General Health Questionnaire-28.

A path analysis provided a model for how the key variables may relate to each other and the comparative strength of these relationships. In summary, it appears that those who were not evacuated were at higher risk of war related experiences such as air-raids and that the impact of these experiences may be affecting current psychological morbidity, mainly due to a failure to process the traumatic events to adaptive completion. The relationships between the variables of abuse, attachment and PTSD symptoms, and current psychological morbidity are complex. It appears that those who were evacuated, were at higher risk of being abused and the impact of this abuse may have affected their attachment style (and therefore the subsequent availability of social support). Both abuse and attachment style affect current psychological morbidity through the intervening variable of PTSD symptoms. This would suggest that those with insecure attachment styles may have less social support and that this may have made it more difficult to overcome traumatic symptoms. Ultimately, in this study, it

appears that current psychological morbidity is affected by PTSD symptoms and that these symptoms reveal a failure to process traumatic events experienced as a child during the second world war.

Therefore a significant number of people who were children during the war will have current psychological problems related to those experiences. Both evacuees and non-evacuees could be affected but for different reasons. Evacuees were found to be more likely to have suffered some form of abuse (emotional, sexual or neglect) whereas non-evacuees were found to be more likely to have suffered traumatic war related experiences (such as air-raids and their aftermath). The relationship between experiences of war related trauma, childhood abuse and attachment on current psychological morbidity were found to be mediated by PTSD symptoms in this sample.

It appears that the events of World War II, including evacuation, had a major impact on those who were children at the time and continues to affect their lives even now, sixty years on. Investigation of the psychological sequelae of negative war-time experiences has been neglected until recently, but there are now indicators that there may be implications for the current mental health treatment of this age-group and health-care professionals need to be aware of this possibility.

Acknowledgements

I would like to thank all the enthusiastic volunteers who participated in this study and gave so generously of their time and knowledge. Many thanks too, to my supervisors Janet Feigenbaum and Steve Davies and also to Ian Robbins for their advice, guidance and encouragement throughout the study. I would also like to thank Diane Foster for her foundation work with this cohort and for making her data available to me. Finally, I would like to thank my husband and sons for their patience and support and also the many friends and family who have provided emotional and practical support along the way.

1 Introduction

Overview

The impact of World War Two (WWII) on the population of Britain should not be underestimated. Fathers, sons and brothers were conscripted into the armed forces, some being away from home for years at a time; others were retained in reserved occupations working long hours to keep the infrastructure of the country functioning. Mothers, daughters and sisters were conscripted into war work in the factories and on the land, some joined the armed forces as nurses, drivers and administrators. Many people were involved in violent events such as combat and air raids. Large numbers of children experienced air raids, witnessing death and destruction on a large scale. Many were evacuated away from their families and some experienced the death of their parents, loss of relatives or friends, loss of their home, school, community and often their childhoods.

Everyone in the country was affected to a greater or lesser extent by the extraordinary events of 1939-45 and their aftermath. However, little research literature exists on the effects of these experiences on the British population as a whole. Most of the literature focuses on the effects on combat veterans or the survivors of prison of war camps (POWs). Literature on the effects on civilians, including children, is scarce as is the literature on the long-term effects on this cohort.

This study focuses on the experiences of people who were children during WWII. It is important to consider this group for a number of reasons. Firstly, there is a large body of evidence which shows that traumatic experiences during childhood are correlated with psychological problems in adulthood. In a review of the literature, Rutter and Maughan (1997) concluded that chronic childhood adversities are more likely to have long-term effects than acute, time-limited experiences. Although this study does not suggest that everyone that was a child during the war had unfavourable or traumatic experiences, it does suggest a psychological mechanism through which these experiences could be associated with adverse effects for many.

Secondly, the wide reaching effects of the war have the potential to affect a substantial number of people. These people are now over 60 years of age and it is important that health care professionals are aware of any residual effects of war experiences on people's health and behaviour alongside any other issues that are relevant at this stage of life. Thirdly, findings from this study may have relevance to the type of help provided to those people who are currently suffering conflicts throughout the world.

Taking into account the lack of previous research into both the long-term effects of war and specifically the effects on those who were children, this study aims to establish whether people who were children during the war are suffering from any such effects and if so, the extent and nature of these problems.

1.1 PSYCHOLOGICAL IMPACT OF WAR ON CIVILIAN POPULATIONS

Although a substantial amount of research has been conducted into the effects of war trauma on men who have experienced combat, much less research has been carried out into the effects of war trauma on civilian populations.

A variety of studies in Lebanon (see Farhood et al., 1993) have found that loss of home and property was positively related to psychological distress. Also, the number of environmental problems (lack of water, toilet, electricity), the levels of crowding and the number of children at home under 15 years were positively correlated with increased levels of depressive symptoms among mothers.

In a descriptive study after direct exposure to air-raids during WWII, data obtained from a doctor in general practice (Aubrey, 1941), showed that psychological symptoms were found to be aggravated in those persons who had experienced damage to home or absence of domestic shelter. The impact of bombing on civilian populations was reviewed by Janis (1951). He showed that effects of air-raids were proportional to the level of death and destruction, particularly to the personal experience of seeing others mutilated and dead, of being knocked down or nearly killed by the blast, or of having ones home destroyed. These “near miss” experiences contributed greatly to the development of severe fear reactions as well as to higher levels of anxiety and depression. Those that experienced a “remote miss” however, may show reduced levels of fear and greater capacity to cope with later raids, unless they subsequently had a “near miss”. Severe emotional reactions were found to be related to the levels of death

and destruction, loss and grief and dislocation. Morbidity levels were directly proportional to the intensity of the stressors. Other experiences of war such as separation of family members, bereavement, fear of invasion, bombardment, capture and occupation may all add to the stressful effects for civilians.

A recent report by UNHCR (1997) estimated that there were approximately 50 million internally displaced people and refugees globally and half of these are thought to be children and adolescents. The total number of unaccompanied children is estimated to be in the hundreds of thousands (Ressler, 1988) and these children can be found in refugee centres, orphanages and in the homes of extended family. Overall, research into such unaccompanied children supports the importance of keeping families together whenever possible (Boothby, 1988). It is recommended by the UN-Machel study (1996) that if parents are unavailable then children should be evacuated with their siblings or other relatives. This recommendation is based on the findings of studies such as Kinzie, et al. (1986, 1989), into a group of unaccompanied Cambodian refugee children in America which found that living with a sibling or other relative was protective against distress.

Several war-related experiences may trigger posttraumatic stress reactions in children (see Arroyo & Eth, 1984; Dyregrov & Raundalen, 1987). Exposure to violence and trauma, e.g. mutilation and death, was found to be associated with increased post traumatic stress disorder (PTSD) symptoms, emotional and behavioural disorders and lower cognitive ability when children exposed to such events were compared with

children from the same culture who were protected from war violence (Espino, 1991; Sack et al., 1994). Pynoos et al. (1995) argues that there is strong evidence of a direct relationship between the extent of the exposure to traumatic events and the severity of PTSD symptomatology in children and adults.

1.2 EVACUATION

The evacuation of British civilians during WWII was an enormous undertaking. People were moved from areas where it was believed there was a threat of air strikes or invasion to what were regarded as safer areas. This mass movement of people is regarded by many historians to be the greatest social upheaval in modern Britain (Parsons and Starns, 1999). These events have been documented from a historical point of view, with the associated social and political effects. However, the psychological implications of the evacuation are only recently beginning to be investigated.

Historical Context of Evacuation

As the threat of war increased during the late 1930's, the Government began finalising plans for a mass evacuation. It had been decided that, should war come, those least able to fend for themselves, children, the elderly and the disabled, should be evacuated from those places most under threat – particularly those living in London, the industrial cities and large ports. During the final days of peace in 1939, nearly two million civilians, most of them children, were taken away from the cities, industrial towns and ports of Britain to the relative safety of rural areas such as Kent, East Anglia and Wales.

Children were often evacuated with their schools and teachers, and often shared the neighbourhood school with the local children. Children from the same family would go together with the younger ones going with the eldest's school. Pre-school children were evacuated with their mothers.

On 31st August 1939, three days before war broke out, the order was given for the evacuation plans to be put into operation, and during the next four days, nearly 1.9 million people were evacuated, including almost 1.5 million children, over half of whom were in school parties. Parents often didn't know the destination of their children until they had got there. From the London area alone, 376,652 children and their teachers, 275,895 pre-school children and their mothers, 3,577 expectant mothers and 3,403 blind adults were transported out of the capital. However, the civilian evacuation was not a single event but an ongoing process of ebb and flow between Britain's urban and rural areas which continued throughout the war (Inglis, 1990; Davies, 1997).

Reception of Evacuees

When evacuees arrived at their destinations their reception was not always ideal. For example, the numbers and categories (e.g. mothers with babies) of evacuees were not what the billeting officers had been lead to expect and were therefore unprepared for. Particularly traumatic for many children was the process by which they were allocated billets (Parsons, 1998). Children were either taken around to different homes until someone agreed to take them or alternatively, the children were taken to a village hall or similar place where potential hosts selected a child or children, to take home.

Although the movement of the evacuees was relatively well planned and executed, the billeting of children on potential hosts was organised locally and no systematic screening was undertaken to ensure that these people were suitable foster-parents. It seems that there could therefore have been an opportunity for abuse of unaccompanied children and examples of physical, sexual and emotional abuse are cited in almost all of the recent literature on the evacuation (e.g. Holman, 1995). Local billeting officers are often commended in the literature for their efforts in dealing with complaints and difficulties from both evacuees and hosts. However, it was difficult for all of the children to be visited on a regular basis because they could be spread over large geographical areas.

Common problems with evacuees

A common problem among child evacuees was bed-wetting (Isaacs, 1941), and estimates of this problem have ranged between 4% to 33% (Holman, 1995). Host families assumed that this problem was due to bad parenting but was more likely to be a result of the upheaval and stress to the children (Bowlby, 1940). Another problem with some evacuees from densely populated areas was that of headlice. However, publicity about this meant that some evacuees were indiscriminately bathed in disinfectant and had their heads shaved before being allowed into the hosts house (Parsons, 1998).

Contact with parents

Although some parents were evacuated with their children, the majority of children were unaccompanied and parents had to travel to visit them. This could be prohibitively expensive, particularly as the distances increased as children were sent to more remote areas over the course of the war. This often meant that parents and children did not know when they would see each other again. Often the fathers of evacuees would have been abroad during the war and they would therefore have been even less likely to see them.

Overseas Evacuation

The Children's Overseas Reception Board (CORB) was established by the British government in order to co-ordinate the evacuation of children abroad. Some children had already been sent abroad under private arrangements in the early part of 1939. In the summer of 1940 over two and a half thousand unaccompanied child evacuees left Britain for destinations such as Australia, Canada, New Zealand and South Africa. However, the official scheme was stopped following the sinking of the SS City of Benares by a German U-boat in September 1940 with the loss of seventy-seven children. Most of those evacuated overseas remained there for the duration of the war.

Return of Evacuees

The government began planning for the return of evacuees as early as 1943 in the hope that the return home would be as organised as the departure. However, there were difficulties due to homes being damaged or destroyed by bombing, or families having

grown in size over the duration of the war so their original house was no longer large enough.

The return home was undoubtedly difficult even if welcome. Evacuees were returning to cities that had changed following the destruction of war, as well as families and homes that may have altered significantly. Families may have moved house or gained or lost members. Some members of the family may have seen active service and the role of women in the household could have changed significantly. Calder,(1969) pointed out that families who had been separated during the war, often knew little of each other's experiences, and the government actively encouraged people not to talk about such experiences in order to preserve morale.

The long-term effects of evacuation.

Bowlby (1940) suggested that the majority of children that were evacuated would suffer some degree of anxiety and recommended that parents and children visited each other regularly in order to reassure the children that their parents still loved them and that they were safe. He also pointed out that a child's age and the level of security experienced in their own families would determine how well they were likely to settle into foster-homes. The lack of empirical research into the long-term psychological effects of the evacuation is pointed out by Davies (1997). However, there were two surveys that did investigate the immediate effects; these were the Cambridge Evacuation Survey (Isaacs, 1941), and a survey by the Barnett House Study Group (1947).

The Cambridge Evacuation Survey collected information about more than 500 children. This information was gathered from teachers, parents and the children themselves. A number of issues were found to be pertinent to the evacuation experience, including evidence that children over the age of thirteen were more likely to be unhappy in their billet, and it is suggested that this may be due to the onset of adolescence. Other causes of unhappiness for children in billets included being billeted with a foster-mother over the age of sixty, infrequent visits by parents, lack of siblings in the same billet, and frequent changes of billet. Unfortunately, there was no follow-up to this survey, either at a later point during the war or following the evacuees return home.

The Barnet House Study Group (1947) carried out a similar survey in 1942-3 on 319 senior school children who were evacuated from London to Oxford. They used school attainment, out of school activities, relations with other children, and general behaviour as variables to measure successful adjustment. There appeared to be no difference between those children who were evacuated with their parents and those who were unaccompanied. There were a number of factors identified as being related to a positive outcome on these measures which included peer companions for only children, permanency of billet, co-operation between parents and foster parents and the quality of caring by foster-mothers to children coming from homes where they may not have had very much affection. Unfortunately, once again, there was no follow-up to this survey. One attempt at a long-term follow-up of children was undertaken by Maas (1963). This study included only a small number people in their twenties who had been in wartime nurseries as children. They found that any evidence of “aberrancy” in their adjustment

could be explained by data on their families. However, this study consisted of only 20 participants and no control group was provided.

In the first major study on this cohort by Foster (2000) it is suggested that the experience of evacuation as a child during World War II is associated with lower levels of psychological wellbeing sixty years later. It was found that evacuation predicted a small, but significant amount of the variance in present psychological wellbeing after accounting for the impact of age, gender and marital status. It was also found that attachment played an important role in mediating the relationship between the experience of evacuation and present psychological wellbeing.

It appears that overall, research into any possible long-term effects on those people who were evacuated as children has been neglected. James Roffey (1998) who was an evacuee himself and also founded the Evacuee Reunion Association pointed out that many former evacuees avoid talking about this part of their lives. For many it evokes long-repressed emotions, “emotions that have affected them throughout their adult lives and which will never go away”.

Much of the historical evidence available about the evacuation is based on material that was heavily biased by the need to maintain morale and therefore inaccuracies and stereotypes have persisted (Parsons, 1998). It has also been noted that the reluctance of child evacuees to talk at the time about any bad experiences. For example, significant numbers of ex-evacuees now report experiences of physical or sexual abuse and yet

only one unofficial account of abuse exists in primary written evidence from that time (Parsons, 1998).

1.3 Attachment

Foster (2000) in a study of older adults who were children during WWII, found that attachment played an important role in mediating the relationship between the experience of evacuation and present psychological wellbeing. The experience of evacuation predicted a greater likelihood of insecure attachment, which was in turn associated with lower levels of present psychological wellbeing.

Attachment Theory

Attachment theory focuses on the quality of the relationship between the child and their caregiver (traditionally the mother), and makes specific predictions about the negative effects on the child of separation from the caregiver. This theory suggests that attachment provides the security necessary for the child to explore his or her environment, and that it forms the basis for interpersonal relationships in later years. It has been hypothesized that the failure to form a secure attachment to one or a few primary persons in the early years is related to an inability to develop close personal relationships in adulthood (Bowlby, 1973).

A series of studies by Ainsworth et. al. (1978) revealed interesting differences in the quality of the mother-child relationship. They developed an experimental procedure known as the *Strange Situation* which allowed observation of parent-child interactions.

From these studies they categorised children into three groups – Secure, Insecure-Avoidant and Insecure-Ambivalent. Those children described as “secure” showed distress at separation from the parent and on reunion showed some clinging behaviour before eventually resuming play. This was the most commonly observed reaction. Children described as “insecure-avoidant” showed distress at separation but did not acknowledge the presence of the parent when reunited. Those described as “insecure-ambivalent” were also distressed at separation but would display evidence of anger or rejection of the parent upon reunion.

It has been suggested that over a period of time, children will internalize information from interactions with caregivers that will inform the nature of their future relationships when they are adults. Bowlby (1973), suggests that these complementary yet distinct internal structures are representations about the self and others known as the “working model of the self” and the “working model of the world”. These internal working models are complex schemata consisting of affective, defensive and descriptive cognitive components relating to aspects of the self, the attachment figure, and attachment interactions (Bretherton, 1985; Main et al., 1985). Bowlby (1973) suggests that these internal working models are malleable and open to modification in the early years. However, once they are consolidated within the self structure, they have been shown to be relatively stable across the lifespan (Main et al., 1985; Sroufe et al., 1990). They would therefore guide the individual’s interaction with others into adulthood (Main et al., 1985).

Attachment in Adults

There has recently been increasing interest in adult attachment, and researchers have begun to develop and examine various models of adult attachment styles (Bartholomew, 1990; Hazan & Shaver, 1987; Main et al., 1985). Hazan and Shaver (1987) developed their model of adult attachment in romantic relationships based on Ainsworth's childhood attachment styles of "secure", "avoidant", and "ambivalent". Main et al. (1985) developed a model of adult attachment that described four categories of attachment style including "secure-autonomous", "dismissing", "preoccupied" and "unresolved-disorganised".

In parent-child attachments, the child contributes temperament and interactional aspects to the relationship, whereas in adult attachment relationships both people contribute their mental representations from prior experiences (Sperling, et al., 1992). These prior experiences do not only influence behaviour, but also affects how each person understands and experiences the other person's behaviour. Adult attachment therefore appears to be a more complex process than parent-child attachment.

Pathology and Attachment

Bowlby (1980) suggested possible mechanisms through which attachment-related events in childhood, such as loss of the attachment relationship due to psychological unavailability, separation or death, could lead to internal working models consistent with insecure attachment styles, and suggested that these can be related to psychopathology throughout adulthood.

A study by Tennant, et al. (1982) looked at the effect of childhood separation experiences on adult depression and anxiety states. They found that the overall morbidity of people separated from parents during childhood was significantly higher than those who had not been separated. Early loss or separation from parents has also been found to be associated with difficulties in adulthood such as panic disorder (Brown & Harris, 1993); agoraphobia (Favarelli et al., 1985); pathogenic grief and depression following bereavement (Holmes, 1993); dissociative disorders (Liotti, 1996), eating disorders (e.g. Palmer, et al., 1988) and personality disorders (e.g. Zanarini et al., 1989).

An individual's attachment style may also impact on their ability to relate to other people (Hazan & Shaver 1987) and therefore may affect their perception of the availability or quality of their social support (Florian et al., 1995). This may influence the protective nature of social support during stressful times

It appears therefore, that the quality of a child's attachment with its primary caregivers provides the basis for their social and emotional development, and insecure attachment may therefore lead to problems with psychological wellbeing later in life.

1.4 ABUSE AND NEGLECT

Parsons (1998) and Parsons and Starns (1999) have provided accounts of the evacuation based on research using both documentary and oral history testimonies. It was noted that significant numbers of ex-evacuees talked about their experiences of abuse whilst evacuated and yet this phenomena had not been documented elsewhere. Abuse can consist of physical, sexual and emotional abuse as well as neglect.

Most of the literature on adult survivors of childhood abuse tends to focus on survivors of childhood sexual abuse (CSA). However, the literature regarding physical and emotional abuse and neglect of children and adolescents may give us an indication of the possible long-term consequences of this type of abuse.

Physical Abuse and/or Neglect

It has been found that physical abuse and/or neglect is associated with a large number of interpersonal, cognitive, emotional, behavioural and substance abuse problems and psychiatric disorders, and increased mental health services utilisation has also been reported for maltreated children (Garland et al., 1996).

Deficits in the social functioning of abused children and adolescents have been found in analyses of information from multiple informants (parents, teachers, and peers) (i.e. Dodge et al., 1994). In the case of abused infants, these deficits may be seen as insecure (particularly disorganised) patterns of attachment (Cicchetti and Barnett, 1992) which may set the stage for later peer rejection and for intimate relationships marked by

revictimisation or the victimising of others. Adolescents with abuse histories also report impaired styles of interpersonal attachment, engage in more aggression in their peer relationships and exhibit more abusive or coercive behaviours in dating relationships (Wolfe et al., 1998).

Although studies have infrequently examined neglect, recent data suggest that physically neglected children also have deficits in social functioning, including greater conflict with friends and fewer reciprocated friendships (Bolger et al., 1998). There is evidence that the interpersonal problems of maltreated children are related to difficulty in understanding appropriate affective responses to interpersonal situations and to limited social problem-solving skills (Haskett, 1990).

Recent studies have consistently documented impaired cognitive abilities and poor academic achievement in maltreated youth. Both abuse and neglect have been associated with large deficits on both mathematics and language tests, with neglect having the strongest association with poor achievement (Eckenrode et al., 1993; Wodarski et al., 1990).

Aggressive and delinquent behaviours are among the most frequent correlates of physical abuse. Lewis (1992) hypothesized that physical abuse exposure increases the risk for the expression of aggression by increasing levels of impulsivity and irritability, engendering hypervigilance and paranoia, and curtailing the recognition of pain in both self and others. As abuse victims develop, they are at risk for engaging in violent,

criminal behaviour in both adolescence (Herrenkohl et al., 1997) and adulthood (Widom, 1989). An association between physical abuse and risk for suicidal behaviour has been reported, particularly in adolescents (Garnefski et al., 1992; Kaplan et al., 1997; Riggs et al., 1990). Physically abused youths are also more likely than their non-abused counterparts to take part in behaviours endangering their health, including cigarette smoking, substance use, and sexual risk-taking (Riggs et al., 1990).

A number of studies have found that abuse victims are at increased risk for a variety of child and adolescent psychiatric diagnoses. These include depressive disorders, anxiety disorders, conduct disorder, oppositional defiant disorder, attention-deficit/hyperactivity disorder and substance abuse (Famularo et al., 1992; Flisher et al., 1997; Kaplan et al., 1998; Livingston et al., 1993).

Emotional Abuse

Research indicates that emotional maltreatment (also referred to as psychological maltreatment) occurs in an overwhelming majority of physical abuse cases but also occurs independently of other types of maltreatment (Claussen and Crittenden, 1991). Until recently, emotional abuse has not been the focus of research as it was thought that it was less damaging than physical abuse. Also, emotional abuse can be more difficult to quantify compared with physical evidence of trauma. However, research is now suggesting that emotional abuse may actually have a stronger relationship to long-term psychological functioning than other forms of abuse. Regression analyses have indicated that emotional abuse is a stronger predictor than physical abuse of a wide

array of problems. These can include internalising and externalising behaviours, social impairment, low self-esteem and suicidal behaviour, as well as current and previous psychiatric diagnoses and hospitalisations (McGee et al., 1997; Mullen et al., 1996; Vissing et al., 1991).

Sexual Abuse

Research into the long-term effects of childhood sexual abuse (CSA) has identified a number of psychological sequelae. The most commonly reported symptom is depression (Brown and Finkelhor, 1986). Also, low self-esteem and feelings of “badness” and “shame” (Herman, 1992) are prevalent along with isolation. Post Traumatic Stress Disorder symptoms such as dissociation, re-experiencing the trauma, autonomic arousal and emotional numbing have been repeatedly identified in CSA victims (Kuyken, 1995). An inability to trust, powerlessness and helplessness in interpersonal relating have been identified (Cahill, Llewelyn and Pearson, 1991) as have feelings of self-blame, shame, anger and guilt (Liem, O’Toole and James, 1996; Gilbert, Pehl and Allan, 1994; Jehu, 1992). Fear of betrayal, abuse, intimacy and abandonment, feelings of contamination and being undeserving of love can lead to either over-dependence or over-control in relationships (Cahill et al., 1991). Sexual disorders are also more commonly reported by CSA survivors (Browne and Finkelhor, 1986; Jehu, 1988) including avoidance, fear, sexual compulsions, use of sex to gain affection or get needs met and increased rates of prostitution and revictimisation (Herman and Hirschman, 1981, cited in Cahill et al., 1991).

CSA perpetrated by a primary care-giver consistently leads to more severe interpersonal and psychological difficulties in adulthood due to the betrayal, mistrust and association of abuse with love and affection (Finkelhor, 1979, cited in Kuyken, 1995). Finkelhor (1987) suggests that extra-familial abuse or abuse which is short in duration which occurs in the context of a supportive, functional family is likely to have less of an impact on interpersonal and psychological functioning in adulthood.

From the developmental perspective, early CSA experiences are seen to be internalised and carried into adulthood within schemata about self, the world, the future (Beck et al., 1979). Also, schemata about others and self-other interactions which govern how the actions of others are interpreted and any subsequent interpersonal interactions (Liem et al., 1996). Herman (1992) proposes that without alternative supportive relationships to counteract the effects of CSA on the developing self, mistrust of self and others, betrayal, powerlessness and low self worth may become dominant personality themes in adulthood which interfere with interpersonal functioning. For example, Herman et al., (1989, cited in van der Kolk et al., 1996) found that over two-thirds of her sample of borderline personality disorder patients, who experience the interpersonal problems described above, had experienced intra-familial sexual trauma and significant neglect before the age of seven. Briere and Runtz (1987) propose a developmental theory termed “post-sexual abuse trauma” in which once adaptive perceptions and coping strategies developed during abuse become fixed and are carried into adulthood, though they are no longer adaptive. Such phenomena can be understood in the context of attachment theory.

Bowlby's ethological theory of attachment (1969, 1973, 1980) proposed that infants develop internal working models which are abstracted interpersonal representations used in maintaining attachments. This can be likened to an interpersonal schema which Safran (1990a,b) terms a "generalised representation of self-other relationships" with the purpose of maintaining interpersonal relatedness (Bowlby, 1969). An abusive relationship characterised by power, control, trust and intimacy distortions, may therefore be laid down as an internal working model for interpersonal functioning, leading to enduring interpersonal difficulties in adulthood (Cloitre, 1995, cited in Cloitre, et al., 1997). Conversely, secure attachment bonds serve as primary defences against trauma-induced psychopathology both in childhood and adulthood (Finkelhor and Browne, 1984, cited in van der Kolk et al, 1996). Retrospective research investigating attachment in adulthood using the AAI (Adult Attachment Interview) suggests that attachment patterns persist into adulthood and exert influence on interpersonal relationships and the sense of self. For example, fear of trust and emotional expression coupled with over-dependence on others is common both after CSA and in adults with avoidant styles of attachment (Alexander, 1992).

Alexander et al. (1998) surveyed CSA in relation to adult attachment in a self-selected sample of ninety-two women who had experienced CSA by a perpetrator living in their own home. Sixty per cent of the women had avoidant attachment styles and only 9% secure, compared with 15% avoidant and 57% secure within a normative sample (Bartholomew and Horowitz, 1991, cited in Alexander et al., 1998). Insecure, avoidant attachment was more predictive of distress, interpersonal dysfunction and depression

than CSA severity (Alexander et al., 1998) suggesting that the association between CSA and dysfunctional interpersonal relationships may be mediated by the meaning ascribed to intimate relationships learned within a dysfunctional family context. However, causality between childhood experience, adult attachment style and interpersonal functioning has not been proven conclusively and longitudinal research is necessary.

In an attempt to theoretically conceptualise the developmental mechanisms by which CSA continues to impact on interpersonal relationships through the lifespan, Finkelhor and Browne (1985) developed the causal “Traumagenics Dynamic Model” (TDM).

Previously, PTSD was the most accepted model as sexual abuse was viewed as sharing many dynamics with other traumas. However, Finkelhor (1987) proposes firstly that sexual abuse did not fit into the PTSD ‘slot’ because certain sequelae of CSA including the interpersonal and sexual dysfunction are not accounted for by the PTSD model.

Additionally, it has been suggested that the PTSD theory cannot account for the mechanisms by which CSA characteristically impacts on the development of self and interpersonal functioning. Whereas PTSD emphasises intrusive imagery, dissociation and numbing of affect, CSA research has emphasised fear, powerlessness, depression, self-blame, shame and sexual and interpersonal problems such as revictimisation.

Finkelhor and Browne (1985) propose that these effects of CSA trauma, though related are qualitatively different than for PTSD. Furthermore, CSA is hypothesised as leading to cognitive distortions and maladaptive schemata in addition to affective disturbances identified in PTSD.

There are therefore some theoretical problems with the PTSD model, though many PTSD symptoms are clearly relevant to CSA. PTSD is said to result from “an overwhelming event resulting in helplessness in the face of intolerable danger, anxiety and instinctual arousal” (Pynoos and Eth, 1985, cited in Finkelhor, 1987). However, CSA is often committed within the remit of the child’s trust due to manipulation of relationship boundaries, authority and power (Finkelhor, 1987). Whereas Horowitz’s (1976) work on PTSD postulates that traumatic memories remain active and disruptive until they can be integrated into existing schemata, a completion tendency, CSA more often leads to over-integration into existing interpersonal schemata and contributes to schema development and maintenance from a young age (Finkelhor, 1987; Young, 1990).

In response to these theoretical considerations, the TDM proposes four dynamics which impact on the individual and concord with empirical research (e.g. Gilbert et al., 1994; Jehu, 1992). These are traumatic sexualisation, betrayal, stigmatisation and powerlessness. A traumagenic dynamic is deemed to be “an experience that alters a child’s cognitive or emotional orientation to the world and causes trauma by distorting the child’s self-concept, worldview, or affective capacities” (Finkelhor, 1987). It is these developmental, cognitive distortion dynamics which evoke the interpersonal and psychological problems associated with CSA.

For example, traumatic sexualisation might lead to sex becoming feared due to associations with loss of control and powerlessness. Betrayal may be an active dynamic

from the commencement of abuse if committed by a trusted care-giver or later, when the child realises that they were coerced into something bad. Additionally, disclosure might activate betrayal and stigmatisation dynamics if significant others are not supportive or believing (Herman, 1981). The betrayal dynamic can lead to impaired judgement of trustworthiness of others and extreme suspicion, hostility and anger towards men and intimate relationships (Briere, 1984, cited in Finkelhor, 1987). Conversely, it can also lead to extreme dependency and fear of abandonment in relationships. Empirical research by Liem et al. (1996) has demonstrated significantly more themes of powerlessness and betrayal in the narratives of CSA survivors on the Thematic Apperception Test compared with controls, supporting the theory that these dynamics are CSA related. Stigmatisation stems from multiple sources telling the individual that they are “bad”, shameful, guilty and evil. This may lead to fear of rejection on disclosure (Herman and Hirschman, 1977, cited in Finkelhor, 1987), low self-esteem and depression. Finally, powerlessness stems from the overwhelming abuse experience, the physical and emotional threat, and powerlessness after disclosure to control events. This dynamic leads to anxiety and dissociative symptoms and also to impaired coping skills and self-efficacy. Powerlessness has been linked to the phenomena of revictimisation (Herman, 1981). Conversely, a schema-compensation mechanism of over-controlling and dominating relationships is sometimes found (Finkelhor, 1987).

These dynamics are hypothesised as being present to varying degrees in relation to abuse experiences and family circumstances and offers a comprehensive framework for the

variety of interpersonal problems characteristic of CSA adult survivors. The impact in each area of functioning is dependent on the extent to which each traumagenic dynamic is activated. Additionally, different parts of the abuse process might contribute differentially to the four traumagenic dynamics, including pre and post-abuse experiences (Finkelhor and Browne, 1985). For example, the betrayal dynamic may be less influential in an individual who experienced extrafamilial abuse but had a strong sense of trust from a supportive and nurturing family. This is the first causal model to comprehensively account for the process by which CSA impacts on interpersonal relationships and it also serves as a framework for assessment and intervention. However, it has yet to be empirically evaluated and longitudinal research is warranted for this.

The experience of shame is also integral in the impact of CSA on interpersonal relationships. Shame occurs through self-other comparisons, and Lewis (1987, cited in Gilbert, Pehl and Allan, 1994) views shame as a power relationship in which the individual evaluates themselves as inferior. Lefevre and West (1981, cited in Gilbert et al., 1994) found that fear of negative evaluation was central to the interpersonal behaviour of non-assertive individuals such as those who have experienced CSA, a finding supported by Gilbert et al. (1994). They investigated the relationship between guilt, shame, depression, submissive behaviour and fear of negative evaluation in a sample of 125 undergraduates using standardised questionnaire measures. A significant correlation was found between fear of negative evaluation, self-focused attention and

shame, both of which were associated with submissive behaviour. Guilt was correlated with helplessness, inferiority and anger at others.

Finkelhor and Browne's (1985) Traumagenic Dynamics Model offers a promising theoretical conceptualisation of the interpersonal impact of CSA across the lifespan. It can account for many more of the interpersonal problems empirically identified than the PTSD model as well as provide a framework for assessment and intervention.

However, the TDM is a developmental, causal model and longitudinal research utilising representative samples and appropriate control groups is required to empirically validate it, though it is likely that all four traumagenic dynamics as well as shame are central.

Additionally, both attachment theory and Safran's (1990) theoretical conceptualisation of the cognitive-interpersonal cycle and interpersonal schema have provided frameworks for understanding how dysfunctional interpersonal relationships in childhood such as CSA can become internalised during development, maintained and continue to determine interpersonal functioning.

1.5 Post Traumatic Stress Disorder

The history of trauma related symptoms

That extreme trauma has negative effects on psychological well-being has been known for some considerable time. The psychological effects of battle have been evident, at least in the literature, for thousands of years. Homer's description of Achilles after the death of Patroclus has been linked to the modern concept of post-traumatic stress disorder (Shay, 1987; 1994). Numerous other examples of reactions to trauma can be

found in literature throughout history. The first acknowledgement of a psychological response to battle experience by medical personnel dates back to the American Civil War, where it was labeled “nostalgia”, and thought to be a result of homesickness, of missing loved ones.

In World War One, the term “shellshock” was coined to describe these casualties. It was thought that shellshock was the result of concussive blast injury, but many sufferers had not been near shells. Other labels during WWI were “trench neuroses” and “gas hysteria”. Unlucky victims were charged with cowardice or desertion in the face of the enemy, and over 300 were shot (Babbington, 1983). Many traumatised individuals did receive various forms of psychological treatment, including the poets Wilfred Owen and Siegfried Sassoon, both of whom were treated at Craiglockhart hospital in 1917 by W.Rivers.

Freud (1921) theorised on the aetiology of war neurosis and recognised that war neuroses were functional rather than organic, which is in contrast to the Allied WWI work which had led to the notion of shellshock as a physiological response to combat experience. By World War Two, the findings regarding war trauma were largely forgotten. Initially there was a tendency to think of psychiatric casualties as having “low moral fibre”. It seemed that the lessons of one war were forgotten and had to be relearned with each new conflict. Adler’s (1943) account of the psychological effects of the Coconut Grove Fire is perhaps the first extensive and systematic description of a traumatic syndrome.

As can be seen, the construct now termed PTSD has existed for many years under a variety of formulations and names, mainly relating to battle experience (battle fatigue, combat neurosis, etc.). These terms all refer to a specific set of symptoms that are the result of a traumatic experience.

PTSD Classification

In 1980, the American Psychiatric Association included Post-Traumatic stress Disorder (PTSD) as a diagnostic category within the Diagnostic and Statistical Manual for Mental disorders (DSM-III: APA, 1980). It was revised for DSM-III-R (APA, 1987) and again for DSM-IV (APA, 1994). Its inclusion was largely the result of research work carried out into the effects of the Vietnam War. Since 1980, the construct has acted as a catalyst for research into veterans of other wars such as WWII (including the holocaust) and Korea, and the effects of traumas not related to war, e.g., rape, natural and man-made disasters.

The diagnostic criteria for PTSD in DSM-IV include:

- A. Exposure to a traumatic event.
- B. Re-experiencing of the traumatic event through intrusive thoughts, images, nightmares, or flashbacks.
- C. Avoidance of stimuli associated with the trauma and/or numbing of general responses.
- D. Persistent autonomic arousal (e.g. hypervigilance, poor concentration, sleep disturbances and irritability).

- E. Duration of the disturbance is more than one month.
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

It must also be specified whether the duration is of less than three months (acute), or three months or more (chronic) and if onset of symptoms occurred at least six months after the event (delayed onset).

According to DSM-IV, prevalence rates for PTSD range from 1% to 14% in lifetime studies and from 3% to 58% in studies of at-risk individuals (e.g. combat veterans).

The Epidemiologic Catchment Area (ECA) survey of approximately 2,500 people (Helzer et al., 1987) found that those who had been physically attacked had a prevalence of 3.5%, and veterans of the Vietnam War a prevalence of 20%. In a retrospective study, Kilpatrick and Resnick (1993) found that 35% of rape victims and 39% of victims of assault report symptoms of PTSD. Rothbaum et al. (1992), in a prospective study, found higher rates; in the three months following a sexual assault, rates of PTSD were 47%, and for nonsexual assault 22%. Curran et al. (1990) report that 50% of survivors of the Enniskillen bombing in Ireland had symptoms of PTSD.

Comorbidity

Roth and Fonagy (1996) note that PTSD appears to be associated with high rates of other Axis I disorders. These other classifiable disorders are usually anxiety or depression related (Green et al., 1990; Keane & Wolfe, 1990). In a review of surveys of community and clinical samples, Keane & Wolfe (1990) reported consistently high

rates of depression and substance abuse. They found that in a sample of 50 patients presenting with PTSD, there were rates of 70% for alcohol abuse, 68% had a lifetime diagnosis of depression, and 26% had a diagnosis of personality disorder, most usually antisocial personality disorder or mixed personality disorder. McNally (1992) found 98.8% of PTSD victims had a concurrent diagnosis of anxiety, depression or alcohol abuse.

The Stressor Criterion

Breslau & Davis (1987), considering the DSM-III criteria (and their arguments are still largely applicable to the DSM-IV version) concluded that most of the criterial symptoms, such as impaired cognitive function, avoidance, and diminished interest in significant events are shared by other diagnoses. What made PTSD distinct was the apparently unique class of stressors. The debate centred around whether the PTSD stressor was really different from the kinds of stressful events that precede the onset of other disorders. The other problem concerns intrusive re-experiencing. It has been argued that this is distinctive to PTSD (Breslau,1990). Breslau & Davis (1987) argued that intrusion is only specific to PTSD if the content of intrusive experiences are specific to a distinctive PTSD stressor. From this they conclude that the stressor is the single distinctive criterion for PTSD.

The problem with the stressor criterion at the time of DSM-III-R was that it was unclear which stressors would actually count as criteria. DSM-IV improves on the situation by specifying that there must be a traumatic event or events that involved actual or

threatened death or serious injury, in which the individual or someone close to them was involved, and that the person's response involved re-experiencing, avoidance, and increased arousal. The problem still remains, though, that the decision has to be made as to whether a particular event should be classified as traumatic or not.

Much research has demonstrated a direct relationship between the severity of the stressor and later distress (e.g. Selye, 1956; Figley, 1978; Penk et al, 1981). Later authors have also found such a relationship, though other factors play an important part (Foy et al, 1984; Green et al, 1990). It has been suggested that the aetiological role of the stressor decreases over time (Solomon et al, 1991). Scott and Stradling (1994) have suggested that PTSD can occur in the absence of extreme trauma. There have been instances where patients have all the symptoms of PTSD and in whom no single extreme stressor can be identified, but their symptoms appear to be related to a series of less severe stressors.

However, not all individuals exposed to a severe stressor later go on to develop psychological symptomatology. It is clear that other factors need to be considered, such as temperament, personality, previous experiences and environmental factors (Feinstein & Dolan, 1991; Breslau & Davis, 1987), intrinsic mediating variables such as intrusion and avoidance (Creamer et al, 1992), and methods of coping.

Mediating Variables

Creamer and his colleagues (Creamer et al, 1992; Creamer, 1995) show that the stressor/psychological distress relationship is not clear-cut. They found that the main predictor of trauma-related symptomatology is not the event itself, but the person's cognitive interpretation or appraisal of the event. Intrusive thoughts are a possible mediating variable between the event and subsequent psychological problems.

Davidson & Baum (1993), studying Vietnam veterans, also found intrusion to be a better predictor of chronic stress than combat exposure. McFarlane (1995) criticises such processing models suggesting that there is little work carried out on the temporal element, that the meaning of the trauma is derived not just from the event but from factors which precede and follow the trauma. McFarlane (1995) also discussed problems with retrospective assessment of the severity of the stressor, suggesting that such studies inevitably bias the findings to demonstrate the role of the stressor.

A variety of factors have been investigated and found to have an influence on the development of symptoms. These include genetic risk factors, past history of trauma, past history of psychological problems, nature of parental relationships and personality (see Yehuda & McFarlane, 1995).

O'Brien (1998) reviewed the literature on personality effects and found that overall the evidence showed that certain personality traits are associated with the development of PTSD. However, personality is only one factor amongst many and there is no evidence to suggest that only those with personality difficulties could develop PTSD.

Resilience

Research into the effects of stressful life-events in children (e.g. Garnezy & Rutter, 1983; Johnson, 1986) have shown that there is a strong association between life-event scores and risk of maladjustment. These pathogenic life circumstances include child maltreatment (Cicchetti, 1989), economic deprivation (Werner & Smith, 1982) and severe environmental circumstances such as natural disasters and war (Garnezy & Rutter, 1985). However, not all children were found to have maladaptive outcomes and this has led to a large number of studies aimed at identifying possible resilience factors (see e.g. Cohler et al, 1993 for a review). Rutter (1990) illustrated that resilience could not be thought of as an attribute born into children or even acquired during development. He asserted that it is the indication of a process which characterises a complex social system at a moment in time. Resilience can therefore be seen as a set of social and intra-psychic processes which take place across time given positive combinations of child attributes, family, social and cultural environments.

Social support

Post-trauma factors have also been found to have a modulating effect on symptom development, particularly the availability of social support. Social support is the resources provided to us through our interactions with other people. The availability of such support is thought to affect our appraisal of a stressor and our ability to cope with it. Numerous studies have shown that social support is linked to psychological and physical health outcomes (House, Robbins, & Metzner, 1982; Billings & Moos, 1982). There are two main models of social support, the Main Effect Model which postulates

that social networks enhance well-being no matter what level of stress is experienced; and the Buffering Model which focuses on functional support such as direct aid, advice and a sense of self-esteem. In a review of the literature Cohen & Wills (1985) concluded that both conceptualisations of social support are correct in some respects but each represents a different process through which social support may affect well-being.

Evidence shows that there is a relationship between social support and well-being in a variety of traumatic situations (e.g. Schwarzer, 1992; Turner & Marino, 1994).

Horowitz & Stinson (1994) in a study relating personality features to neurotic responses to events concluded that social supports sustain the person through the emotional turbulence following a trauma. Social support has been shown to be effective for families living through war (Farhood et al, 1993) and that a lack of social support can lead to a victim becoming isolated or detached (Loo, 1993). Recovery from PTSD has been linked to increased social support and less emotion-focused coping (Solomon et al, 1990; Norris & Kaniasty, 1992). Increased social support in the form of a willing listener to the story of the traumatic episode has been shown to be beneficial in a variety of situations, such as sexual assault (Harvey et al, 1991) and shooting (North et al, 1994).

Psychological Models of PTSD

Keane et al (1985) developed a “learning theory model of PTSD” which was based on Mowrer’s Two Factor Theory (1947). This theory states that individuals who experience a trauma can become conditioned to a variety of neutral stimuli that are

present during the trauma. Consequently, stimuli such as sounds, smells and cognitions may elicit the fear and anxiety responses that contribute to symptomatology. Avoidance of traumatic memories and external reminders reduces the aversive symptoms and is therefore negatively reinforced.

There are problems with this theory, as it suggests that extinction should occur with repeated exposure but this does not appear to be the case in PTSD. Also, it does not explain why some people would develop PTSD and not others who have been exposed to the same trauma.

A cognitive processing model of trauma proposes that a person enters a traumatic situation with pre-existing schemata about the nature of the world, their belief systems, and expectations regarding the future (Hollon & Kriss, 1984). The experience of trauma confronts individuals with information that is inconsistent with these schemata, which contain information about safety and invulnerability. Janoff-Bulman's (1985) theory on "Shattered Assumptions" proposes that PTSD is largely due to the shattering of basic assumptions about the individuals themselves and their world.

Horowitz (1976) argued that for recovery to occur, the individual must process the traumatic experience such that the new inconsistent information is resolved and incorporated into the person's schemata via a process of adaptation. In order to do this the pre-existing schemata must be adjusted to incorporate the new information. The individual's attempts to assimilate the trauma-related information will inevitably lead to increased arousal and hence a desire to escape from, or avoid, thoughts and reminders

of the event. Horowitz argued that until the trauma-related information is assimilated it is stored in active memory, and will continue to produce intrusive recollections.

Psychological numbing of responsiveness (DSM-IV, APA, 1994) is a psychological defence mechanism against such intrusive thoughts.

Foa et al (1989) described the formation of a fear network as a result of the experience of a trauma. This fear network includes stimulus, response and meaning information about the event. In order to reduce fear two conditions must be fulfilled. Reminders of the trauma (fear-relevant information) must be made available in a way that will activate the fear structure. Second, in order to modify the memory network information that is incompatible with the fear structure must be available. Effective processing of the new information will lead to the dissociation of response elements from stimulus elements in the fear network and hence the modification of the information about the meaning of feared stimuli and responses.

One of the difficulties concerning processing is that there appears to be an assumption that when the memory network is activated it “automatically” begins processing. This may not actually be the case. If an individual simply goes over and over the memory, it may not necessarily become less horrific or traumatic.

Brewin, et al. (1996) proposed a Dual Representation Theory of PTSD which involves verbally accessible memories (VAMS) and situationally accessible memories (SAMS).

It is suggested that VAMs support ordinary autobiographical memories that can be retrieved either automatically or using deliberate, strategic processes. VAM memories can be edited and interact with the rest of the autobiographical knowledge base, so that the trauma is represented within a complete personal context comprising past, present, and future. These memories are readily available for verbal communication with others, but the amount of information they contain is restricted because they are mediated by limited-capacity serial processes such as attention. SAM memories contain information that has been obtained from more extensive, lower level perceptual processing of the traumatic scene that has received little conscious processing (e.g. flashbacks, trauma-related dreams), and also the person's bodily responses to it. Consequently, flashbacks and dreams are more detailed and affect-laden than ordinary memories and because the SAM system does not use a verbal code, these memories are difficult to communicate to others.

It is suggested that VAMS can be deliberately retrieved from the store of autobiographical experience and are therefore amenable to cognitive restructuring. SAMS however are not verbally accessible and are the output of nonconscious processing which may be accessed automatically when the person is in a context whose physical features or meaning are similar to the traumatic situation. In order to restructure these memories it is therefore necessary to do so whilst "reliving" the event as SAMS are only accessible via emotion.

A Cognitive Model of Posttraumatic Stress Disorder is proposed by Ehlers & Clark (2000). It is suggested that PTSD becomes persistent when individuals process the trauma in a way that leads to a sense of serious, current threat. This sense of threat arises as a consequence of excessively negative appraisals of the trauma and/or its sequelae and a disturbance of autobiographical memory characterised by poor elaboration and contextualisation, strong associative memory and strong perceptual priming. It is also suggested that a series of problematic behavioural and cognitive strategies prevent changes in the negative appraisals and the memory of the trauma.

Complex PTSD

Judith Herman (1995) suggests that as the current diagnostic formulation of PTSD is derived primarily from observations of survivors of relatively circumscribed traumatic events, it does not capture the various sequelae of prolonged, repeated trauma. This prolonged trauma can only occur where the victim is in a state of captivity such as prisons, concentration camps and also such situations as religious cults, brothels and in abusive families.

The concept of a spectrum of post-traumatic disorders has been suggested independently by many major contributors to the field and clinicians working with survivors of childhood abuse have proposed the need for an expanded diagnostic concept. Goodwin (1988) conceptualises the sequelae of prolonged childhood abuse as a severe post traumatic syndrome that includes fugue and other dissociative states, ego

fragmentation, affective and anxiety disorders, reenactment and revictimisation, somatisation and suicidality.

Herman (1995) notes that clinical observations of clients with prolonged trauma have identified three areas that go beyond simple PTSD. Firstly, the symptom picture in survivors of prolonged trauma often appears to be more complex, diffuse and tenacious than in simple PTSD. Secondly, survivors of prolonged abuse develop characteristic personality changes including difficulties with relatedness and identity. Thirdly, survivors have vulnerability to repeated harm, both self-inflicted and at the hands of others.

Long Term Effects of Trauma

Most of the research in this area has been conducted over a relatively short-term and very little research has been conducted into the very long-term effects of trauma.

However, there is some evidence that the effects of earlier trauma can increase as people age. For example, Hunt (1997) found that the onset of nightmares relating to wartime events in war veterans was linked with periods of inactivity due to poor health or retirement. Hilton (1997) reported that anniversaries of wartime events reported in the media were found to awaken memories for people who had experienced these events.

In a study involving holocaust victims, (Mazor et al., 1990) found that although they had rebuilt their lives and had achievements similar to those of their cohorts, inside

them there had been a continuous struggle to deal with memories and feelings of their traumatic past. It appears that for a non-clinical group, it was only when they reached the age of around 50 years that they began to open up and wanted to give meaning to their lives. It is suggested that for most persons the reactivation of memories and the need to document their experiences enhances, in a limited way, the recognition of their loss and brings some relief.

A study of the long-term effects of WWII on women (Waugh, 1997) found that a significant proportion were still severely distressed by their experiences and were suffering from current psychological problems. This indicated that there was a long-term detrimental effect of war trauma on this population and that psychological disturbance was related to war experiences. This relationship was found to be mediated by avoidance in this population which suggested that it was not the trauma alone that caused problems, but rather the failure to process effectively the event(s) to adaptive completion.

Coping strategies that had previously been effective may no longer be as helpful as people age. Also, the life review is a recognized psychological mechanism in the latter part of life (Butler, 1963). This involves surveying and reflecting on one's life which may provide insight into the past and resolve old conflicts, thereby enabling a sense of coherence and wholeness. This process is thought to be a normal and healthy activity of aging, and is usually adaptive because it appears to aid the elaboration, coherence and memory of the life story (Coleman, 1994).

Severe traumatisation does not preclude good social and professional functioning through adult life. However, a study by Op den Velde et al. (1990) into Dutch resistance veterans found that they tended to retire earlier than their peers and were more likely to be claiming disability pension. Three distinct developmental courses for PTSD were found in this older population. Acute PTSD would persist to become a chronic state; delayed onset following a symptom free period lasting between 5-35 years; and a fluctuating course with symptoms manifest for 5 years after the war, followed by symptom-free intervals of 15-30 years after which PTSD symptoms recurred. Other subjects with anxious and depressive symptomatology achieved a similar pattern of scores but only resistance veterans reported intrusive reminiscences of stressful events among their symptoms.

Orner (1992) points out that there is a lack of research into post war functioning of older war veteran groups. Of those populations that have been sampled and studied there appears to be higher morbidity and mortality than comparable non-veteran citizens. Dutch researchers draw attention to vital exhaustion (Falger et al., 1990) and psychosomatic disorders (De Loos, 1990) as pervasive aspects of the clinical picture presented by older veteran populations with PTSD. Hovens et al. (1993) reported on the development of a Dutch PTSD scale based on the DSM-III criteria for PTSD. All the subjects in the study were over 60 years old and their traumatisation took place in early adulthood or late adolescence. Their results indicated that although the clinical presentation of PTSD may be different to that in younger subjects (Op den Velde et al, 1990), the structure of the symptomatology is not significantly different.

Much of the research in this area suggests that the traumatic experiences may be expressed across the lifespan. For many the problems dissipate with time but for others the problems may continue or worsen making life course adaptation difficult. There is also the possibility that symptoms may reappear if circumstances once again come to represent the distant trauma. Examples of this are the loss of status and structure associated with retirement or the vulnerability associated with illness or increasing frailty being linked to recurrence of nightmares (Elder & Clipp, 1988).

1.6 Current Study

It is possible that a significant number of people who were children during WWII could have experienced any of a variety of traumatic events. These events could include the experience of air raids and the resulting death and destruction, evacuation away from their families and communities, and the possible risk of physical, emotional and sexual abuse and neglect. There may also have been the experience of the death or injury of parents, family or friends.

As has been described above, traumatic experiences such as violence and abuse may lead to psychological morbidity, and separation from families may affect attachment and interpersonal functioning throughout the lifespan. Taking into account the lack of previous research into both the long-term effects of war experiences and abuse, and particularly their effects on those who were children at the time, this study aims to establish whether childhood survivors of WWII are suffering from any such effects and if so, the extent and nature of these problems.

Because of the lack of previous research, this study should be seen as exploratory. Therefore, some of the hypotheses relate to the long term psychological effects of wartime experiences and others will consider the differences in experiences between those who were evacuated and those who were not evacuated. This should help to provide an overall picture of wartime experiences and what, if any, long term psychological effects these experiences may have had.

It is therefore hypothesised that –

1. There will be a positive relationship between traumatic war experiences in childhood and current psychological functioning.
2. There will be a significantly higher rate of childhood abuse experienced by evacuees than non-evacuees.
3. There will be significantly higher rates of psychological morbidity in those who experienced childhood abuse than those who were not abused.
4. Those who were evacuated away from parents will have less secure attachment styles in adulthood.
5. Insecure attachment will lead to higher rates of psychological morbidity.

2. Method

2.1 Design

This is a retrospective cross-sectional design, which uses a range of standardised self-report questionnaires. Questionnaires were posted to participants and stamped addressed envelopes were provided for their return. The participants consisted of people who were evacuated as children during World War II and people who were children during World War II, but who were not evacuated.

2.2 Ethical Considerations

Ethical approval for the study was granted by the Joint UCL/UCH committees on the Ethics of Human Research (Appendix 1), and by the West Essex Local Research Ethics Committee (Appendix 2).

Each person who volunteered to take part in the study was sent a pack that contained an information sheet describing the study (Appendix 3). It was felt by the researchers and the Ethics Committees that this information allowed the participants to give informed consent. The forms encouraged participants to contact the researcher by telephone or letter if they had any questions or concerns about the study, and requested that people who chose to participate sign the enclosed consent form (Appendix 4) and return it together with their completed questionnaires.

It was recognised that some participants could have experienced distress as a result of thinking about the experiences referred to in the questionnaires. Participants were therefore asked to contact the researcher if they experienced any serious distress and the researcher would suggest contacting their GP if necessary. No participant contacted the researcher for this reason.

2.3 Recruitment

Evacuee group

The Evacuees Reunion Association (ERA) was founded in 1996 by people who had been evacuated during World War II. It produces a monthly newsletter and arranges reunion meetings in different areas of Britain. At the time of recruitment, the ERA had approximately 1900 members.

A previous study (Foster, 2000) had provided a data-base from this group, of whom 136 had agreed to be contacted again for further research purposes. Also, an advertisement explaining the purpose of the study (Appendix 5) was placed in the September 2000 edition of the ERA newsletter which generated another 207 volunteers. Of the total 343 questionnaires sent out, 245 were returned completed, 25 were returned not completed and 4 were returned too late to be included in the analysis. Altogether, 249 (72.6%) of the 343 questionnaires sent out were returned completed which is a very good response rate.

Non-Evacuee Group

The non-evacuee group consisted of people who were children during World War II but were not evacuated. They were recruited through items (Appendix 6) in “The Oldie” magazine and local press and leaflets which were sent to clubs and organisations aimed at an appropriate age range, e.g. Over 60’s clubs, University of the Third Age, Age Concern. Of the total 145 questionnaires sent out, 96 were returned completed, 19 were returned not completed and 1 was returned too late to be included in the analysis. Altogether, 97 (66.9%) of the 145 questionnaires sent out were returned completed which is a very good response rate.

Total Group

Overall, of the total 488 questionnaires sent out, 341 were returned completed, 44 were returned not completed and 5 was returned too late to be included in the analysis. Altogether, 346 (70.9%) of the 488 questionnaires sent out were returned completed which is a very good response rate.

2.4 Participants

The 341 people who took part in this study were men and women who had experienced World War Two as children in the UK and who had volunteered to complete the questionnaires. As WWII ended in 1945, the respondents are all over 60 years old.

The demographic structure of the sample is given in Table 2.1.

Table 2.1

	Total Group	Evacuee	Non-Evacuee
Number	341	245	96
Age Range	60 – 75	60 – 75	61 - 75
Mean Age	68.4 (s.d.3.5)	68.3 (s.d.3.4)	68.5 (s.d.3.7)
Gender - Male	130 (38%)	84 (34%)	46 (48%)
- Female	211 (62%)	161 (66%)	50 (52%)
Marital Status –			
Married	211 (62%)	149 (61%)	62 (65%)
Single	30 (9%)	18 (7%)	12 (12.5%)
Divorced/Separated	43 (13%)	33 (14%)	10 (10%)
Widowed	56 (16%)	44 (18%)	12 (12.5%)
Retired	93.5%	91.7%	97.9%

2.5 Measures

When selecting questionnaire measures for this study, it was recognised that a large amount of information was required, but that lengthy questionnaires may significantly reduce the response rate, especially as some of the information required may appear to participants to have little relevance to their childhood experiences.

Evacuation Experience Questionnaire (Foster & Davies, unpublished) (Appendix 7).

This questionnaire was adapted for the current study by Foster & Davies from the War Experiences Questionnaire (Davies, unpublished). It contains questions relating to current demographic information, and questions relating specifically to evacuation experiences. The questionnaire attempted to account for the fact that each evacuee may have had several billets, and that experiences might have changed according to the billet. Participants were asked to rate their experiences on five-point Likert scales, from

0 – “very negative” to 4 – “very positive”. An open-ended question was also included which asked participants to write down whatever they felt was important about their evacuation experiences. This was intended to elicit any important issues that the questionnaire may have missed.

The EEQ was adapted (Appendix 8) for use with the non-evacuated group in order to obtain information about wartime experiences. These were the same questions as the overall war experiences section of the EEQ but obviously did not include any questions regarding evacuation experiences, billets, etc.

War Related Experiences Scale (Robbins & Hunt, unpublished) (Appendix 9)

The War Related Experiences Scale (Robbins & Hunt, unpublished) consists of 14 items which can be scored on an objective scale (indicating whether an item was experienced or not) and a subjective scale where the degree of stressfulness of the experience can be indicated on a 5-point Likert scale (see Waugh, 1997).

Abuse Questionnaire (Appendix 10)

A childhood abuse questionnaire was developed for this study because there are no appropriate measures that take into account the possibility of large numbers of the population being moved away from their homes and families, as happened during the evacuation in WWII. Also, some published questionnaires were prohibitively expensive for this study and some were too long or over-inclusive. The abuse questionnaire was divided into four sections on each type of abuse (physical, emotional,

sexual and neglect) with eight questions in each section aimed at ascertaining if abuse occurred, where it occurred, who the abuser(s) were, and the frequency and severity of the abuse.

Items to include in this questionnaire were based on key factors identified from an examination of the childhood abuse literature and published questionnaires (e.g. Childhood Trauma Questionnaire (CTQ), The Psychological Corporation, 1998; Early Trauma Inventory, Bremner, 1996; Life Stressor Checklist-Revised, Wolfe et al., 1996).

Impact of Events Scale – Revised (Weiss and Marmar, 1997).

The original Impact of Event Scale (IES) was developed by Horowitz et al. (1979) as a measure of the impact of any specific traumatic event and provided a measure of the two main components of PTSD: intrusion and avoidance. This measure has 15 items and the respondent is asked to indicate on a four-point scale ranging from zero (not at all) to five (often), how frequently each reaction has been experienced in the last week.

The Impact of Event Scale-Revised (IES-R) was developed by Weiss and Marmar (1997) and contains all original 15 items from the IES. The IES-R was devised as a self-report measure of the three broad domains of response to traumatic stress, that is, intrusive phenomena, avoidant phenomena and hyperarousal phenomena. The seven new items for hyperarousal are what differentiates the IES from the IES-R. Weiss and Marmar (1997) note that the IES and IES-R are not derived from a narrow theoretical

orientation, but from observation of stress response. Weiss also asserts that the IES and the IES-R are comparable due to the overlap of 15 items and two of the three factors.

Horowitz et al (1979) presented validation data for the IES, showing that the instrument was psychometrically sound with good test-retest and internal consistency reliability and a sound two-factor structure (Cronbach's alpha coefficient for intrusion = .79, and for avoidance = .82). Weiss et al. (1995) reports data from a study of 439 emergency service workers using the IES-R. Cronbach's alpha coefficients were stated as .85 for intrusion, .86 for avoidance and .77 for hyperarousal. Robbins and Hunt (1996) in a study of WWII combat veterans found that IES was an appropriate measure for the assessment of the long-term effects of combat-related trauma. The trauma experienced by their sample had occurred 40-50 years previously. They found that both intrusion and avoidance factors had high internal consistency (Cronbach's alpha for intrusion = .86, avoidance = .73) and successfully predicted levels of psychological distress. These results suggest that the IES is an appropriate measure of trauma-related intrusion and avoidance in elderly populations.

General Health Questionnaire-28 (Goldberg, 1978).

The General Health Questionnaire (Goldberg, 1978) consists of four sections with seven items in each (28 items in total) and is scored using a 0,0,1,1, scale. It is a well-known and extensively validated screening questionnaire for functional psychiatric caseness (e.g. Thompson et al.,1995). The four scales of the GHQ-28 were derived from the 60-item version using factor analysis and measure somatic symptoms, anxiety and

insomnia, social dysfunction and severe depression. The sub-scales are not independent of each other, their correlations range from 0.33 to 0.58 (Goldberg and Hillier, 1979). Surveys have shown that age does not exert a strong effect on GHQ score, but a large Health and Lifestyle survey (Cox et al., 1978) did show a rise in scores in the group of people over the age of 75 years. This is older than the population of this study.

Three reviews of the criterion validity of the GHQ-28 are reported in the Users Guide to the GHQ (Goldberg and Williams, 1988). These are Banks, (1983), Goldberg and Hillier (1979) and Rabins and Brooks (1981). The median correlation coefficient between the GHQ-28 and standardised psychometric assessment was 0.76. A correlation of 0.73 was obtained with the clinical depression rating and 0.67 with the anxiety rating. The sensitivity was 88% and specificity 82.4% using a cut-off score of 4/5. Tennant (1977) reported sensitivities ranging from 86.6% to 90% and specificities ranging from 90% to 94.45 for the GHQ-28.

Adult Attachment Styles Questionnaire (AAS: Hazan and Shaver, 1987).

This scale consists of three paragraphs that represent adult analogues of Ainsworth et al's (1978) attachment patterns. The secure style describes the respondent as comfortable with intimacy and dependency and as having low anxiety about loss. The ambivalent style depicts a desire for closeness, concern about rejection and a consciousness that the respondent desires more intimacy than most people. The avoidant style describes discomfort with intimacy and dependency, and lack of trust.

Respondents are asked to identify the paragraph that best describes their feelings about themselves in relationships.

It was found by Kirkpatrick and Hazan (1994) that 70% of people identified the same attachment style as four years earlier, the secure group being most stable. This study and others (e.g. Feeney and Noller, 1990; Hazan and Shaver, 1987) have found no gender differences in the distribution of classifications. In terms of validity, people who classify themselves as secure report warmer, more responsive and more supportive parents than insecure-avoidant people. People classifying themselves as insecure-avoidant are more likely to report that parents were rejecting, and insecure-ambivalent ratings were associated with a perception of the father as unfair.

2.6 Procedure

Packs of questionnaires were posted to the people who had responded to requests for volunteers, as previously described. The packs included the information sheet, consent form, the questionnaires and a stamped addressed envelope for their return to the researcher.

Participants were not required to write their names on the questionnaire, but all participants had to sign the consent form for the study. All questionnaires and consent forms were therefore numbered when they were received, and the consent forms were separated from the returned questionnaires. Participants were assured confidentiality and all questionnaires and consent forms were kept in a locked filing cabinet.

2.7 Data Analyses

Information was entered into a computer data-base using SPSS version 9 for windows. Statistical analysis involved t-tests, chi-square, analysis of variance, correlations and regressions including regression analyses to test for mediation effects.

After initial data preparation, the data was assessed for any demographic items that may be acting as confounding variables. Analyses were then conducted into the relationship between the key variables both with and without controlling for the confounding variables. The relationship between evacuation and abuse was then examined in more detail to clarify when those who were both evacuated and abused actually experienced the abuse (i.e., before, during, or after evacuation or any combination of these three). Analyses was then conducted to ascertain if there were any mediational effects between key variables and finally, a Path Analysis was designed in order to show the strength of the relationships between the main variables.

During the course of this study, a large amount of information about childhood wartime experiences has been collected, including some qualitative data. It is beyond the scope of this study to examine all this data in detail, but further analyses are planned for the future.

3. Results

3.1 Data Preparation

Prior to analysis, all dependent variables were tested for normality. It was found that GHQ and IES-R scores were significantly positively skewed and transformation of the data was attempted but did not significantly change the degree of skewness. It was therefore decided to apply non-parametric statistics where appropriate. It was found that non-parametric statistical analysis did not lead to significantly different conclusions to the parametric analysis. This is due to the fact that the sample size is large and parametric statistics are robust in dealing with data which is not completely normally distributed. Only the parametric statistics have therefore been reported.

At various points in the analyses a general linear model (GLM) Analysis of Variance has been used. This analysis is equivalent to a multiple regression but is more conveniently designed for handling nominal variables such as marital status. Therefore GLM Anova allows testing for main effects and interactions of both categorical variables (as in traditional Anova) and continuous variables (as in multiple regression).

Descriptive Data

The descriptive data for the whole sample is presented below. As the IES-R is relatively new and no reliable data on norms are yet available, the data for the IES includes the Intrusion and Avoidance sub-scales only in order to provide comparison with normative data on the original IES.

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Above cut-off</i>
GHQ	331	3.84	5.22	30.8%
IES	311	14.31	17.05	16.7%

It can be seen that 30.8% have scored over the cut-off (5) for the GHQ which is much higher than the expected norms of 9-12% for this age group (Goldberg, 1978).

The mean and standard deviation on the IES is lower than the norms reported by Horowitz (1979) for a clinical population (Mean 56.35, SD 30.95) and similar to the reported student population (Mean 13.25, SD 12.2). The number scoring over the cut-off (30) for the IES is lower than the 24.6% found by Robbins and Hunt (1996) in a study of combat veterans.

The GHQ and IES (Intrusion and Avoidance only) scores for different sub-groups of the sample are provided below.

Abused

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Above cut-off</i>
GHQ	144	5.42	5.90	42.86%
IES	137	22.47	19.35	31.97%

Not Abused

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Above cut-off</i>
GHQ	187	2.63	4.27	21.65%
IES	174	7.89	11.51	5.15%

Chi-Squares of those who were abused and those who were not abused revealed that there is a significant difference in scores on the GHQ ($\chi^2(2) = 17.78$; $p < 0.001$) and the IES ($\chi^2(2) = 43.25$; $p < 0.001$).

Evacuated

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Above cut-off</i>
GHQ	236	4.01	5.44	30.20%
IES	220	14.98	17.30	18.78%

Not Evacuated

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Above cut-off</i>
GHQ	95	3.42	4.64	32.29%
IES	91	12.68	16.40	11.46%

Chi-Squares of those who were evacuated and those who were not evacuated revealed that there is no significant difference in scores on the GHQ ($\chi^2(2) = 1.73$; $p = 0.42$) and the IES ($\chi^2(2) = 5.57$; $p = 0.62$).

Secure Attachment

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Above cut-off</i>
GHQ	224	2.98	4.55	23.68%
IES	210	10.5	14.29	10.53%

Insecure Attachment

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Above cut-off</i>
GHQ	98	5.77	5.98	47.52%
IES	92	22.92	19.62	30.69%

Chi-Squares of those who were securely attached and those who were insecurely attached revealed that there is a significant difference in scores on the GHQ ($\chi^2(2) = 19.89$; $p < 0.001$) and the IES ($\chi^2(2) = 21.30$; $p < 0.001$).

Adult Attachment Styles Questionnaire

The Adult Attachment Styles questionnaire (AAS) provides a categorisation of attachment styles, namely secure attachment, insecure-avoidant attachment and insecure-ambivalent attachment. The distribution of these categories in the whole sample are given in table 3-1.

Table 3-1

Frequencies and percentages of each attachment style.

<u>Attachment Style</u>	<u>N</u>	<u>%</u>
Secure	228	69.1
Insecure-avoidant	52	26.4
<u>Insecure ambivalent</u>	<u>15</u>	<u>4.5</u>

These frequencies are consistent with norms for the AAS which show two-thirds reporting secure attachment (see Crowell et al, 1999).

As only a small proportion of respondents described their attachment style as insecure-ambivalent, it was decided to combine the insecure-avoidant group and the insecure-ambivalent group to create one group where attachment was classified as insecure (N=67). This is consistent with other studies that have investigated the association of attachment style to disturbances in adulthood and have distinguished individuals as either secure or insecure (e.g. Sadowski et al., 1999; Burbach and Bourduin, 1986).

Abuse Questionnaire

For ease of analysis, the variables for each of the different types of abuse experienced (physical, emotional, sexual and neglect) were collapsed into a combined *any abuse* variable. Also, each of the four types of abuse that occurred before, during and after evacuation were collapsed into *any abuse before*, *any abuse during* and *any abuse after* variables.

3.1.1 Assessment of Potential Confounding Variables

In order to assess for potential confounding variables, analyses were undertaken to determine whether there were any significant differences as a function of the demographic variables of age, marital status and gender on key dependent variables. This is in order that they can be taken into account when testing key hypotheses later.

Age as a potential confounding variable.

Correlations were carried out to test associations between age and current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

Table 3.2

Correlation of Age with IES-R & GHQ.

<u>Dependent variable</u>	<u>Pearsons r</u>	<u>p</u>
IES Total	-.181	0.001
GHQ Total	-.136	0.014

As can be seen, there are significant differences in psychological morbidity (GHQ) and PTSD symptoms (IES-R) as a function of Age. That is, older participants were more likely to have lower scores.

t-test of Age and Attachment

A t-test revealed that there is also a significant difference in attachment styles as a function of age ($t(32) = 3.62; p < 0.001$). That is, those who were securely attached were older than those who were insecurely attached (means – secure 68.77 years/S.D.3.42; insecure 67.28 years/S.D.3.36).

As can be seen, there are significant differences in all key dependent variables as a function of age and this will therefore have to be controlled for in later analyses.

Marital Status as a potential confounding variable.

An analysis of variance was also carried out to test associations between marital status and current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

Table 3.3

ANOVA (GLM) of Marital Status with IES-R & GHQ.

<u>Dependent variable</u>	<u>F</u>	<u>df</u>	<u>p</u>
IES Total	9.73	3,306	<0.001
GHQ Total	8.46	3,326	<0.001

Table 3.3 indicates that there are significant differences in psychological morbidity (GHQ) and PTSD symptoms (IES-R) as a function of Marital Status. The descriptive statistics are presented in Table 3.4.

Table 3.4

Descriptive Statistics for Marital Status on GHQ and IES-R Scores.

	N	Mean	S.D.
IES-R			
Married	195	16.50	22.30
Single	28	15.64	17.37
Divorced/Separated	36	38.03	30.07
Widowed	51	15.33	21.68
GHQ			
Married	207	3.35	4.88
Single	29	3.72	5.38
Divorced/separated	41	7.51	6.73
Widowed	53	2.90	3.97

As can be seen in Table 3.4, both for IES-R and GHQ, participants who were divorced/separated, scored approximately twice as highly as those who were either married, single or widowed.

Chi-Square of Marital Status and Attachment

A Chi-Square revealed that there is also a significant difference in attachment styles as a function of Marital Status ($\chi^2(3) = 23.05$; $p < 0.001$). The descriptive statistics are presented in Table 3.5.

Table 3.5

Descriptive Statistics for Marital Status on Attachment Scores.

<u>Marital Status</u>	<u>Secure</u>	<u>Insecure</u>
Married	149 (73.0%)	55 (27.0%)
Single	17 (58.6%)	12 (41.4%)
Divorced/separated	16 (40.0%)	21 (60.0%)
Widowed	45 (81.8%)	10 (18.2%)

Table 3.5 shows that insecure attachment is highest for those who are divorced/separated.

As can be seen, there are significant differences in all key dependent variables as a function of Marital Status and this will therefore have to be controlled for in later analyses.

Gender as a potential confounding variable.

A series of t-tests were also carried out to test associations between gender and current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

Table 3.6

t-test of Gender with IES-R & GHQ.

<u>D.V.</u>	<u>Male</u>		<u>Female</u>		<u>t</u>	<u>df</u>	<u>p</u>
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>			
IES Total	14.12	19.19	21.56	25.92	-2.72	309	0.007
GHQ Total	2.74	4.19	4.54	5.68	-3.08	329	0.002

Table 3.6 indicates that there are significant differences in psychological morbidity (GHQ) and PTSD symptoms (IES-R) as a function of Gender with females scoring higher on these scales than males.

Chi-Square of Gender and Attachment

A Chi-Square revealed that there is no significant difference in attachment styles as a function of Gender ($\chi^2(1) = 3.04$; $p = 0.081$).

As can be seen, there are significant differences in all key dependent variables apart from Attachment as a function of Gender.

The significant differences identified in the key dependent variables as a function of age, marital status and gender, will therefore be controlled for when conducting further analyses of the data.

3.2 Direct Effects

Initially, analyses were conducted to ascertain if there were any significant relationships between the main variables without controlling for age, gender and marital status.

These analyses were carried out first as a means of assessing the overall effect of these factors on psychological morbidity regardless of potential overlaps with demographic factors and also as a point of comparison for later analyses where appropriate controls are included.

Associations between psychological morbidity (GHQ) and symptoms of PTSD (IES-R).

Correlations were carried out to test associations between psychological morbidity (GHQ) and symptoms of PTSD (IES-R & sub-scales).

Table 3.7

Correlation of GHQ with IES-R.

<u>Dependent variable</u>	<u>N</u>	<u>Pearsons r</u>	<u>p</u>
IES Total	306	.536	<0.01
IES Hyperarousal	306	.548	<0.01
IES Avoidance	306	.472	<0.01
IES Intrusion	306	.483	<0.01

It should be noted that, not unexpectedly, the dependent variables of GHQ and IES-R are correlated with each other and hence the analyses presented in these tables are not independent.

Associations between war experience (Warex) and psychological morbidity (GHQ) and PTSD symptoms (IES-R).

Correlations were carried out to test for associations between war experience (Warex) and psychological morbidity (GHQ), and PTSD symptoms (IES-R).

Table 3.8

Correlation of Warex with IES-R and GHQ.

<u>Dependent variable</u>	<u>N</u>	<u>Pearsons r</u>	<u>p</u>
IES Total	311	0.171	0.002
GHQ Total	331	0.117	0.034

Table 3.8 indicates that there are significant relationships between Warex and GHQ, that is, those who had a higher number of war experiences scored significantly higher on the measure of psychological morbidity (GHQ). Also there is a significant relationship between Warex and IES-R, that is, those who had a higher number of war experiences scored significantly higher on the measure of PTSD symptomatology.

Associations between abuse and current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

A series of t-tests were carried out to test associations between abuse and current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

Table 3.9

t-test of Abuse with IES-R & GHQ.

Dependent variable	Abused		Not Abused		t	df	p
	Mean	S.D.	Mean	S.D.			
IES Total	29.57	27.02	10.93	17.53	-7.37	309	<0.001
GHQ Total	5.23	5.58	2.87	4.72	-4.15	329	<0.001

Table 3.9 indicates there is a significant relationship between abuse and GHQ, that is, those who were abused scored significantly higher on the measure of psychological morbidity (GHQ). Also, there is a significant relationship between abuse and IES-R, that is, those who were abused scored significantly higher on the measure of PTSD symptomatology.

Associations between attachment and current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

A series of t-tests were also carried out to test associations between attachment and current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

Table 3.10

t-test of Attachment with GHQ and IES-R.

Dependent variable	Secure		Insecure		t	df	p
	Mean	S.D.	Mean	S.D.			
IES Total	13.25	19.17	30.99	28.44	-6.34	300	<0.001
GHQ Total	2.98	4.55	5.77	5.98	-4.57	320	<0.001

Table 3.10 indicates there is a significant relationship between attachment and GHQ, that is, those who were insecurely attached scored significantly higher on the measure of psychological morbidity (GHQ). Also there is a significant relationship between attachment and IES, that is, those who were insecurely attached scored significantly higher on the measure of PTSD symptomatology.

Associations between evacuation and attachment and evacuation and abuse.

Chi-square tests were carried out on Evacuation with Attachment and Evacuation with Abuse to test for significant relationships between them.

Chi-Square of Evacuation with Attachment.

A Chi-Square test of Evacuation with Attachment revealed that there is no significant relationship between them ($\chi^2(1) = 0.994$; $p = 0.319$). That is, if you were evacuated you were not significantly more likely to have insecure attachment. Of those who were not evacuated ($n=92$), 24 (26.1%) had insecure attachment and 68 (73.9%) had secure attachment. Of those who were evacuated ($n=237$), 77 (32.5%) had insecure attachment and 160 (67.5%) had secure attachment.

Chi-Square of Evacuation with Abuse.

A Chi-Square test of Evacuation with Abuse revealed that there is a significant relationship between them ($\chi^2(1) = 14.181$; $p < 0.001$). That is, if you were evacuated you were significantly more likely to have been abused. Of those who were not evacuated ($n=96$), 23 (24.0%) were abused and 73 (76.0%) were not abused. Of those who were evacuated ($n=245$), 115 (46.9%) were abused and 130 (53.1%) were not abused.

Associations between evacuation, war experiences (Warex), current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

A series of t-tests were carried out to test associations between evacuation, war experiences (Warex), current psychological morbidity (GHQ), and PTSD symptoms (IES-R).

Table 3.11

t-test of Evacuation with GHQ, IES-R and Warex.

Dependent variable	Evac.		Non-Evac		t	df	p
	Mean	S.D.	Mean	S.D.			
IES Total	19.45	23.89	16.75	23.53	-0.91	309	0.364
GHQ Total	4.01	5.44	3.42	4.64	-0.93	329	0.352
Warex	5.79	3.03	7.05	2.97	3.47	339	0.001

Table 3.11 indicates that there is no significant relationship between Evacuation and psychological morbidity (GHQ) or PTSD symptoms (IES-R).

However, there is a significant negative relationship between Evacuation and war experience (Warex). That is, those who were evacuated were likely to have less war experiences.

3.2.1 Summary of Direct Effects.

- The dependent variables of psychological morbidity (GHQ) and PTSD symptoms (IES-R) are correlated.
- War experience (Warex) is positively related to psychological morbidity (GHQ) and PTSD symptoms (IES-R).
- Abuse is positively related to psychological morbidity (GHQ) and PTSD symptoms (IES-R).
- Attachment is positively related to psychological morbidity (GHQ) and PTSD symptoms (IES-R).
- Evacuation is not related to Attachment.
- Evacuation is not related to psychological morbidity (GHQ) or PTSD symptoms (IES-R).
- Evacuation is positively related to Abuse.
- Evacuation is negatively related to war experiences (Warex).

3.3 Relationships between key variables when controlling for the confounding variables of age, gender and marital status.

Analyses were conducted to ascertain if there were any significant relationships between the key variables whilst controlling for age, gender and marital status. These analyses were carried out as a means of assessing the effect of these factors on psychological morbidity when taking into account potential overlaps with demographic factors. In order to do this, a general linear model Analysis of Variance was used. As described previously, this analysis is equivalent to a multiple regression but is more conveniently designed for handling nominal variables such as marital status. Therefore, GLM Anova allows testing for main effects and interactions of both categorical variables (as in traditional Anova) and continuous variables (as in multiple regression). The results of these analyses are shown below.

Associations between war experience (Warex), abuse and attachment, and current psychological morbidity and PTSD symptoms, when controlling for demographic variables.

Analyses of variance (GLM) were carried out to test associations between war experience (Warex), Abuse and Attachment, and current psychological morbidity (GHQ), and PTSD symptoms (IES-R), whilst controlling for Age, Gender and Marital Status (see table 3.12 below).

Table 3.12

Analysis of Variance (GLM) of Abuse and Attachment with IES-R & GHQ.
(controlling for Age, Gender and Marital Status)

	Mean (SD)				F	df	p
<u>Abuse</u>	N	Abused	N	Not Abused			
IES-R Total	129	29.57 (27.02)	182	10.93 (17.53)	41.37	1,300	<0.001
GHQ Total	137	5.23 (5.59)	194	2.87 (4.73)	10.63	1,320	0.001
<u>Attachment</u>	N	Insecure	N	Secure			
IES-R Total	92	30.99 (28.44)	210	13.25 (19.17)	24.04	1,291	<0.001
GHQ Total	98	5.78 (5.98)	224	2.98 (4.56)	8.80	1,311	0.003

Table 3.12 shows that there are still significant relationships between Abuse and Attachment, and current psychological morbidity (GHQ), and PTSD symptoms (IES-R), when Age, Gender and Marital Status are controlled for.

An Anova (GLM) of Warex with IES-R and GHQ was conducted whilst controlling for Age, Gender and Marital Status. It was found that the effects of Warex on IES when controlling for the demographic variables is still significant ($F(1,300) = 13.45$; $p < 0.001$). The effects of Warex on GHQ when controlling for the demographic variables is also still significant ($F(1,320) = 7.64$; $p = 0.006$).

Associations between Evacuation and War experiences and Abuse when controlling for demographic variables.

An Analysis of Variance of evacuation with war experiences (Warex) was conducted whilst controlling for demographic variables.

Analysis of Variance (GLM) of Evacuation with War experiences (Warex)
(controlling for Age, Gender and Marital Status)

It was found that there is still a significant negative relationship between Evacuation and war experiences (Warex), after controlling for age, gender and marital status ($F(1,332) = 9.460$; $p = 0.002$). That is, if you were evacuated you had less war related experiences.

Logistical Regression of Evacuation with Abuse
(controlling for Age, Marital Status and Gender)

As it is able to handle categorical data, a logistic regression was carried out to test associations between Evacuation and Abuse. It was found that the effect of Evacuation on Abuse remained after controlling for Age, Marital Status and Gender (Odds Ratio = 2.85; Wald = 13.9; $p < 0.001$). That is, if you were evacuated you were at higher risk of being abused that if you were not evacuated.

3.3.1 Summary of Relationships between key variables when controlling for the confounding variables of age, gender and marital status.

- War experience (Warex) is positively related to psychological morbidity (GHQ) and PTSD symptoms (IES-R).
- Abuse is positively related to psychological morbidity (GHQ) and PTSD symptoms (IES-R).
- Attachment is positively related to psychological morbidity (GHQ) and PTSD symptoms (IES-R).
- Evacuation is negatively related to war experiences (Warex).
- Evacuation is positively related to abuse.

3.4 Breakdown of Effects of Evacuation and Abuse

For the purpose of clarity, in this section the relationship between Evacuation and Abuse will be examined in greater detail. Firstly, a comparison of the levels of abuse between evacuees and non-evacuees will be undertaken for each of the four types of abuse. Then, for those who were evacuated and abused, an examination will be made of when this abuse took place, that is, before evacuation, during evacuation, after evacuation, or a combination of these. The relationships between these three periods will then be analysed to ascertain if being abused at one period leads to an increased risk of being abused again.

In accordance with the anecdotal evidence in the literature, the hypothesis is that people who were evacuated when they were children are more likely to have experienced abuse. However, just because you were evacuated and also abused as a child under the age of 16 years does not necessarily mean you were abused whilst evacuated. The variable of any abuse has therefore been broken down into any abuse before evacuation, any abuse during evacuation and any abuse after evacuation. People who were evacuated could have been abused in each or any combination of these categories.

Types of Abuse.

Firstly, Chi-Squares were carried out to ascertain whether evacuees and non-evacuees experienced significantly different levels of each type of abuse.

Table 3.13

Chi-Square of Evacuation with Type of Abuse.

Type of Abuse	Evacuated	N	Not Evacuated	N	χ^2	df	p
Physical	21.8%	239	18.4%	87	0.26	1	0.612
Emotional	43.4%	228	14.5%	83	20.99	1	0.000
Sexual	22.9%	227	9.4%	85	6.41	1	0.011
Neglect	18.7%	230	3.6%	84	10.08	1	0.001

Yates' correction was applied to avoid bias.

Table 3.13 indicates that there was no significant difference in levels of physical abuse between evacuees and non-evacuees but that for emotional abuse, sexual abuse and neglect, evacuees are significantly more likely to have been abused.

When did abuse take place?

An examination of when people who were evacuated had experienced abuse produced the following table.

Table 3.14

Of those *who were abused and evacuated*, when did the abuse take place?

Type of Abuse	N	before	Evacuation during	after
Physical	52	34.6%	51.9%	44.2%
Emotional	99	26.3%	74.7%	45.5%
Sexual	52	15.4%	57.7%	46.2%
Neglect	43	27.9%	76.7%	23.3%

[Respondents could have suffered abuse at more than one time (before, during and after)]

The highest levels of abuse occurred during evacuation and the lowest levels before evacuation. Levels of abuse after evacuation fall between the two.

Relationship between being abused before and during evacuation.

A Chi-Square analysis was conducted to ascertain if there was a relationship between being abused before and during evacuation.

Table 3.15

Chi-Square of Abused Before with Abused During Evacuation.

	abused during evacuation	χ^2	P
Abused before evacuation (N = 35)	25 (71.4%)	14.40*	<0.001
Not abused before evacuation (N = 210)	75 (35.7%)		

*Yates' correction applied.

Table 3.15 indicates that there is a significant relationship between being abused before and during evacuation. That is, if you were abused before evacuation you were significantly more likely to be abused during evacuation.

Relationship between being abused before, during and after evacuation.

Chi-Square analyses were conducted to ascertain if there was a relationship between being abused before, during and after evacuation.

Table 3.16

Chi-Square of Abused Before with Abused During and After Evacuation.

		Abused after evacuation	χ^2	P
Not Abused before evacuation	Not abused during evacuation (N =135)	13 (9.6%)	8.03*	0.005
	Abused during evacuation (N =75)	19 (25.3%)		
Abused before evacuation	Not abused during evacuation (N = 10)	7 (70.0%)	1.000**	0.606
	Abused during evacuation (N = 25)	18 (72.0%)		

* Yates' correction applied.

** Fisher's exact test due to expected frequencies < 5.

Table 3.16 indicates that for those who were abused before evacuation, there was no significant difference between the rates of abuse during and after evacuation. For those who were not abused before evacuation there was a significant difference between the rates of abuse during and after evacuation.

That is, if you were not abused before evacuation but were abused during evacuation, you were significantly more likely to be abused after evacuation. Whereas, if you were abused before evacuation, there was no difference in the rate of abuse during and after evacuation.

3.5 Mediation Analyses

Regression Analyses to test for Mediation

In order to test for Mediation effects, analyses were carried out to ascertain whether:

1. IES-R (PTSD symptoms) mediated the relationship between Warex (war experiences) and GHQ (psychological morbidity).
2. IES-R (PTSD symptoms) mediated the relationship between Abuse and GHQ (psychological morbidity).
3. Attachment mediated the relationship between Abuse and GHQ (psychological morbidity).

To test for mediation, three regression equations need to be carried out (Baron and Kenny, 1986):

1. Regressing the mediator on the independent variable.
2. Regressing the dependent variable on the independent variable.
3. Regressing the dependent variable on both the independent variable and on the mediator.

Three conditions must be met in order for a variable to function as a mediator (Baron and Kenny, 1986). These conditions are:

1. The independent variable must affect the mediator in the first equation.
2. The independent variable must be shown to affect the dependent variable in the second equation.
3. The mediator must affect the dependent variable in the third equation.

The mediational model was tested using three regressions for each set of variables. Each analysis was conducted in a hierarchical manner with age, marital status and gender entered at the first step in order to control for their effects.

PTSD symptoms (IES-R) as a mediator between war experience (Warex) and psychological morbidity (GHQ).

Following Baron and Kenny (1986) 3 regressions were performed to test whether the relationship between war experience (Warex) and psychological morbidity (GHQ) was mediated by PTSD symptoms (IES-R):

- A. Independent variable (Warex) regressed on to the mediator (IES).
- B. Independent variable (Warex) regressed on to the dependent variable (GHQ).
- C. Independent variable (Warex) and mediator (IES) regressed on to the dependent variable (GHQ).

Table 3.17 Mediation Analysis – IES as mediator between Warex & GHQ

Predictor	Unstandardised Coefficients	Standardised Coefficients	sr^2
<u>A. Warex regressed onto IES</u>			
N = 307			
Gender**	7.28	0.15	0.02
Age***	-1.28	-0.19	0.03
Marital Status	1.02	0.05	<0.01
Warex***	1.65	0.22	0.04
<u>B. Warex regressed onto GHQ</u>			
N = 327			
Gender**	1.76	0.17	0.03
Age*	-0.20	-0.14	0.02
Marital Status	0.18	0.04	<0.01
Warex**	0.27	0.16	0.02
<u>C. Warex and IES regressed onto GHQ</u>			
N = 302			
Gender	0.73	0.07	<0.01
Age	-0.04	-0.03	<0.01
Marital Status	0.14	0.03	<0.01
Warex	0.07	0.04	<0.01
IES***	0.11	0.51	0.23

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

[sr^2 is the measure of individual contribution to R^2 , which is the overall variance explained, i.e. IES-R is explaining 23% of the variance in GHQ].

Table 3.17 indicates that:

- A. Warex is a significant predictor of IES-R. (Warex explains 4% of the variance in IES-R).
- B. Without IES-R included, Warex is a significant predictor of GHQ. (Warex explains 2% of the variance in GHQ).
- C. Warex is not significant when IES-R is included. IES-R explains 23% of the variance in GHQ.

These three regressions fulfil the criteria for mediation as described by Baron and Kenny (1986) and indicate that PTSD symptoms (IES) mediate the relationship between war experience (Warex) and psychological morbidity (GHQ).

PTSD symptoms (IES-R) as a mediator between abuse and psychological morbidity (GHQ).

Three regressions were performed, this time, to test whether the relationship between Abuse and psychological morbidity (GHQ) was mediated by PTSD symptoms (IES-R):

- A. Independent variable (Abuse) regressed on to the mediator (IES).
- B. Independent variable (Abuse) regressed on to the dependent variable (GHQ).
- C. Independent variable (Abuse) and mediator (IES) regressed on to the dependent variable (GHQ).

Table 3.18 Mediation Analysis – IES as mediator between Abuse & GHQ.

Predictor	Unstandardised Coefficients	Standardised Coefficients	sr^2
<u>A. Abuse regressed onto IES</u>			
N = 307			
Gender	6.04	0.12	0.01
Age	-0.73	-0.11	0.01
Marital Status	0.75	0.04	<0.01
Abuse***	17.10	0.36	0.12
<u>B. Abuse regressed onto GHQ</u>			
N = 327			
Gender**	1.54	0.15	0.02
Age	-0.12	-0.08	0.01
Marital Status	0.12	0.03	<0.01
Abuse***	2.15	0.21	0.04
<u>C. Abuse and IES regressed onto GHQ</u>			
N = 302			
Gender	0.69	0.06	<0.01
Age	-0.03	-0.02	<0.01
Marital Status	0.14	0.03	<0.01
Abuse	0.44	0.04	<0.01
IES***	0.11	0.50	0.20

*** p < 0.001 ** p < 0.01 * p < 0.05

Table 3.18 indicates that:

- A. Abuse is a significant predictor of IES-R. (Abuse explains 12% of the variance in IES-R).
- B. Abuse is a significant predictor of GHQ. (Abuse explains 4% of the variance in GHQ).
- C. Abuse is not significant when IES-R is included. IES-R explains 20% of the variance in GHQ.

These three regressions fulfil the criteria for mediation as described by Baron and Kenny (1986) and indicate that PTSD symptoms (IES) mediate the relationship between Abuse and psychological morbidity (GHQ).

Attachment as a mediator between Abuse and psychological morbidity (GHQ).

Three regressions were performed to test whether the relationship between Abuse and psychological morbidity (GHQ) was mediated by Attachment.

- A. Independent variable (Abuse) regressed on to the mediator (Attachment).
- B. Independent variable (Abuse) regressed on to the dependent variable (GHQ).
- C. Independent variable (Abuse) and mediator (Attachment) regressed on to the dependent variable (GHQ).

Table 3.19 Mediation Analysis – Attachment as mediator between Abuse & GHQ. (logistical regression was utilised for Abuse-Attachment as they are both categorical variables).

Predictor	B	Wald Test	95% CI for Odds Ratio	
<u>A. Abuse regressed onto Attachment</u>				
N = 325				
Gender	0.35	1.53	Lower 0.82	Upper 2.47
Age*	-0.09	5.53	0.84	0.98
Marital Status**		12.33		
Abuse***	1.12	18.30	1.84	5.16
Predictor	Unstandardised Coefficients	Standardised Coefficients	sr^2	
<u>B. Abuse regressed onto GHQ</u>				
N = 327				
Gender**	1.54	0.15	0.02	
Age	-0.12	-0.08	0.01	
Marital Status	0.12	0.03	<0.01	
Abuse***	2.15	0.21	0.04	
<u>C. Abuse and Attachment regressed onto GHQ</u>				
N = 318				
Gender*	1.64	0.16	0.02	
Age	-0.09	-0.06	<0.01	
Marital Status	0.08	0.02	<0.01	
Abuse**	1.84	0.17	0.02	
Attachment**	1.60	0.15	0.02	

*** p < 0.001 ** p < 0.01 * p < 0.05

Table 3.19 indicates that:

- A. Abuse is a significant predictor of Attachment. (Odds Ratio 3.08).
- B. Abuse is a significant predictor of GHQ. (Abuse explains 4% of the variance in GHQ).
- C. Abuse is less significant (2%) when Attachment is included. Attachment explains 2% of the variance in GHQ.

These three regressions fulfil the criterion for *partial* mediation as described by Baron and Kenny (1986). This means that Abuse predicts Attachment, Abuse predicts GHQ, and Attachment is acting as a partial mediator of Abuse on GHQ.

However, when a regression was conducted of Attachment and IES onto GHQ it was found that IES remained a significant predictor of GHQ ($B = 0.108$; $p < 0.01$) but Attachment no longer significantly predicted GHQ ($B = 0.624$; $p = 0.303$). This suggested that IES may be mediating the relationship between Attachment and GHQ and therefore further mediation regressions were conducted in order to ascertain if this was the case.

Also, as there were significant relationships between abuse and attachment and attachment and IES, another mediation regression was conducted to ascertain whether Attachment was mediating the relationship between Abuse and IES.

PTSD symptoms as mediator between Attachment and psychological morbidity (GHQ).

Three regressions were performed to test whether the relationship between Attachment and psychological morbidity (GHQ) was mediated by PTSD symptoms (IES-R):

- A. Independent variable (Attachment) regressed on to the mediator (IES).
- B. Independent variable (Attachment) regressed on to the dependent variable (GHQ).
- C. Independent variable (Attachment) and mediator (IES) regressed on to the dependent variable (GHQ).

Table 3.20 Mediation Analysis – IES as mediator between Attachment & GHQ.

Predictor	Unstandardised Coefficients	Standardised Coefficients	sr^2
<u>A. Attachment regressed onto IES</u>			
N = 298			
Gender*	5.75	0.12	0.13
Age	-0.69	-0.10	0.01
Marital Status	0.97	0.05	<0.01
Attachment***	15.57	0.30	0.09
<u>B. Attachment regressed onto GHQ</u>			
N = 318			
Gender**	1.65	0.16	0.02
Age	-0.12	-0.08	0.01
Marital Status	0.11	0.03	<0.01
Attachment***	2.30	0.21	0.04
<u>C. Attachment and IES regressed onto GHQ</u>			
N = 294			
Gender	0.91	0.09	0.01
Age	-2.31	-0.16	<0.01
Marital Status	8.14	0.02	0.01
Attachment	0.62	0.06	<0.01
IES***	0.11	0.50	0.21

*** p < 0.001 ** p < 0.01 * p < 0.05

Table 3.20 indicates that:

- A. Attachment is a significant predictor of IES-R. (Attachment explains 9% of the variance in IES-R).
- B. Attachment is a significant predictor of GHQ. (Attachment explains 4% of the variance in GHQ).
- C. Attachment is not significant when IES-R is included. IES-R explains 21% of the variance in GHQ.

These three regressions fulfil the criteria for mediation as described by Baron and Kenny (1986) and indicate that PTSD symptoms (IES-R) mediate the relationship between Attachment and psychological morbidity (GHQ).

Attachment as mediator between abuse and PTSD symptoms (IES-R).

A further three regressions were performed to test whether the relationship between Abuse and PTSD symptoms (IES-R) was mediated by Attachment.

- A. Independent variable (Abuse) regressed on to the mediator (Attachment).
- B. Independent variable (Abuse) regressed on to the dependent variable (IES).
- C. Independent variable (Abuse) and mediator (Attachment) regressed on to the dependent variable (IES).

Table 3.21 Mediation Analysis – Attachment as mediator between Abuse & IES. (logistical regression was utilised for Abuse-Attachment as they are both categorical variables).

Predictor	B	Wald Test	95% CI for Odds Ratio	
<u>A. Abuse regressed onto Attachment</u>				
N = 325				
Gender	0.35	1.53	0.82	2.47
Age*	-0.09	5.53	0.85	0.98
Marital Status**		12.33		
Abuse***	1.12	18.30	1.84	5.16
<u>B. Abuse regressed onto IES</u>				
N = 307				
Gender*	6.04	0.13	0.01	
Age*	-0.74	-0.11	0.01	
Marital Status	0.75	0.04	<0.01	
Abuse***	17.10	0.36	0.12	
<u>C. Abuse and Attachment regressed onto IES</u>				
N = 298				
Gender*	5.56	0.12	0.01	
Age	-0.51	-0.08	<0.01	
Marital Status	0.81	0.04	<0.01	
Attachment***	11.65	0.23	0.05	
Abuse***	13.98	0.29	0.08	

*** p < 0.001 ** p < 0.01 * p < 0.05

Table 3.21 indicates that:

- A. Abuse is a significant predictor of Attachment. (Odds Ratio = 3.08).
- B. Abuse is a significant predictor of IES. (Abuse explains 13% of the variance in IES).
- C. Abuse is less significant (8%) when Attachment is included. Attachment explains 5% of the variance in IES.

These three regressions fulfil the criterion for *partial* mediation as described by Baron and Kenny (1986). This means that Abuse predicts Attachment, Abuse predicts IES-R, and Attachment is acting as a partial mediator of Abuse on IES.

3.6 Path Analysis

A path analysis was undertaken in order to provide a framework for conceptualising the complex relationships between the key variables (see Figure 1). Regression analyses (controlling for Age, Marital Status and Gender) were conducted to ascertain the strength of the relationships between these variables.

A logistic regression of Evacuation on Abuse revealed that Evacuation was a significant predictor of Abuse ($\chi^2(6) = 29.55$; $p < 0.001$). That is, if you were evacuated you were significantly more likely to be abused.

A regression of Evacuation on war experience (Warex) revealed that Evacuation is a significant predictor of war experience ($F(4,332) = 5.05$; $p < 0.001$). That is, if you were evacuated you were more likely to have lower levels of war experience.

A regression of war experience (Warex) and Abuse on attachment revealed that Warex did not significantly predict attachment. Abuse did significantly predict attachment ($\chi^2(7) = 49.53$; $p < 0.001$). That is, levels of war experience did not affect your attachment style but higher levels of abuse significantly predict insecure attachment styles.

A regression of attachment on GHQ showed a significant relationship ($F(4,293) = 12.35; p < 0.001$). However, when attachment along with IES-R was regressed onto GHQ it was found that attachment was no longer significant. Only IES-R was a significant predictor of GHQ and acts as a mediator between attachment and GHQ.

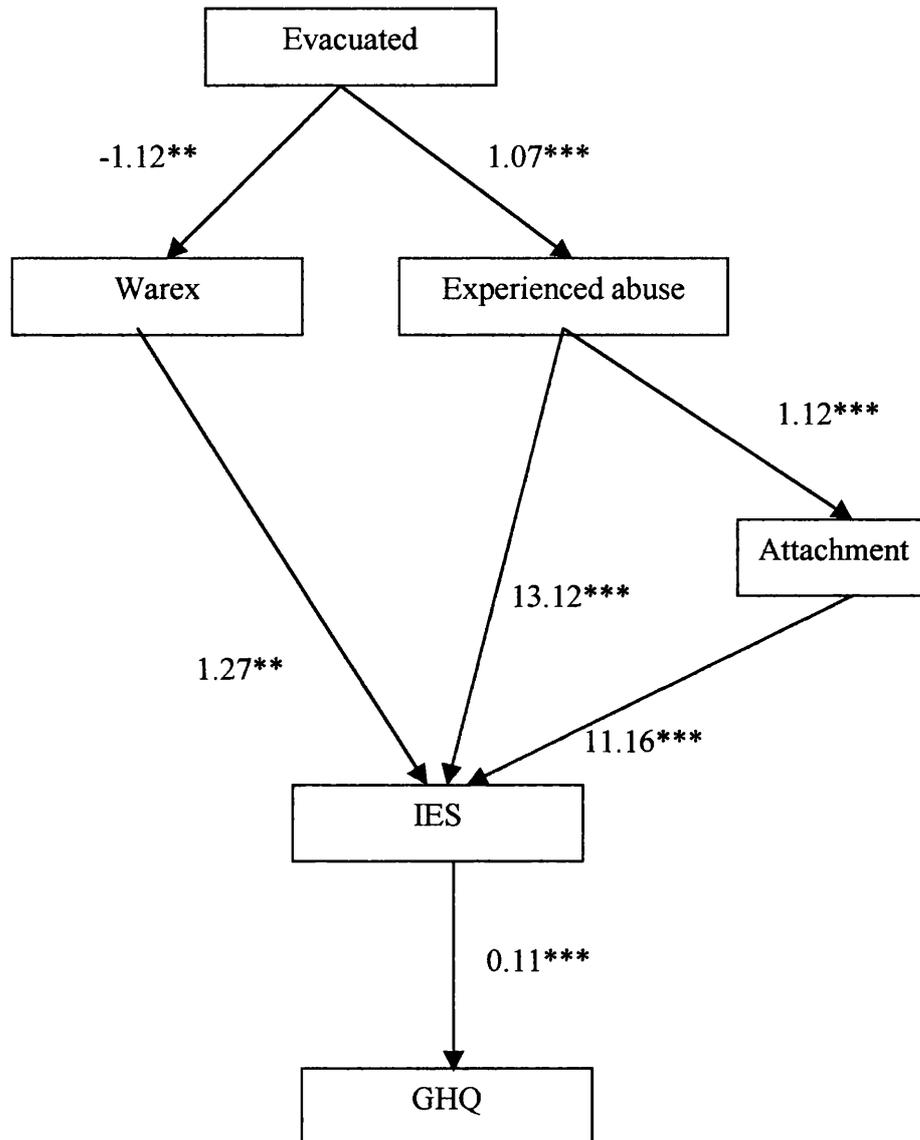
Therefore, a regression of war experience (Warex), experience of Abuse and Attachment on PTSD symptoms (IES-R) was conducted and revealed that Warex, Abuse and attachment are significant predictors of IES-R ($F(6,291) = 16.000; p < 0.001$).

A regression revealed that IES is a significant predictor of GHQ ($F(4,297) = 30.55; p < 0.001$). That is, the higher your scores on the scale of PTSD symptoms, the more likely you were to have higher levels of psychological morbidity.

See Figure 1 below -

Figure 1 Path Analysis

Analyses were conducted to ascertain the strength of the relationships between the main variables. Path coefficients are controlling for Age, marital status and gender.



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

3.7 Summary of mediation and path analyses.

- Evacuation is negatively related to war experience.
- Evacuation is positively related to experience of Abuse.
- Attachment partially mediates the relationship between Abuse and IES.
- Both War Experience and Abuse are positively related to IES.
- IES mediates the relationship between Abuse and GHQ.
- IES mediates the relationship between Attachment and GHQ.
- IES mediates the relationship between war experience and GHQ.
- IES is positively related to GHQ.

Therefore, the data suggests that -

1. If you were evacuated you were likely to have lower levels of war experiences but you were more likely to have experienced abuse.
2. Higher levels of war experiences predicts higher levels of PTSD symptomatology.
3. Higher levels of abuse predicts higher levels of PTSD symptomatology.
4. Higher levels of PTSD symptomatology predicts higher levels of psychological morbidity.
5. Higher levels of abuse were associated with higher levels of insecure attachment.
6. Higher levels of insecure attachment is associated with higher levels of PTSD symptoms.
7. The relationships between war experience and psychological morbidity, Abuse and psychological morbidity and Attachment and psychological morbidity are all mediated by PTSD symptoms.

4. Discussion

It appears that the events of World War Two, including evacuation, had a major impact on those who were children at the time and continues to affect their lives even now, sixty years on. Those who were children during World War Two are likely to have been exposed to events that are not generally experienced by children in peace-time. As previously described, children during the war were likely to have experienced air-raids and the subsequent death and destruction, evacuation from their families and attachment figures and possible increased risk of abuse. The aim of this study was to ascertain whether any long-term psychological difficulties could have developed as a result of these experiences and to examine possible mechanisms by which these could be explained.

It was hypothesised that there would be a relationship between traumatic war experiences in childhood and current psychological morbidity. The data showed that those who were not evacuated had higher levels of war experiences than those who were evacuated. This seems logical in that evacuees were moved away from areas of high risk to areas that were regarded as safer from air raids. Therefore, those left behind in high risk areas were more likely to have experienced air-raids and their aftermath. Analysis of the data revealed that those with higher levels of exposure to war experiences as measured by the War Related Experiences Questionnaire (Warex) did have higher levels of psychological morbidity as measured by the General Health Questionnaire (GHQ). However, this relationship was mediated by PTSD symptoms as

measured by the Impact of Event Scale-Revised (IES-R). This suggests that it is not the traumatic event itself that is affecting current psychological morbidity, but rather the ability to process the event to adaptive completion (see Horowitz, 1976).

The fact that the war experiences of this population are related to psychological distress supports the (roughly contemporary) findings by Aubrey (1941), who found that following air-raids during WWII, psychological symptoms were aggravated in those persons who had experienced damage to home or absence of domestic shelter. Also, Janis (1951) reviewed the impact of air-raids during WWII on civilian populations and found that the effects were proportional to the level of death and destruction experienced. Several previous studies have also found that war-related experiences could trigger post-traumatic stress reactions in children (see Arroyo & Eth, 1984; Dyregrov & Raundalen, 1987). Exposure to violence and trauma was found to be associated with increased post-traumatic stress disorder (PTSD) symptoms when children exposed to such events were compared with children from the same culture who were protected from war violence (Espino, 1991; Sack et al., 1994).

The IES-R measures the distress caused by the impact of traumatic events and also taps dimensions that parallel the defining characteristics of PTSD in DSM-IV, i.e., hyperarousal and the cognitive variables of intrusion and avoidance. The finding that, in this population, war experience is related to psychological morbidity, but that this relationship is mediated by PTSD symptoms, supports previous research which has indicated similar mediation by cognitive variables (e.g. McFarlane, 1992; Robbins &

Hunt, 2001, Waugh, 1997). This finding also fits in with the cognitive processing model of trauma, which proposes that a person enters a situation with pre-existing schemata about the nature of the world, their belief systems and expectations regarding the future (Hollon & Kriss, 1984). Thus, for recovery to occur, the individual must process the traumatic experience such that the new inconsistent information is resolved and incorporated into the person's schemata via a process of adaptation (Horowitz, 1976). Therefore, those who are still distressed by their traumatic experiences are those that have been unable to cognitively restructure these experiences.

That these effects should still be found in this population sixty years after the traumatic events supports previous research into the long-term detrimental effect of war trauma. For example, Hunt & Robbins (2001) in a study of WWII combat veterans, Op den Velde et al., 1990 in a study of Dutch resistance fighters in WWII and Waugh (1997) in a study of women's experiences of WWII.

Following anecdotal evidence in the historical literature, it was hypothesised that there would be significantly higher rates of childhood abuse experienced by evacuees than non-evacuees. Analysis of the data revealed that evacuees were significantly more at risk of being abused than non-evacuees. When each type of abuse was looked at individually, it was found that evacuees were significantly more at risk of emotional abuse, sexual abuse and neglect than were non-evacuees. However, there was no significant difference in risk of physical abuse between evacuees and non-evacuees. This could be explained by the difference in perception of what constitutes physical

abuse. What is considered as physical abuse today, may have been considered “discipline” sixty years ago.

That evacuees were significantly more at risk of abuse than non-evacuees supports the research of Parsons (1998) and Parsons and Starns (1999) which used documentary and oral history testimonies. They noted that significant numbers of ex-evacuees talked about their experiences of abuse whilst evacuated and yet this phenomena had not been documented elsewhere.

Of those who were evacuees and had suffered abuse, it was found that if you were abused before evacuation you were significantly more likely to be abused during evacuation. For those who were abused before evacuation, there was no significant difference between the rates of abuse during and after evacuation. For those who were not abused before evacuation there was a significant difference between the rates of abuse during and after evacuation. That is, if you were not abused before evacuation but were abused during evacuation, you were significantly more likely to be abused after evacuation. Whereas, if you were abused before evacuation, there was no difference in the rate of abuse during and after evacuation. This would fit with the literature on childhood abuse which shows that victims of abuse are at higher risk of being re-victimised (see Herman, 1995).

It was also hypothesised that there would be significantly higher rates of psychological morbidity in those who experienced childhood abuse than those who were not abused. Analysis of the data revealed that there were significantly higher levels of psychological morbidity in those that had been abused than those who had not. However, this relationship was found to be mediated by levels of PTSD symptoms as measured by the IES-R.

This suggests that, as with war experiences it is not the trauma of the abuse itself that is affecting current psychological morbidity, but rather the ability to process these events to adaptive completion (Horowitz, 1976). Alternatively, the childhood sexual abuse (CSA) literature suggests that, rather than an inability to process traumatic memories into existing schemata, CSA more often leads to over-integration into existing interpersonal schemata and contributes to schema development and maintenance from a young age (Finkelhor, 1987; Young, 1990).

These findings support previous childhood abuse research, which suggests that abuse has a strong relationship to long-term psychological functioning. For example, physical abuse and/or neglect has been associated with a large number of interpersonal, cognitive, emotional, behavioural and substance abuse problems as well as psychiatric disorders and increased mental health services utilisation (Garland et al., 1996).

Emotional abuse has been found to be a strong predictor of an array of problems including internalising and externalising behaviours, social impairment, low self-esteem and suicidal behaviour, as well as current and previous psychiatric diagnoses and

hospitalisations (McGee et al., 1997; Mullen et al., 1996; Vissing et al., 1991).

Childhood sexual abuse (CSA) has been found to have numerous psychological sequelae including depression, sexual disorders (Brown and Finkelhor, 1986), low self-esteem and feelings of “badness” and “shame” (Herman, 1992). Also, post-traumatic stress disorder symptoms such as dissociation, re-experiencing the trauma, autonomic arousal and emotional numbing have been repeatedly identified in CSA victims (Kuyken, 1995).

It was hypothesised that those who were evacuated away from their parents would have less secure attachment styles in adulthood. It was found that in this population, there was no significant relationship between Evacuation and Attachment. However, there was a significant relationship between Evacuation and Abuse and between Abuse and Attachment. This would indicate that if you were evacuated, you were at higher risk of abuse (as described above) and if you were abused you were significantly more likely to develop an insecure attachment style.

Foster (2000) in a study of a population from the same cohort found a weak but significant relationship between evacuation and attachment styles. However, it was also noted that almost 15% of respondents in the sample of former evacuees mentioned incidents of abuse whilst evacuated (this information was unsolicited), but such incidents were not reported by any respondents in the comparison non-evacuees group. It could be therefore, that the association found by Foster between evacuation and attachment was actually being mediated by abuse but this information had not been

specifically measured. The difference in these findings may also in part be explained by the larger sample size in this study (341 compared to 217).

The fact that there are significant relationships between evacuation and abuse, and abuse and attachment suggests that it was not the evacuation away from family itself that affected security of attachment but how people were treated when they were evacuated, i.e. the increased risk of being abused. That abuse affects attachment style has been identified in previous research, for example, Cicchetti and Barnett (1992) found that abused infants may develop insecure (particularly disorganised) patterns of attachment which may lead to later peer rejection and for intimate relationships to be marked by revictimisation or the victimising of others. Also, Alexander et al. (1998) examined childhood sexual abuse in relation to adult attachment in a sample of ninety-two women who had experienced CSA by a perpetrator living in their own home. They found that sixty per cent of the women had avoidant attachment styles and only nine per cent had secure attachment styles. This compared with fifteen percent avoidant and fifty-seven percent secure within a normative sample. It was also found that insecure, avoidant attachment was more predictive of distress, interpersonal dysfunction and depression than CSA severity, suggesting that the relationship between abuse and psychological morbidity may be mediated by the meaning ascribed to intimate relationships learned within a dysfunctional family context.

No previous research into the long-term effects of childhood sexual abuse on this cohort has been identified and therefore it is not possible to compare the rates of abuse reported

in this study. Also, there seems to be little known about the psychological impact of childhood abuse as people age. Bergstrom-Walan (1997) describes case studies where elderly people were still suffering serious distress resulting from experiences of sexual abuse in childhood and who were helped with psychotherapy. However, as previously described, long-term effects of war trauma on combat veterans and civilians suggests that the effects of earlier trauma can increase as people age (e.g. Hunt, 1997; Davies, 2001).

It was hypothesized that insecure attachment will lead to higher rates of psychological morbidity. It was found that there was a significant relationship between attachment and psychological morbidity but that this relationship was mediated by PTSD symptoms as measured by the IES-R. This would suggest that attachment style may impact on a person's ability to process traumatic experiences and is therefore less able to cognitively restructure these experiences.

Hazan and Shaver (1987) found that an individual's attachment style may impact on their ability to relate to other people and that this may therefore affect their perception of the availability or quality of their social support (Florian et al., 1995). This may influence the protective nature of social support during stressful times. Social support has been found to have a modulating effect on symptom development following trauma. The availability of social support is thought to affect the appraisal of a stressor and the ability to cope with it. Various studies have found that social support is related to psychological and physical health outcomes (e.g., House, Robbins and Metzner, 1982;

Billings & Moos, 1982). Horowitz and Stinson (1994) found that social supports sustain a person through the emotional turbulence following a trauma, and Farhood et al. (1993) found that social support was effective for sustaining families during war. Lack of social support can lead to a victim becoming isolated or detached (Loo, 1993) and recovery from PTSD has been linked to increased social support (e.g. Solomon et al., 1990). Foster (2000) found that satisfaction with social support mediated the relationship between attachment style and psychological wellbeing, such that people with secure attachment styles expressed greater levels of satisfaction with their social support and reported higher levels of psychological wellbeing.

It is also interesting to note that participants who were divorced/separated scored almost twice as highly on measures of PTSD symptoms and psychological morbidity, than those who were either married, single or widowed. They were also much more likely to have insecure attachment styles. It is not possible to know the direction of the relationship, but in accordance with the literature, it may suggest that the psychological difficulties resulting from early traumatic experiences and the interpersonal relationship problems of insecure attachment styles, may mean a higher rate of marital breakdown. This is an area which would benefit from further investigation.

The path analysis provides a model for how the key variables may relate to each other and the comparative strength of these relationships. In summary, it appears that if you were not evacuated you were at higher risk of war related experiences such as air-raids and that the impact of these experiences may be affecting current psychological

morbidity, mainly due to a failure to process the traumatic events to adaptive completion. The relationships between the variables of abuse, attachment and PTSD symptoms, and current psychological morbidity are complex. It appears that if you were evacuated, you were at higher risk of being abused and the impact of this abuse may have affected your attachment style (and therefore the subsequent availability of social support). Both abuse and attachment style affect current psychological morbidity through the intervening variable of PTSD symptoms. This would suggest that those with insecure attachment styles may have less social support and that this may have made it more difficult to overcome traumatic symptoms. Ultimately, in this study, it appears that current psychological morbidity is affected by PTSD symptoms and that these symptoms reveal a failure to process traumatic events experienced as a child during the second world war.

The finding that symptoms of PTSD as measured by the IES-R seems to mediate the relationship between trauma and current psychological morbidity supports previous research which has indicated mediation by cognitive variables (e.g. Creamer et al, 1992; Robbins & Hunt, 1993). However, McFarlane (1992) suggests that onset of disorder is not simply due to the magnitude of the traumatic event or the failure of adaptive completion, but rather that these cognitions initiate a further process of symptom formation in people with a family history of psychiatric illness and neuroticism. Ehlers & Clark (2000) suggest that psychological morbidity persists when individuals process the trauma in a way that leads to a sense of serious, current threat. This sense of threat arises as a consequence of excessively negative appraisals of the trauma and/or its

sequelae and a disturbance of autobiographical memory characterised by poor elaboration and contextualisation, strong associative memory and strong perceptual priming. It is also suggested that a series of problematic behavioural and cognitive strategies prevent changes in the negative appraisals and the memory of the trauma.

It should also be noted that it is possible that there are other variables, relationships and pathways that could describe the findings of this study. For example, it could be argued that attachment is a key variable in providing a resilience factor to children prior to their evacuation and that therefore attachment could be put at the start of the pathway. This could suggest that those who were already securely attached prior to evacuation would cope with the separation from their primary caregiver more successfully (Fonagy, et al, 1994) and would therefore have less long-term negative effects. This possibility requires further investigation

4.1 Limitations of the study

As participants were recruited through advertisements, it is possible that biases may have occurred. For example, it is possible that using members of the Evacuee Reunion Association (ERA) as a target sample may produce biases in recruitment in that these people may remember their evacuation experiences more favourably or consider them more important than those people who are not members. Also, membership of the ERA could be associated with particular ways of coping with difficult experiences whilst evacuated. For example, people who utilise avoidance as a coping strategy to deal with unpleasant experiences may be less likely to join an association such as the ERA. The

sample of people that respond to an advertisement may be unrepresentative of the total population that were evacuated as people who respond to a request for volunteers may be more motivated than those who do not respond. Also, people who are less literate may be underrepresented. These potential biases may influence the generalisability of the results of this study and therefore its external validity.

The same biases may well be present for the comparison group as they too were mainly recruited through advertisement. Therefore respondents may be those that consider their experiences more significant than those who do not respond and may therefore be more motivated to take part than non-respondents. Also, respondents are likely to be more literate because of the method of recruitment and the prospect of completing questionnaires. Again, people who utilise avoidance as a coping strategy may be less likely to volunteer to participate. Also, data was not collected on the location of non-evacuees and it may be that those who responded were those who were in high risk areas such as London. Non-evacuees that lived in rural areas may have had quite a different experience and it would have been useful to have recruited such a group for the sake of comparison. However, it did prove more difficult to recruit non-evacuees because they are not a homogenous group and do not have any Associations that unite or act as a focal point for them, as the Evacuees do (Evacuee Reunion Association).

It should also be noted that some people who experienced childhood adversity would have survived these experiences without developing psychological morbidity and may even have become stronger as a result. For example, Waugh (1994) found that some

women survivors of WWII regarded their experience as a reinforcing, positive contribution to the rest of their lives. This fits with the literature on childhood resilience which suggests that particular attributes of the individual, family and environment are protective against maladjustment in the face of childhood adversity. Unfortunately, it was beyond the scope of this study to consider all these individual factors and this should therefore be an area for future research on this cohort.

Due to cost and time restrictions, information was only collected using postal questionnaires. These consisted of mostly closed questions which has the advantage of providing responses that are easier to analyse, quantify and compare across respondents. However, this has the disadvantage of forcing people into what may seem to them an unnatural reply, people may understand the questions differently and they have no opportunity to qualify their answers or to explain their opinions more precisely (Sheatsley, 1983). It would therefore have been useful to follow-up the questionnaires with a number of semi-structured interviews to enable a deeper understanding of the nature of the experiences and to be able to elucidate or explore the quantitative findings further (Barker, Pistrang and Elliot, 1994).

Another problem with questionnaire studies are issues related to the suitability of the measures used. The General Health Questionnaire has four sub-scales which measure somatic symptoms, anxiety and insomnia, social dysfunction and severe depression. It has been criticised for its use with older adults because of the general increase in somatic symptoms as people age. A large Health and Lifestyle survey (Cox et al.,

1987) did show a rise in scores in the group of people over the age of 75 years.

However, this is older than the population of this study.

The Impact of Events Scale could be problematic used in this context as it is completed after filling in other questionnaires regarding war experiences and this may affect the way in which people complete the scale as their memories of these experiences will have already been stimulated. However, in a similar study of combat veterans, Robbins and Hunt (1996) found that IES was an appropriate measure for the assessment of the long-term effects of combat-related trauma. The trauma experienced by their sample had occurred 40-50 years previously. They found that both intrusion and avoidance factors successfully predicted levels of psychological distress. It should be noted that there are other, more appropriate measures of PTSD for diagnosis purposes such as the SCID (Spitzer et al, 1996) which is a structured clinical interview. However, the IES has not been used in this study for diagnostic purposes and it has been shown to be an effective measure in research contexts (Briere & Elliott, 1998).

The Adult Attachment Styles Questionnaire (Hazan & Shaver, 1987) is short, easy to administer and has face validity. However, it is a rather crude measure and is based on a categorical model of attachment which assumes that variation within one category is not important. A more appropriate measure for attachment would be the Adult Attachment Interview which is described as “a rich and well-validated measure, especially for the study of current representations of early attachment relationships” (Crowell et al. (1999). The AAI overcomes the problems associated with the self-report

questionnaires but its major drawback is the expense, time and economic cost involved in administration and scoring.

Another issue that needs consideration is that of sample size. There was an enthusiastic response to this study which has resulted in a large sample size. This generally allows for the ability to separate out the variance associated with the effects of interest from the variance due to errors of sampling and measurement and thus avoids missing an effect which is in fact present (false negative). However, with a large sample size it is possible that an effect may be detected when in fact none exists (false positive) and therefore this needs to be taken into account when considering the results of this study.

Finally, the events to which the study relates took place over sixty years ago and it is possible that there may therefore be inaccuracies resulting from memory recall. People who were very young during the war may have particular difficulty in remembering details about the experience. However, the key outcome variables measuring the Impact of Events (IES-R) and measuring current psychological morbidity (GHQ) refer to how people have felt in the past seven days (IES-R) or past few weeks (GHQ) and are therefore unlikely to be affected by memory recall. The measure of attachment is also a current time measure.

4.2 Clinical Implications

It appears that a significant number of people who were children during the war will have current psychological problems related to those experiences. Both evacuees and non-evacuees could be affected but for different reasons. Evacuees may be more likely to have suffered some form of abuse (emotional, sexual or neglect) whereas non-evacuees may be more likely to have suffered traumatic war related experiences (such as air-raids and their aftermath).

Given the current age of people who were children during the war (60 to 75 years), these findings are likely to be relevant to services for older adults. Therefore the fact that a significant number of people who have current psychological morbidity which may be related to their childhood experiences could have important implications for the current mental health treatment of this age-group, and health-care professionals should be made aware of this possibility. For example, Kahana et al. (1988) point out that the meaning of reminiscence would be substantially affected in the case of older persons who underwent extreme psychic trauma during earlier points in their lives. It may be that reminiscence would not provide the same sort of psychological outlet to traumatised groups as it does to less highly stressed groups.

The perceived importance of major events such as childhood experiences during the war could increase as people age. It is possible that as people get older, are less busy, children move away, and they retire from work, this may mean they have less distraction and less social support both from family and work colleagues. Also the life

review is a recognised psychological mechanism in the latter part of life (Butler, 1963). This involves surveying and reflecting on one's life in order to provide insight into the past and resolve old conflicts, thereby enabling a sense of coherence and wholeness.

There may also be physical and cognitive changes associated with the ageing process which may mean that previously successful coping strategies are no longer as effective. It is known that elderly individuals in residential homes suffer from feelings of frustration and helplessness and Kahana et al. (1988) note that there are certain parallels about the frailty, vulnerability and dependency of late life that may awaken memories of life threatening traumas.

The findings suggest that clinicians should always consider enquiring about whether a person who was a child during the war might have had any of the identified traumatic experiences, and whether these relate to the presenting problems. There is some evidence that this may not be a topic that emerges routinely in psychological assessment or treatment, and might even be avoided (e.g. Davies, 1997). Hunt et al.(1997) points out that there is a reluctance by survivors and society in general to talk about and hear accounts of traumatising experiences and the distressing impact they have had. Both talking and listening means opening oneself to both feelings and thoughts of frightening events and this can be distressing for the survivors and for those who listen to their stories and it is therefore often avoided.

The recently published National Service Framework for Older People states that effective diagnosis is important because too often mental health problems can be perceived by older people and their families, as well as by professionals, as an inevitable consequence of ageing, rather than health problems which will respond to treatment. This leads to widespread under-detection of mental illness in older people, especially depression. Standard seven of the NSF states that older people who have mental health problems should have access to integrated mental health services, provided by the NHS and councils, to ensure effective diagnosis, treatment and support, for them and for their carers. It is therefore essential for clinicians working with older adults to be aware of the possibility of long-term psychological implications of early trauma in order to be able assess, formulate and treat psychological problems effectively.

A variety of treatment approaches have been developed that can help older people who are still struggling with the consequences of earlier traumatic experiences (see Hunt et al., 1997). These approaches can include developing a relationship of trust, confidence and security in clients as these elements are undermined by traumatic events and for many survivors the damage has not been repaired. The value of peer support is described by Fried and Hassan (1997) as a way of setting a solid foundation of confidence and security. Bergstrom-Walan (1997) utilised the development of a relationship in counselling or psychotherapy, and Coleman and Mills (1997) point to the possibility that the way in which physical care is provided in residential settings can help to rebuild trust and self-confidence. Robbins (1997), Crocq (1997) and Davies

(1997), all describe ways in which they structure their time with clients to enable the story to be told. It is recognised that structure is necessary for maintaining focus and for identifying and clarifying treatment goals. The recounting and restructuring of traumatic experiences in a realistic form are considered essential to many clients who may never have been listened to before and a necessary part of the process of “moving on” in psychological and social terms. For some people however, confronting what has happened to them is not an option they wish to take. Therefore ways of containing rather than resolving their difficulties are utilised in order to avoid the worst of the stress and pain they are suffering by strengthening their defences (e.g. Brainin and Teicher, 1997).

The fact that attachment may be an issue for some people suggests that the therapeutic relationship could be of particular significance to the individual’s self-concept, and may play a role in any therapeutic gain. Therefore ending of therapy may need to be handled sensitively in order to avoid issues of abandonment and some people may need longer term supportive psychotherapy as described by Holmes (1996).

4.3 Conclusions and Future Research

This study has produced a number of very interesting findings which suggest that a significant proportion of those who were children during the second world war may still be suffering the consequences of traumatic experiences sixty years on. The relationship between experiences of war related trauma, childhood abuse and attachment on current psychological morbidity were found to be mediated by PTSD symptoms in this sample. However this is a preliminary study in an under-researched area and therefore further studies are needed in order to be confident of the findings.

Data on other aspects of childhood experiences of the second world war has been collected in the course of this research. It is beyond the scope of this study to include all of this information but further analyses are planned for the future. For example, information such as qualitative data from open-ended questions is available as well as further information about evacuation and abuse experiences and demographic information such as whether participants are retired or not and if they have ever utilised psychological therapy. It would also be beneficial for a qualitative analyses of in-depth interviews to be undertaken with a sub-sample of this population in order to develop a broader understanding of the issues and to explore the quantitative findings further. The evidence from the current study suggests that the relationship between early traumatic experiences and long-term psychological morbidity is mediated by cognitive variables of intrusion and avoidance and by hyperarousal. The cognitive processing of traumatic events may be affected by many possible variables including personality, attachment, social support, the type of stressor and prior vulnerability to psychological

disturbance. Further research should be conducted into these variables to ascertain their contribution to the process of adaptive completion and/or psychological disorder.

It appears that childhood experiences of world war two are still very pertinent to many people. Investigation of the psychological sequelae of negative war-time experiences has been neglected until recently but there are now indicators that there may be implications for the current mental health treatment of this age-group and health-care professionals need to be aware of this possibility.

References

- Adler, A. (1943). Neuropsychiatric Complications in Victims of Boston's Cocoanut Grove Disaster. *Journal of the American Medical Association*. 123:1098-1101.
- Ainsworth, M. D., Blehar, M., Waters, E., and Wall., (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillside, NJ: Erlbaum.
- Alexander, P.C. (1992). Application of attachment theory to the study of sexual abuse. *Journal of Consulting and Clinical Psychology*, 60(2), 185-195.
- Alexander, P.C., Anderson, C.L., Brand, B., Schaeffer, C.M., Grelling, B.Z and Kretz, L. (1998). Adult attachment and long term effects in survivors of incest. *Child Abuse and Neglect*. 22(1), 45-61.
- American Psychiatric Association (1980). *Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition*. Washington, DC: American Psychiatric Association.
- American Psychiatric Association (1987). *Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition(Revised)*. Washington, DC: American Psychiatric Association.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition*. Washington, DC: American Psychiatric Association.
- Arroyo, W., & Eth, S. (1984). Children traumatised by Central American Warfare. In S. Eth and R. Pynoos (Eds.), *Posttraumatic stress disorder in children*. 101-120. Washington DC: American Psychiatric Press.
- Aubrey, L. (1941). *Incidence of Neurosis in England under War conditions*. *Lancet*, 2, 175-183.
- Babbington, A (1983). *For the Sake of Example: Capital Courts-Martial, 1914-1920*. London: Leo Cooper.
- Banks, M. H. (1983). Validation of the General Health Questionnaire in a young community sample. *Psychological Medicine*, 13, 349 – 353.
- Barker, C., Pistrang, N. and Elliot, R. (1994). *Research Methods in Clinical and Counselling Psychology*. Chichester: Wiley.
- Barnett House Study Group (1947). *London Children in Wartime Oxford: A survey of social and educational results of evacuation*. London: Oxford University Press.

- Baron, R. M. and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1171 – 1182.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 147-178.
- Bartholomew, K. and Shaver, P. R. (1998). Measures of Attachment: Do they converge? In Simpson, J. A. and Rholes, W. S. (Eds.) *Attachment Theory and Close Relationships*. New York: Guilford Press.
- Beck, A.T., Rush, A.J., Shaw, B.F. and Emery, G. (1979). *Cognitive Therapy for Depression*. Guilford Press: NY.
- Bergstrom-Walan, Maj-Briht. (1997). Psycho-Sexual Therapy with Elders. In Hunt, L., Marshall, M., and Rowlings, C. (Eds). *Past Trauma in Late Life*. Jessica Kingsley Publishers Ltd.
- Billings, A.G. & Moos, R.H. (1982). Stressful Life Events and Symptoms: A Longitudinal Model. *Health Psychology*, 1. 99-117.
- Bolger, K.E., Patterson, C.J., Kupersmidt, J.B. (1998). Peer relationships and self esteem among children who have been maltreated. *Child Development*, 69 1171-1197.
- Boothby, N. (1988). Unaccompanied children from a psychological perspective. In Ressler, E., Boothby, N. and Steinbock, D. (Eds). *Unaccompanied Children*. New York: Oxford University Press.
- Bowlby, J. (1940) Psychological Aspects. In: Padley, R. and Cole, M. (Eds) *Evacuation Survey: A report to the Fabian Society*. London: Routledge.
- Bowlby, J. (1969). *Attachment and Loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and Loss: Vol. 2. Separation*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and Loss: Vol. 3. Loss*. New York: Basic Books.
- Brainin E. and Teicher, S. (1997). Time heals no wounds. In Hunt, L., Marshall, M. and Rowlings, C., (Eds.). *Past Trauma in Late Life*. Jessica Kingsley Publishers.
- Bremner, J.D. (1996). Psychometric review of Early Trauma Inventory. in B.H. Stamm (Ed.). *Measurement of stress, trauma and adaptation*. Lutherville, MD: Sidran Press.

- Breslau, N. (1990). Stressors: Continuous and discontinuous. *Journal of Applied Social Psychology*, 20(20), 1666-1673.
- Breslau, N & Davis, G.C.D. (1987). Post-traumatic stress disorder: The stressor criterion. *Journal of Nervous and Mental Disease*, 175, 255-264.
- Bretherton, I. (1995). Attachment theory and developmental psychopathology. In D. Cicchetti & S. Toth (Eds.), *Emotion, cognition, and representation. Rochester symposium on developmental psychopathology* (Vol.6, pp 231-260). Rochester, NY: University of Rochester Press.
- Brewin, C., Dalgleish, T. & Joseph, S. (1996). A dual representation theory of post-traumatic stress disorder. *Psychological Review*, 103, 670-686.
- Briere, J and Runtz, M. (1987). Post sexual abuse trauma: Data and implications for clinical practice. 2, 367-379.
- Briere, J. & Elliott, D.M. (1998). Clinical Utility of the Impact of Event Scale: Psychometrics in the General Population. *Assessment*, 5(2) 171-180.
- Brown, A. & Finkelhor, D. (1986). Impact of child sexual abuse: a review of the research. *Psychological Bulletin*, 99(1), 66-77.
- Brown, G. W. and Harris, T.O. (1993). Aetiology of anxiety and depressive disorders in an inner city population 1: Early adversity. *Psychological Medicine*, 23, 143 – 154.
- Burbach, D. J. and Bourduin, C. M. (1986). Parent-child relations and the etiology of depression: A review of methods and findings. *Clinical Psychology Review*, 6, 133 – 153.
- Butler, R. N. (1963). The life review: An interpretation of reminiscence in the aged. *Psychiatry*, 26, 65 – 76.
- Cahill, C., Llewelyn, S.P. & Pearson, C. (1991). Long-term effects of sexual abuse which occurred in childhood: A review. *British Journal of Clinical Psychology*, 30, 117-130.
- Calder, A. (1969). *The People's War: Britain 1939-45*. London: Pimlico Books.
- Cicchetti, D. & Barnett, D. (1992). Attachment organisation in maltreated pre-schoolers. *Dev.Psychopathol.* 3:397-411.
- Cicchetti, D. (1989). Developmental psychopathology: some thoughts on its evolution. *Development and Psychopathology*, 1, 1-4.

- Claussen, A.H. & Crittenden, P.M. (1991). Physical and psychological maltreatment: relations among types of maltreatment. *Child Abuse & Neglect* 15: 5-18.
- Cloitre, M., Scarvalone, P. and Difede, J. (1997). Posttraumatic stress disorder, self and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress*, 10(3), 437-452.
- Cohen, S. and Wills, A.T. (1985). Stress, Social Support and the buffering Hypothesis. *Psychological Bulletin*. 98(2), 310-357.
- Cohler, B.J., Stott, F.N. & Musick, J. (1993). *Vulnerability, resilience and response to personal adversity: cultural and developmental perspectives*. Maddison, Connecticut: International University Press.
- Coleman, P.G. and Mills, M.A. (1997). Listening to the story. In Hunt, L., Marshall, M. and Rowlings, C., (Eds.). *Past Trauma in Late Life*. Jessica Kingsley Publishers.
- Coleman, P. G. (1994). Reminiscence within the study of ageing: the social significance of story. In Bornat, J. (Ed.) *Reminiscence Reviewed*. Milton Keynes: Open University Press.
- Cox, B., Blaxter, M., Buckle, A., Fenner, N. P., Golding, J., Gore, M., Huppert, F., Nickson, J., Roth, M., Stark, J., Wadsworth, M., and Wichelow, M. (1987). *The Health and Lifestyle Survey*. Cambridge: Health Promotion Research Trust.
- Creamer, M. (1995). A cognitive processing formulation of posttrauma reactions. In RJ Kleber, CR Figley & BPR Gersons (Eds). *Beyond Trauma: Cultural and Societal dynamics*. New York: Plenum Press.
- Creamer, M, Burgess, P & Pattison, P (1992). Reaction to trauma: A cognitive processing model. *Journal of Abnormal Psychology*. 101(4). 452-459.
- Crocq, L. (1997). The Emotional Consequences of War 50 Years On. A Psychiatrists Perspective. In Hunt, L., Marshall, M., and Rowlings, C. (Eds.) *Past Trauma in Late Life: European Perspectives on Therapeutic Work with Older People*. London: Jessica Kingsley.
- Crowell, J.A., Fraley, R. C. & Shaver, P.R. (1999). Measurement of Individual Differences in Adolescent and Adult Attachment. In Cassidy, R. & Shaver, P.R. (Eds). *Handbook of attachment: theory, research and clinical applications*. The Guildford Press.

- Curran, P.S., Bell, P., Murray, G., Loughrey, G., Roddy, R., & Roche, L.G. (1990). Psychological consequences of the Enniskillen bombing. *British Journal of Psychiatry*, 156, 478-482.
- Davidson, L M & Baum, A (1993). Predictors of chronic stress among Vietnam veterans: Stressor exposure and intrusive recall. *Journal of Traumatic Stress*. 6(2), 195-212.
- Davies, S. (2001). The long term psychological effects of wartime experiences on older adults. *Aging & Mental Health*, 5,2, 101-105.
- Davies, S. (1997). We'll meet again: The long-term psychological effects on, and intervention with, UK Second World War evacuees. In Hunt, L., Marshall, M., and Rowlings, C. (Eds.) *Past Trauma in Late Life: European Perspectives on Therapeutic Work with Older People*. London: Jessica Kingsley.
- De Loos, W.S. (1990a). Psychosomatic manifestations of chronic posttraumatic stress disorder. In M.E.Wolf & A.D. Mosnaim, (Eds). *Posttraumatic Stress Disorder: Etiology, Phenomenology and Treatment*. Washington, DC: American Psychiatric Press.
- Dodge, K.A., Pettit, G.S., Bates, J.E. (1994). Effects of physical maltreatment on the development of peer relations. *Dev Psychopathology* 6: 44-55.
- Dyregrov, A., & Raundalen, M. (1987). Children and the stresses of war: A review of the literature. In C.P. Dodge and M Raundalen (Eds.), *War, violence and children in Uganda*. 109-132. Oslo: Norwegian University Press.
- Eckenrode, J., Laird, M., Doris, J. (1993). School performance and disciplinary problems among abused and neglected children. *Dev Psychol* 29, 53-62.
- Ehlers, Anke and Clark, David M. (2000). A Cognitive Model of Posttraumatic Stress Disorder. *Behaviour Research and Therapy*, 38, 319-345.
- Elder, G.H. & Clipp, E.C. (1988). Combat experience, comradeship and psychological health. In J Wilson, Z Harel & B Kahana (Eds) *Human Adaptation to Severe Stress: From the Holocaust to Vietnam*. Plenum: New York.
- Espino, C.M. (1991). The case of Central American children. In Ahern, F.L. and Athey, J. (Eds). *Refugee Children*. Baltimore: John Hopkins University Press.
- Falger, P.R.J., Op den Velde, W., Hovens, J.E. and Schouten, E.G.W. (1990). Current post traumatic stress disorder and cardiovascular risk factors in Dutch resistance veterans from World War II. In W.S. De Loos & W. Op den Velde (Eds.) *Selected Proceedings of Second European Conference on Traumatic Stress, Psychotherapy and Psychosomatics*.

- Famularo, R., Kinscherff, R., Fenton, T. (1992). Psychiatric diagnoses of maltreated children: preliminary findings. *J Am Acad Child Adolesc Psychiatry* 31: 863-867.
- Farhood, L., Zurayk, H, Chaya, M, Saadeh, F, Meshefedjian, G & Sidani, T (1993). The impact of war on the physical and mental health of the family: The Lebanese experience. *Social Science and Medicine*, 36(12), 1555-1567.
- Faravelli, C., Webb, T., Ambbonetti, A., Fonnesu, F., and Sessarego, A. (1985). Prevalence of traumatic early life events in 31 agoraphobic patients with panic attacks. *American Journal of Psychiatry*, 142, 1493 – 1494.
- Feeney, J. A. and Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58, 281 – 291.
- Feinstein, A & Dolan, R (1991). Predictors of post-traumatic stress disorder following physical trauma: An examination of the stressor criterion. *Psychological Medicine*, 21, 85-91.
- Figley, C.R. (1978). *Stress Disorders among Vietnam Veterans: Theory, Research & Treatment*, New York: Brunner/Mazel.
- Finkelhor, D. (1987). The trauma of child sexual abuse: Two models. *Journal of Interpersonal Violence*, 2(4), 348-366.
- Finkelhor, D., and Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualisation. *Amer J Orthopsychiat.* 55(4): 530-541.
- Flisher, A.J., Kramer, R.A., Hoven, C.W. (1997). Psychosocial characteristics of physically abused children and adolescents. *J Am Acad Child Adolesc Psychiatry* 36: 123-131.
- Florian, V., Mikulincer, M., Bucholtz, I. (1995). Effects of adult attachment style on the perception and search for social support. *Journal of Psychology*, 129, 665 – 76.
- Foa, E B, Steketee, G, & Rothbaum, BO (1989). Behavioural/cognitive conceptualisation of post-traumatic stress disorder. *Behaviour Therapy*, 20, 155-176.
- Fonagy, P, Steele, M., Steele, H., Higgitt, A & Target, M. (1994). The Emanuel Miller Memorial Lecture 1992. The Theory and Practice of Resilience. *Journal of Child Psychology and Psychiatry.* 35(2). 231-257.

- Foster, D. (2000). The Evacuation of British Children During World War II: A Preliminary Investigation into the Long-Term Psychological Effects. D.Clin.Psych.Thesis. University College London.
- Foy, D.W., Sippelle, R.C., Rueger, D.B. & Carroll, E.M. (1984). Etiology of posttraumatic stress disorder in Vietnam veterans: Analysis of premilitary, military and combat exposure influences. *Journal of Consulting and Clinical Psychology*, 52(1), 79-87.
- Freud, S (1921) Introduction to Psychoanalysis and the War Neuroses. In J Strachey (Ed) *Standard Edition*, Vol 17. London: Hogarth Press.
- Fried, H. (1997). Café 84: A social day care centre for survivors and their children. In Hunt, L., Marshall, M. and Rowlings, C., (Eds.). *Past Trauma in Late Life*. Jessica Kingsley Publishers.
- Garland, A.F., Landsverk, J.L., Hough, R.L., Ellis-Macleod, E. (1996). Type of maltreatment as a predictor of mental health service use for children in foster care. *Child Abuse & Neglect* 20:675-688.
- Garnezy, N. & Rutter, M. (1983). *Stress, coping and development in children*. New York: McGraw-Hill.
- Garnezy, N. & Rutter, M. (1985). Acute reactions to stress. In M. Rutter and L. Hersov (Eds), *Child psychiatry: modern approaches* (2nd Edn). 79-106. Oxford: Blackwell Scientific.
- Garnefski, N., Diekstra, R.F.W., de Heus, P. (1992). Population-based survey of the characteristics of high school students with and without a history of suicidal behaviour. *Acta Psychiatr Scand* 86: 189-196.
- Gilbert, P., Pehl, J and Allan, S. (1994). The phenomenology of shame and guilt: An empirical investigation. *British Journal of Medical Psychology*, 67, 23-36.
- Goldberg, D. (1976). *Manual of the General Health Questionnaire*. Windsor: NFER Nelson.
- Goldberg, D. (1978). *General Health Questionnaire(28)*. Windsor: NFER Nelson.
- Goldberg, D. and Hillier, V. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9, 139 - 145.
- Goldberg, D., and Williams, P. (1988). *A User's Guide to the General Health Questionnaire*. Windsor: NFER Nelson.

- Goodwin, J. (1988). Evaluation and treatment of incest victims and their families: A problem oriented approach. In J.G. Howells (Ed.), *Modern perspectives in psycho-social pathology*, New York: Brunner/Mazel.
- Green, B.L., Grace, M.C., Lindy J.D. & Gleser, G.C. (1990). War stressors and symptom persistence in post-traumatic stress disorder. *Journal of Anxiety Disorders*, 4, 31-39.
- Harvey, J.H., Orbuch, T.L., Chwalisz, K.D. & Garwood, G. (1991). Coping with sexual assault: The roles of account-making and confiding. *Journal of Traumatic Stress*, 4(4), 515-531.
- Haskett, M.E. (1990). Social problem solving skills of young physically abused children. *Child Psychiatry Hum Dev* 21 109-118.
- Hassan, J. (1997). From Victim to Survivor. In Hunt, L., Marshall, M. and Rowlings, C., (Eds.). *Past Trauma in Late Life*. Jessica Kingsley Publishers.
- Hazan, C., and Shaver, P. (1987). Romantic love conceptualised as an attachment process. *Journal of Personality and Social Psychology*, 52, 511 - 524.
- Helzer, J.E., Robins, L.N. & McEvoy, L. (1987). Post-traumatic stress disorder in the general population: Findings of the epidemiological catchment area survey. *New England Journal of Medicine*, 317, 1630-1634.
- Herman, J. (1981). *Father-daughter incest*. Harvard University Press: NY.
- Herman, J. (1992). *Trauma and Recovery*. Basic Books: NY.
- Herman, J. (1995). Complex PTSD. In G.S. Everly, Jr & J. M. Lating (Eds). *Psychotraumatology*. Plenum Press. New York.
- Herrenkohl, R.C., Egolf, B.P. Herrenkohl, E.C. (1997). Preschool antecedents of adolescent assaultive behaviour: a longitudinal study. *Am. J. Orthopsychiatry* 67: 422-432.
- Hilton, C. (1997). Media triggers of post-traumatic stress disorder 50 years after the Second World War. *Journal of Geriatric Psychiatry*, 12, 862 – 867.
- Hollon, SD & Kriss, MR (1984). Cognitive factors in clinical research and practice. *Clinical Psychology Review*, 4, 35-76.
- Holman, R. (1995). *Evacuation: A Very British Revolution*. Lion.
- Holmes, J. (1996). *Attachment, Intimacy, Autonomy*. North Vale, NJ: Aronson.

- Holmes, J. (1993). *John Bowlby and Attachment Theory*. London: Routledge.
- Horowitz, M J (1976). *Stress Response Syndromes*. New York: Jason Aronson.
- Horowitz, M.J. (1986). *Stress Response Syndromes*, 2nd Edition. New York: Jason Aronson.
- Horowitz, M.J. & Stinson, C. (1994). Stress-response syndromes: Personality features related to neurotic responses to events. *Current Opinion in Psychology*, 7, 144-149.
- Horowitz, M, Wilner, N & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine*, 41(3), 209-218.
- House, J.S., Robbins, C. & Metzner, H.L. (1982). The association of social relationships and activities with mortality: Prospective evidence from the Tecumseh community Health Study. *American Journal of Epidemiology*, 116, 123-140.
- Hovens, J.E., Falger, P.R.J., Op den Velde, W., Meijer, P., de Groen, J.H.M. and van Duun, H. (1993). A Self-Rating Scale for the Assessment of Posttraumatic Stress Disorder in Dutch Resistance Veterans of World War II. *Journal of Clinical Psychology*, 49(2), 196-203.
- Hunt, N. (1997). Trauma of War. *The Psychologist*, 10, 361 – 363.
- Hunt, N and Robbins, I. (2001). The long-term consequences of war: the experience of World War II. *Aging and Mental Health*. 5(2): 183-190.
- Hunt, L., Marshall, M. and Rowlings, C., (1997). *Past Trauma in Late Life*. Jessica Kingsley Publishers.
- Inglis, R. (1990). *The Children's War: Evacuation 1939-45*. Fontana.
- Isaacs, S. (Ed). (1941). *The Cambridge Evacuation Survey. A wartime study in social welfare and education*. London: Methuen.
- Janis, I.L. (1951). Air War and emotional Stress: *Psychological Studies of Bombing and Civilian Defense*. Westport, Connecticut: Greenwood Press.
- Janoff-Bulman, R. (1985). The aftermath of victimisation: Rebuilding shattered assumptions. In CR Figley (Ed), *Trauma and its wake: the study and treatment of post-traumatic stress disorder*, 15-35. New York: Brunner/Mazel.

- Jehu, D. (1988). *Beyond Sexual Abuse: Therapy with women who were childhood victims*. Wiley: Chichester.
- Jehu, D. (1992). Personality problems among adults molested as children. *Sexual and Marital Therapy*, 7(3), 231-249.
- Johnson, J.H. (1986). *Life events as stressors in childhood and adolescence*. Newbury Park, CA: Sage.
- Kahana, E., Kahana, B., Harel, Z. and Rosner, T. (1988). Coping with Extreme Trauma. In Wilson, J.P. *Human Adaptation to Severe Stress (from the Holocaust to Vietnam)*. Plenum Press.
- Kaplan, S.J., Pelcovitz, D., Salzinger, S., Mandel, F.S., Weiner, M. (1997). Adolescent physical abuse and suicide attempts. *J Am Acad Child Adolesc Psychiatry* 36: 799-808.
- Kaplan, S.J., Pelcovitz, D., Salzinger, S. (1998). Adolescent physical abuse risk for adolescent psychiatric disorders. *Am J Psychiatry* 155: 954-959.
- Keane T.M. & Wolfe, J. (1990). Comorbidity in post-traumatic stress disorder: An analysis of community and clinical studies. *Journal of Applied Social Psychology*, 20(21), 1776-1788.
- Keane, TM, Scott, WO, Chavoya, GA, Lamparski, DM and Fairbank, JA (1985). Social support in Vietnam veterans with posttraumatic Stress Disorder: a comparative analysis. *Journal of Consulting and Clinical Psychology*, 53(1). 95-102.
- Kilpatrick, D.G. & Resnick, H.S. (1993). PTSD associated with exposure to criminal victimisation in clinical and community populations. In J.R.T. Davidson & E.B. Foa (Eds.), *PTSD in review: DSMIV and beyond*. Washington, DC: American Psychiatric Press.
- Kinzie, J.D., Sack, W., Angell, R., Clarke, G., and Ben, R., (1989). A three year follow-up of Cambodian young people traumatized as children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 28, 501-504.
- Kinzie, J.D., Sack, W., Angell, R., Manson, S., and Ben, R. (1986). The psychiatric effects of massive trauma on Cambodian Children I: The children. *Journal of the American Academy of Child and Adolescent Psychiatry* 25, 370-376.
- Kirkpatrick, L. and Hazan, C. (1994). Attachment styles and close relationships: A four year prospective study. *Personal Relationships*, 1, 123 – 142.

- Kuyken, W. (1995). The psychological sequelae of childhood sexual abuse: a review of the literature and implications for treatment. *Clinical Psychology and Psychotherapy*, 2(2), 108-121.
- Lewis, D.O. (1992). From abuse to violence: psychophysiological consequences of maltreatment. *J. Am. Acad. Child Adolesc. Psychiatry* 31:383-391.
- Liem, J.H., O'Toole, J.G. & James, J.B. (1996). Themes of power and betrayal in sexual abuse survivors' characterizations of interpersonal relationships. *Journal of Traumatic Stress*, 9(4), 745-761.
- Liotti, G. (1996). Understanding the dissociative processes: The contribution of attachment theory. *Dissociation*, 8.
- Livingston, R., Lawson, I., Jones, J.G. (1993). Predictors of self-reported psychopathology in children abused repeatedly by a parent. *J Am Acad Child Adolesc Psychiatry* 32: 948-943.
- Loo, CM (1993). An integrative-sequential treatment model for posttraumatic stress disorder: A case study of the Japanese American internment and redress. *Clinical Psychology Review* 13, 89-117.
- Maas, H. S. (1963). The young adult adjustment of twenty wartime residential nursery children. *Child Welfare*, 57 – 72
- Main, M., Kaplan, N., and Cassidy, J. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. In Bretherton, I., and Waters, E. (Eds.). Growing points in attachment theory and research. *Monographs of the Society for Research in Child Development*, 50, 1 - 2.
- Mazor, A., Gampel, Y., Enright, R.D. & Orenstein, R. (1990). Holocaust survivors: coping with post-traumatic memories in childhood and 40 year later. *Journal of Traumatic Stress*, 3(1), 1-14.
- McFarlane A.C. (1992). Avoidance and intrusion in post-traumatic stress disorder. *Nervous and Mental Disease*, 180(7), 439-445.
- McFarlane A.C. (1995). The severity of the trauma: Issues about its role in posttraumatic stress disorder. In RJ Kleber, CR Figley & Gersons, BPR (Eds) *Beyond Trauma: Cultural and Societal Dynamics*. New York: Plenum.
- McGee, R.A., Wolfe, D.A., Wilson, S.K. (1997). Multiple maltreatment experiences and adolescent behaviour problems: adolescents perspectives. *Developmental Psychology* 9: 131-149.

- McNally, R.J. (1992). Psychopathology of post-traumatic stress disorder (PTSD): Boundaries of the syndrome. In M Basoglu (Ed). *Torture and its Consequences: Current Treatment Approaches*. Cambridge: Cambridge University Press.
- Mowrer, O.H. (1947). On the dual nature of learning – A reinterpretation of “conditioning” and “problem-solving”. *Harvard Educational Review*, 17, 102-148.
- Mullen, P.E., Martin, J.L., Anderson, J.C., Romans, S.E., Herbison, G.P. (1996). The long-term impact of the physical, emotional, and sexual abuse of children: a community study. *Child Abuse & Neglect* 20:7-21.
- Norris, F H & Kaniasty, K (1992) Reliability of delayed self-reports in disaster research. *Journal of Traumatic Stress*, 5(4).
- North CS, Smith, EM & Spitznagel, EL (1994). Posttraumatic stress disorder in survivors of a mass shooting. *American Journal of Psychiatry*. 151(1). 82-88.
- Op den Velde, W., Faler, P.R.J., de Groen, J.H.M., van Duijin, H., Hovens, J.E., Meijer, P., Soons, M. & Schouten, E.G.W. (1990). Current psychiatric complaints of Dutch resistance veterans from World War II: A feasibility study. *Journal of Traumatic Stress*. 3, 351-358.
- Ormer, J.R. (1992). Post-traumatic stress disorders and European war veterans. *British Journal of Clinical Psychology*. 31, 387-403.
- Palmer, R. L., Oppenheimer, R., and Marshall, P. D. (1988). Eating disordered patients remember their parents: A study using the Parental Bonding Instrument. *International Journal of Eating Disorders*, 7, 101 –106.
- Parsons, M. L. (1998). *“I’ll Take That One”*: *Dispelling the Myths of Civilian Evacuation 1939-45*. Peterborough: Beckett Karlson
- Parsons, M. L. and Starns, P. (1999). *The Evacuation: The True Story*. Peterborough: DSM.
- Penk, W.E. Robinowitz, R, Roberts, W.R., Patterson, E.T., Dolan, M.P. & Atkins, H.G. (1981). Adjustment differences among male substance abusers varying in degree of combat experience in Vietnam. *Journal of Consulting and Clinical Psychology*, 49, 426-437.
- Psychological Corporation, The. (1998). *Childhood Trauma Questionnaire*. Harcourt Brace & Company.

- Pynoos, R., Steinberg, A., and Wraith, R. (1995). A developmental model of childhood traumatic stress. In Cicchetti, D., and Cohen, D. (Eds.). *Developmental Pathology: Risk, Disorder and Adaptation*. New York: Wiley.
- Rabins, P. V. and Brooks, B. R. (1981). Emotional disturbance in multiple sclerosis patients: validity of the General Health Questionnaire. *Psychological Medicine*, 11, 425 – 427.
- Ressler, E. (1988). The problem of unaccompanied children. In Ressler, E., Boothby, N. and Steinbock, D. (Eds.). *Unaccompanied Children*. New York: Oxford University Press.
- Riggs, S., Alario, A.J., McHorner, C. (1990). Health risk behaviours and attempted suicide in adolescents who report prior maltreatment. *J Pediatr*, 116: 815-821.
- Robbins, I. (1997). Understanding and Treating the Long-Term Consequences of War Trauma. In Hunt, L., Marshall, M., and Rowlings, C. (Eds.) *Past Trauma in Late Life: European Perspectives on Therapeutic Work with Older People*. London: Jessica Kingsley.
- Robbins, I & Hunt, N. (1993). The long-term psychological consequences of war experience in elderly veterans. *Paper presented to the London Conference of the British Psychological Society*.
- Robbins, I and Hunt, N. (1996). Validation of the IES as a measure of the long-term impact of war trauma. *British Journal of Health Psychology*, 1, (1), 87-89.
- Roffey, J. (1998). Preface. In Parsons, M. L. (1998). *“I’ll Take That One”: Dispelling the Myths of Civilian Evacuation 1939-45*. Peterborough: Beckett Karlson.
- Roth, A. & Fonagy, P. (1996). *What Works for Whom*. Guildford Press.
- Rothbaum, B.O., Foa, E.B., Riggs, D.S., Murdock, T., & Walsh, W. (1992). A prospective examination of PTSD in rape victims. *Journal of Traumatic Stress*, 5, 455-475.
- Rutter, M. and Maughan, B. (1997). Psychological adversities in childhood and adult psychopathology. *Journal of Personality Disorders*, 11, 4 – 18.
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A.S. Masten, D. Cicchetti, K.H. Neuchterlein & S. Weintraub (Eds), *Risk and protective factors in the development of psychopathology*. (79-101). New York: Cambridge University Press.

- Sack, W. H., McSharry, S., Clarke, G. N., Kinney, R., Seeley, J., and Lasinsohn, P. (1994). The Khmer adolescent project I: Epidemiological findings in two generations of Cambodian refugees. *Journal of Nervous and Mental Disease*, 182, 387 – 395.
- Sadowski, H. S., Ugarte, B., Kolvin, I., Kaplan, C., and Barnes, J. (1999). Early life family disadvantages and major depression in adulthood. *British Journal of Psychiatry*, 174, 112- 120.
- Safran, J.D. (1990a). Towards a refinement of cognitive therapy in light of interpersonal theory: I. Theory. *Clinical Psychology Review*, 10, 87-105.
- Safran, J.D. (1990b). Towards a refinement of cognitive therapy in light of interpersonal theory: II. Practice. *Clinical Psychology Review*, 10, 107-121.
- Schwarzer, C. (1992). Bereavement, received social support, and anxiety in the elderly: A longitudinal analysis. *Anxiety Research*, 4, 287-298.
- Scott, M.J. and Stradling, S.G. (1994). Post-traumatic stress disorder without the trauma. *British Journal of Clinical Psychology*, 33, 71-74.
- Selye, H. (1956). *Stress in Health and Disease*. Boston: Butterworths.
- Shay, J (1987). Learning about combat stress from Homer's Illiad. *Journal of Traumatic Stress*, 4(4), 561-579.
- Shay, J (1994). *Achilles in Vietnam: Combat Trauma and the Undoing of Character*. New York: Atheneum/MacMillan.
- Sheatsley, P.B. (1983). Questionnaire construction and item writing. In P.H. Rossi, J.D. Wright & A.B. Anderson (Eds.), *Handbook of Survey Research*. Orlando. Academic Press.
- Solomon, Z., Benbenishty, R & Mikulincer, M. (1991). The contribution of wartime, pre-war and post-war factors to self-efficacy: A longitudinal study of combat stress reaction. *Journal of Traumatic Stress*. 4(3), 345-361.
- Solomon, Z, Mikulincer & Avitzur, E (1990). Coping, locus of control, social support, and combat-related psychopathology: A prospective study. *Journal of Personality and Social Psychology*.
- Spitzer, R.C. Williams, J. B., Gibbon, M. & Firth, M.B. (1996). Structured Clinical Interview for DSM-IV. New York Biometrics Research Dept. New York State Psychiatric Inst.

- Sperling, M. B., Berman, W. H., and Fagen, G. (1992). Classification of Adult Attachment: An integrative taxonomy from attachment and psychoanalytic theories. *Journal of Personality Assessment*, 59, 239 - 247.
- Sroufe, A.L., Egeland, B., & Kreutzer, T. (1990). The fate of early experience following developmental change: Longitudinal approaches to individual adaptation in childhood. *Child Development*, 6, 1363-1373.
- Tennant, C. (1977). The General Health Questionnaire: a valid index of psychological impairment in Australian populations. *Medical Journal of Australia*, 2, 392 – 394.
- Tennant, C. Hurry, J., and Bebbington, P. (1982). The relation of childhood separation experiences to Adult depressive and anxiety states. *British Journal of Psychiatry*, 141, 475 - 482.
- Thompson, J.A., Charlton, P.F.C., Kerry, R., Lee, D. & Turner, S.W. (1995). An open trail of exposure therapy based on deconditioning for post-traumatic stress disorder. *British Journal of Clinical Psychology*, 34, 407-416.
- Turner R J & Marino, F (1994). Social support and social structure: A descriptive epidemiology. *Journal of Health and Social Behaviour*, 35, 193-212.
- United Nations High Commissioner for Refugees. (1977). *The State of the World's Refugees*. New York: Oxford University Press.
- United Nations. (1966). *Impact of Armed Conflict on Children: Report of the expert of the secretary-general MS G Machel*. New York: Author.
- van der Kolk, B.A., McFarlane, A.C. & Wessaeth, L. (Eds). (1996). *Traumatic Stress: The effects of overwhelming experience on mind, body and society*. Guilford Press: NY, London.
- Vissing, YU.M., Straus, M.A., Gelles, R.J., Harrop, J.W. (1991). Verbal aggression by parents and psychosocial problems of children. *Child Abuse & Neglect* 15: 223-238.
- Waugh, M. (1994). *Women and War. The long term effects of war trauma on women*. (unpublished dissertation).
- Waugh, M. (1997). Keeping the home fires burning. *The Psychologist*, 10, 361 – 363.
- Weiss, D.S. & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In J.P. Wilson and T Keane (Eds.). *Assessing psychological trauma and PTSD: A handbook for practitioners*. New York. Guildford Press.

- Weiss, D.S., Marmar, C.R., Metzler, T. & Ronfeldt, H. (1995). Predicting symptomatic distress in emergency services personnel. *Journal of Consulting and Clinical Psychology, 63*, 361-368.
- Werner, E.E. & Smith, R.S. (1982). *Vulnerable, but invincible: a longitudinal study of resilient children and youth*. New York: McGraw-Hill.
- Widom, C.s. (1989). Child abuse, neglect and adult behaviour. *Criminology 21*: 251-271.
- Wodarski, J.S., Kurtz, P.D., Gaudin, J.M., Howing, P.T. (1990). Maltreatment and the school-age child: Major academic, socioemotional, and adaptive outcomes. *Social Work, 35*, 506-513.
- Wolfe, J.W., Kimerling, R., Brown, P.J., Chrestman, K.R., & Levin, K. (1996). Psychometric review of The Life Stressor Checklist-Revised. In B.H. Stamm (Ed.). *Measurement of stress, trauma and adaptation*. Lutherville, MD: Sidran Press.
- Wolfe, D.A., Wekerle, C., Reitzel-Jaffe, D., Lefebvrfe, L. (1998). Factors associated with abusive relationships among maltreated and non-maltreated youth. *Dev Psychopathology, 10* 61-85.
- Yehuda, R. and McFarlane, A.C. (1995). Conflict between current knowledge about post-traumatic stress disorder and its original conceptual basis. *American Journal of Psychiatry, 152* (12), 1705-1713.
- Young, J.E. (1990). *Cognitive Therapy for Personality Disorders: A schema-focused approach*. Sarasota, FL, Practitioner Resource Exchange.
- Zanarini, M. C., Gunderson, J. G., Marino, M. F., Schwartz, E. O., and Frankenberg, F. R. (1989). Childhood experiences of borderline patients. *Comprehensive Psychiatry, 30*, 18 – 25.

Appendices

- Appendix 1 Letter of Ethical Approval, Joint UCL/UCH Committee
- Appendix 2 Letter of Ethical Approval, W.Essex Ethics Committee
- Appendix 3 Information Sheet
- Appendix 4 Consent Form
- Appendix 5 ERA Advertisement
- Appendix 6 Advertisement for Press and Organisations
- Appendix 7 Evacuation Experience Questionnaire (EEQ)
- Appendix 8 Non-Evacuee Questionnaire (Adapted EEQ)
- Appendix 9 War Related Experiences Scale
- Appendix 10 Abuse Questionnaire

Appendix 1

**Letter of Ethical Approval,
Joint UCL/UCH Committee**



well Done!!

The University College London Hospitals

The Joint UCL/UCLH Committees on the Ethics of Human Research

Committee Alpha Chairman: Professor André McLean

Please address all correspondence to:

Iwona Nowicka
Research & Development Directorate
1st Floor, Vezey Strong Wing
112 Hampstead Road
London NW1 2 LT
020 7380 9579
Fax. 020 7380 9937

Dr Feigenbaum,
Clinical Psychology
UCL

14 June, 2000

Dear Dr Feigenbaum,

Study No: 00/0136 (*Please quote in all correspondence*)
Title: Older adults experience of childhood during world war II

Thank you for letting us see the above proposal, which was reviewed and agreed by the Chairman's Action. You may go ahead with your study.

Please note that it is important that you notify the Committee of any adverse events or changes (name of investigator etc) relating to this project. You should also notify the Committee on completion of the project, or indeed if the project is abandoned. **Please remember to quote the above number in any correspondence.**

Yours sincerely

Professor André McLean, BM BCL PhD FRC Path
Chairman

Very interesting, especially for those in my age group!
al

Appendix 2

**Letter of Ethical Approval,
W. Essex Ethics Committee**

**WEST ESSEX
LOCAL RESEARCH ETHICS COMMITTEE**

**Hamstel House, The Princess Alexandra Hospital NHS Trust, Hamstel Road, Harlow,
ESSEX, CM20 1QX**

Tel: 01279 827082

Fax: 01279 429371

Our ref: JD/sj

26 June 2000

Melinda Waugh
Top Floor Flat
4 Perth Road
London N4 3HB

Dear Ms Waugh

**1322-6-00 OLDER ADULTS EXPERIENCE OF CHILDHOOD DURING
WORLD WAR II (Melinda Waugh)**

Thank you for attending the meeting of the West Essex Local Research Ethics Committee on 15 June 2000 to present the above project.

The Committee requested that the title of the project be shown on the top of the information sheet.

Unconditional approval was given.

The members of the Committee present at the meeting were Dr J Davis, Mr H Bliss, Mr B Rayner, Dr V Oxley, Mr V Vempali and Mr T Clarke.

Please note that I may be contacting you from time to time for information on the progress of the project. I would also be grateful if you would notify me when the project is completed, or if it is terminated for any reason prior to completion, and if there are any material changes to the protocol for the project perhaps you will advise me accordingly.

May I take this opportunity to wish you every success with the project.

Yours sincerely

pp *Lorna Ellis*

**John B Davis MD London MRCGP
Chairman West Essex Local Research Ethics Committee**

Appendix 3

Information Sheet



Sub-Department of Clinical Health Psychology

UNIVERSITY COLLEGE LONDON

GOWER STREET LONDON WC1E 6BT

General Enquiries: 020 7679 7897
Clinical Tutor Team: 020 7679 1258
Senior Secretary: 020 7679 5699
UCL Switchboard: 020 7679 2000
Code from overseas: +44 20
Fax: 020 7916 1989

Confidential

Dear Sir or Madam

Experience of Childhood During World War Two

I am currently conducting research into the experience of people who were children during the Second World War. We know that the events experienced during the war were important in many people's childhood, and we are hoping that this study will help us to understand how these experiences may influence the way that people think and feel through the rest of their lives. This understanding may help us find better ways to help people who have difficult feelings that may be related, in some way, to their wartime experiences.

I am inviting you to take part in this study, which involves completing the enclosed questionnaires. The questionnaires ask about your experiences of childhood during the war. This could include the experience of any air-raids, evacuation or abuse you may have suffered at home or whilst evacuated, some of these questions are of a sexual nature. These questionnaires may take up to one hour to complete.

If you do not want to think about your childhood experiences of the war, then please do not look at the enclosed questionnaires. You do not have to take part in this study. If you do decide to take part, but change your mind at a later date, you can contact me before March 2001 and I will remove the information that you have given from the study. You do not have to give a reason for withdrawing from the study. If you do not wish to complete the questionnaires, I would be very grateful if you could return them to me anyway, in the envelope provided.

All information provided is confidential. You do not have to put your name on the questionnaires if you do not wish to. No information about any individual who has taken part will be given to any other organisation, but the general findings from the study may be published, once it is completed.

I would also like to arrange to meet a small number of participants in person, at their own home if they wish. At that meeting I would like to discuss the issues noted in the questionnaires in more detail. This is a *separate part of the study*, and it does not mean that you have to participate in such a meeting if you complete the questionnaires enclosed. It may cause some emotional distress to think about some aspects of your childhood in detail. There is a space on the consent form to indicate whether or not you would be prepared to participate in a more detailed discussion of your experiences.

All proposals for research are reviewed by an ethics committee before they can proceed. This proposal was reviewed by the Joint UCL/UCLH committee on the Ethics of Human Research.

If you have any questions about the study then please telephone me on 020 7561 1695, or the research supervisors - Dr Janet Feigenbaum on 020 7679 5964, or Steve Davies on 01279 827 289. If you experience any distress when completing the questionnaires, please do not hesitate to call on these numbers.

If you would like to help me with this study, please complete and sign the consent form enclosed. This should be returned with the completed questionnaires in the stamped envelope provided. Thank you for your help, I hope to hear from you soon.

Yours sincerely

Melinda J Waugh
Psychologist

N.B.

I would be very grateful if you could return the questionnaires in the envelope provided, even if you do not wish to complete them.

Appendix 4

Consent Form

Confidential

Consent Form for Participants

Research Project: An investigation into the nature of childhood experiences of the Second World War, and possible psychological consequences of this experience.

Researcher: Melinda J Waugh, BSc (Hons) (Tel: 020 7561 1695)
Psychologist

Have you read the information sheet about this study? Yes/No

Have you been offered an opportunity to ask questions/discuss this study? Yes/No

Have you received satisfactory answers to any questions? Yes/No

Have you received enough information about this study? Yes/No

Which researcher (if any) have you spoken to about this study.....

Do you understand that you are free to withdraw from this study at any time and without giving a reason for withdrawing? Yes/No

Do you agree to take part in this study? Yes/No

Signed: Date:

Name in block letters:

Researcher

Some participants may be invited to meet with the researcher to discuss their childhood experiences in more detail. This meeting would be recorded on audiotape. Please tick one of the statements below to indicate whether you would like to participate in this part of the study:

- I do NOT wish to discuss my experiences in a meeting with a researcher. -----
- I would be happy to discuss my experiences in a meeting with a researcher. -----
- I understand that this meeting will be recorded on audiotape. -----

Your contact telephone number
(or address)

Appendix 5

Evacuee Reunion Association Advertisement

Evacuee Reunion Association - Advertisement

CAN YOU HELP?

I am conducting research into the **long-term effects of war experiences on children**. This research will help us to understand more about how the experience of being a child in wartime can influence the way that people think and feel through the rest of their life. This understanding should help psychologists and other professionals to improve their services for those people who need them. It may also help to inform the future treatment of children in wartime situations.

The study consists of questionnaires, which ask about your wartime experiences, about other aspects of your childhood and about how you feel now. If you decide to take part, I will send you the questionnaires and a stamped addressed envelope in which you can return them to me.

This study follows on from the research project run by Diane Foster, who will shortly report her findings to the ERA. I will be contacting those of you, who kindly indicated to Diane that you would be willing to participate in further research. However, *more participants are needed* and I would therefore invite **anyone who was a child during WWII** to contact me if they would be willing to take some time to contribute to this study.

If you would like to take part or would like more information, then please **contact Melinda Waugh**, Clinical Psychologist in Training, **at the above address or telephone on: 020 7561 1695**.

Appendix 6

Advertisement for Press and Organisations

CAN YOU HELP?

Childhood Experiences of World War Two

In November, 2000, those who were children during the Second World War marched for the first time with the Evacuee Reunion Association in the annual commemoration of Remembrance Day. The experiences of those who were children during WWII varies enormously and can include evacuation away from family, being bombed, having family members killed or wounded and witnessing death and destruction on a large scale.

Whether their experiences were positive or negative, living through the Second World War as a child has undoubtedly had a very significant effect on the lives of that generation. A study is currently underway into the long-term effects of these experiences and thanks to the Evacuee Reunion Association, a large number of evacuees have participated. However, the experiences of those who were *not evacuated* are also of importance and volunteers to help with this research are now needed. Whether your experiences of the Second World War as a *non-evacuated child* were good, bad or indifferent, **your contribution would be highly valued.**

If you would like to take part, please contact Melinda Waugh at the Department of Clinical Health Psychology, University College London, Gower Street, London WC1E 6BT (or telephone 020 7561 1695) for further information.

Appendix 7

Evacuation Experience Questionnaire (EEQ)

EVACUATION EXPERIENCE QUESTIONNAIRE

- 1. How old were you when you were first evacuated?
- 2. Which town did you live in before you were evacuated?
- 3. Were you evacuated on "E-Day" (1st September 1939)? Yes No
- 4. Were you given an explanation about what was happening? Yes No
If so, what were you told?
.....
.....
- 5. How many billets did you have in total?
- 6. How were your billets arranged? (e.g. through school, family etc.)
.....

FIRST BILLET

- 7. Where was your first billet located?
- 8. How long did you stay in your first billet?
- 9. Did any of the following people stay with you in this billet? (please circle)
Mother Brother(s) Sister(s) School friend Other:
- 10. How often did you see you parents during this time? (please circle)
Mother - Never / Less than once per 2 months / More than once per 2 months / All the time
Father - Never / Less than once per 2 months / More than once per 2 months / All the time
- 11. Why did your first billet end?
End of war [] Billeting family did not want evacuee []
Unhappy in billet [] Parents unhappy with billet []
Other
- 12. Did you keep in contact with the people with whom you were first billeted after you had left? Yes / No
- 13. How would you describe your experience during your first billet? (please circle)
Very positive Quite positive Neither positive nor negative Quite negative Very negative

EVAUATION EXPERIENCE QUESTIONNAIRE

SECOND BILLET (If you did not have a second billet, please go to question 28.)

14. **Where was your second billet located?**

15. **How long did you stay in your second billet?**

16. **Did any of the following people stay with you in this billet?** (please circle)

Mother Brother(s) Sister(s) School friend Other:

17. **How often did you see you parents during this time?** (please circle)

Mother - Never / Less than once per 2 months / More than once per 2 months / All the time

Father - Never / Less than once per 2 months / More than once per 2 months / All the time

18. **Why did your second billet end?**

End of war [] Billeting family did not want evacuee []

Unhappy in billet [] Parents unhappy with billet []

Other

19. **Did you keep in contact with the people with whom you were billeted after you had left?**

Yes / No

20. **How would you describe your experience of the second billet?** (please circle)

Very positive Quite positive Neither positive nor negative Quite negative Very negative

THIRD BILLET (If you did not have a third billet, please go to question 28.)

21. **Where was your third billet located?**

22. **How long did you stay in your third billet?**

23. **Did any of the following people stay with you in this billet?** (please circle)

Mother Brother(s) Sister(s) School friend Other:

24. **How often did you see you parents during this time?** (please circle)

Mother - Never / Less than once per 2 months / More than once per 2 months / All the time

Father - Never / Less than once per 2 months / More than once per 2 months / All the time

25. **Why did your third billet end?**

End of war [] Billeting family did not want evacuee []

Unhappy in billet [] Parents unhappy with billet []

Other

EVACUATION EXPERIENCE QUESTIONNAIRE

26. **Did you keep in contact with the people with whom you were billeted after you had left?** Yes / No

27. **How would you describe your experience during the third billet? (please circle)**

Very positive	Quite positive	Neither positive nor negative	Quite negative	Very negative
------------------	-------------------	----------------------------------	-------------------	------------------

The following questions relate to your overall experience during the Second World War

28. **How happy were you in general during your time as an evacuee?**

Very Happy	Quite happy	Neither happy nor unhappy	Quite unhappy	Very unhappy
---------------	----------------	------------------------------	------------------	-----------------

29. **Did you experience any bombing raids in your home town?** Yes No

30. **Did you experience any bombing raids whilst evacuated?** Yes No

31. **If so, did you usually use an air-raid shelter during the raids?** Yes No

32a. **Were you ever 'bombed out' in your home town?** Yes No

32b. **Were you ever 'bombed out' whilst evacuated?** Yes No

33. **Were any of your close relatives or friends killed during the war?** Yes No
If yes, who was that person(s)?

Grandmother []	Grandfather []	Aunt []
Brother []	Sister []	Uncle []
Mother []	Father []	Cousin(s) []
Friend(s) []	Someone else []	

34. **Did you return to your original home after the war had ended?** Yes No

35a. **Did your hosts offer to adopt/foster you after the war?** Yes No

35b. **If so, was this offer accepted?** Yes No

36. **How happy were you in general in the months after you returned home?**

Very Happy	Quite happy	Neither happy nor unhappy	Quite unhappy	Very unhappy
---------------	----------------	------------------------------	------------------	-----------------

37. **How did family life after the evacuation had ended compare with family life before you were evacuated?**

Much better	A little better	The same	A little worse	Much worse
-------------	-----------------	----------	----------------	------------

E V A C U A T I O N E X P E R I E N C E Q U E S T I O N N A I R E

38. **If there was a change, what do you think caused this?**

Your evacuation experience [] Your mother's wartime experience []

Your father's wartime experience [] Other relative's wartime experience []

Other reason.....

.....

39. **Name three good things about the experience of evacuation (if possible):**

a)

b)

c)

40. **Name three bad things about the experience of evacuation (if possible):**

a)

b)

c)

41a. **Have you ever had any form of psychological therapy?** Yes / No

41b. **If yes, did you talk about your evacuation experiences?** Yes / No

42. **If you had bad experiences during your time as an evacuee, how did you cope with them AT THE TIME?**

Thought about it and tried to solve the problems it caused []

Blamed myself / others for its effect on me []

Pretended it was not happening at the time []

Spoke to other people about how I felt []

Tried not to think about it. Put it out of my mind. []

Tried to think of nice things instead (e.g. a trip in the country, winning a million pounds) []

43. **In general, how do think you are coping with them NOW?**

Think about it and try to solve the problems it caused []

Blame myself / others for its effect on me []

Pretend it has not happened []

Speak to other people about how I feel []

Try not to think about it. Put it out of my mind. []

Try to think of nice things instead (e.g. a trip in the country, winning a million pounds) []

EVACUATION EXPERIENCE QUESTIONNAIRE

If you would like to add any other information that you feel is important regarding your experiences during the war, please use the space below:

(Continue overleaf if required)

Please complete *all* the rest of the questionnaire pack, whether evacuated or not.

Appendix 8

Non-Evacuee Questionnaire (Adapted EEQ)

**Childhood Wartime Experiences
Non-Evacuees**

1. **Who was mainly responsible for your care during wartime?**
(please circle relevant persons)
Mother Father Other Relative Friends

2. **Were you separated from your mother during wartime?** Yes No
If yes – for how many months were you separated?

3. **Were you separated from your father during wartime?** Yes No
If yes – for how many months were you separated?

4. **How happy were you in general during wartime?**
Very Quite Neither happy Quite Very
happy happy nor unhappy unhappy unhappy

5. **Did you experience any bombing raids in your home town?** Yes No

6. **If so, did you usually use an air-raid shelter during the raids?** Yes No

7. **Were you ever “bombed out”?** Yes No

8. **Were any of your close relatives or friends killed during the war?** Yes No
If yes, who was that person(s)?
Grandmother [] Grandfather [] Aunt []
Brother [] Sister [] Uncle []
Mother [] Father [] Cousin(s) []
Friend(s) [] Someone else []

9. **How happy were you in general in the months after the war?**
Very Quite Neither happy Quite Very
happy happy nor unhappy unhappy unhappy

10. **How did family life after the war had ended compare with family life before the war?**
Much better A little better The same A little worse Much worse

11. **If there was a change, what do you think caused this?**
Your wartime experiences [] Your mother’s wartime experiences []
Your father’s wartime experiences [] Other relatives wartime experiences []
Other reason

12. **Have you ever had any form of psychological therapy?** Yes No

13. **If yes, did you talk about your wartime experiences?** Yes No

Appendix 9

War Related Experiences Scale

WAR-RELATED EXPERIENCES QUESTIONNAIRE

This part of the questionnaire relates to your wartime experiences.

Please circle "NO" for the events you did not experience.

Please circle "YES" for each of the events you experienced during the war and indicate how much stress (if any) that particular event caused you.

- 1 = not at all stressful
- 2 = a little bit stressful
- 3 = moderately stressful
- 4 = quite a bit stressful
- 5 = extremely stressful

For instance, if you experienced a bombing raid and you found it a little bit stressful, ring number 2.

				How stressful was it?				
		NO	YES →	1	2	3	4	5
1.	I experienced a bombing raid.							
2.	I was strafed by enemy planes							
3.	I was made homeless by a bombing raid							
4.	I had civilian relatives and/or friends who were killed by enemy action							
5.	I had civilian relatives and/or friends who were injured by enemy action.							
6.	I had neighbours who were killed by enemy action							
7.	I had neighbours who were injured by enemy action							
8.	I had friends/relatives in the armed forces who were injured/wounded							
9.	I had friends/relatives in the armed forces who were killed							

10.	I saw enemy POWs	NO	YES →	1	2	3	4	5
11.	I saw Allied casualties	NO	YES →	1	2	3	4	5
12.	I helped people who had been injured by enemy action	NO	YES →	1	2	3	4	5
13.	I saw enemy aircraft flying overhead	NO	YES →	1	2	3	4	5
14.	I saw crashed enemy aircraft	NO	YES →	1	2	3	4	5
15.	Anything else? (write below and rate)							
	.....	NO	YES →	1	2	3	4	5
	.....	NO	YES →	1	2	3	4	5
	.....	NO	YES →	1	2	3	4	5

Which aspects of the war did you find most disturbing?

Which aspects of the war did you find most interesting?

(If you would like to add any other information that you feel is important regarding your experiences during the war, please use the space overleaf).

Appendix 10

Abuse Questionnaire

Abuse Questionnaire

Physical Abuse could include -

e.g. Being physically harmed by another person to an extent that is out of proportion to any offence committed or that could be considered as beyond acceptable limits at that time.

1. **Were you ever physically abused as a child (under 16 years)?** Yes/No

If No, please go to next page

If Yes, -

2. **Did the abuse take place -**

(tick appropriate boxes)

a) before evacuation c) after evacuation

b) during evacuation d) NOT evacuated

4. **Were the abuser(s)**

(enter number of abusers in appropriate boxes)

Number of abusers

a) A close family member (lived in family home)

b) Other family member

c) A member of billeting family

d) Acquaintance

e) Stranger

5. **For each abuser, (approx) -**

When did abuse start

When did abuse stop

6. **How often did abuse occur?**

a) Every day d) More than once per month

b) More than once per week e) Less than once per month

c) Less than once per week f) Other

7. **Please rate *average* severity of abuse (circle)**

(where, e.g., 1 = a hard slap; and 10 = beaten to unconsciousness)

1 2 3 4 5 6 7 8 9 10

8. **Please rate *most severe* occasion of abuse (circle)**

(where, e.g., 1 = a hard slap; and 10 = beaten to unconsciousness)

1 2 3 4 5 6 7 8 9 10

Emotional/Psychological Abuse could include -

e.g. Never being told or feeling that you were loved or cared for. Threatened with being sent away. Excessively criticised. Felt parents/carers seriously disliked or hated you. Being called bad names/being humiliated or shamed. Fearful of your personal safety.

1. Were you ever emotionally abused as a child (under 16 years)? Yes/No

If No, please go to next page

If Yes, -

2. Did the abuse take place -

(tick appropriate boxes)

- | | | | |
|----------------------|-----|---------------------|-----|
| a) before evacuation | [] | c) after evacuation | [] |
| b) during evacuation | [] | d) NOT evacuated | [] |

4. Were the abuser(s)

(enter number of abusers in the appropriate boxes)

Number of abusers

- | | | |
|---|-----|-----|
| a) A close family member (lived in family home) | [] | [] |
| b) Other family member | [] | [] |
| c) A member of billeting family | [] | [] |
| d) Acquaintance | [] | [] |
| e) Stranger | [] | [] |

5. For each abuser, (approx) -

When did abuse start

When did abuse stop

6. How often did abuse occur?

- | | | | |
|----------------------------|-----|-----------------------------|-----|
| a) Every day | [] | d) More than once per month | [] |
| b) More than once per week | [] | e) Less than once per month | [] |
| c) Less than once per week | [] | f) Other | [] |

7. Please rate average severity of abuse (circle)

(where, e.g., 1 = a bad name; and 10 = totally humiliated or distressed)

1 2 3 4 5 6 7 8 9 10

8. Please rate most severe occasion of abuse (circle)

(where, e.g., 1 = a bad name; and 10 = totally humiliated or distressed)

1 2 3 4 5 6 7 8 9 10

Sexual Abuse could include -

e.g. Inappropriate and unwanted use of explicit/sexualised language in your presence. Being shown explicit/pornographic photographs or other material. Being shown other people's private parts, or forced to show own, private body parts. Intimate and inappropriate physical contact.

1. **Were you ever sexually abused as a child (under 16 years)?** Yes/No
If No, please go to next page
If Yes, -

2. **Did the abuse take place -**
(tick appropriate boxes)

- a) before evacuation [] c) after evacuation []
b) during evacuation [] d) NOT evacuated []

4. **Were the abuser(s)**

(enter number of abusers in the appropriate boxes)

Number of abusers

- a) A close family member (lived in family home) []
b) Other family member []
c) A member of billeting family []
d) Acquaintance []
e) Stranger []

5. **For each abuser, (approx) -**
When did abuse start

When did abuse stop

6. **How often did abuse occur?**

- a) Every day [] d) More than once per month []
b) More than once per week [] e) Less than once per month []
c) Less than once per week [] f) Other []

7. **Please rate *average* severity of abuse (circle)**

(where, e.g., 1 = use of sexual language; and 10 = penetrative sex)

1 2 3 4 5 6 7 8 9 10

8. **Please rate *most severe* occasion of abuse (circle)**

(where, e.g., 1 = use of sexual language; and 10 = penetrative sex)

1 2 3 4 5 6 7 8 9 10

Neglect could include -

e.g. Deprived of food/clothing/shelter/warmth for longer than one day.

1. **Were you ever neglected as a child (under 16 years)?** Yes/No

If No, please go to next page

If Yes, -

2. **Did the abuse take place -**

(tick appropriate boxes)

a) before evacuation [] c) after evacuation []

b) during evacuation [] d) NOT evacuated []

4. **Were they**

(enter number of abusers in the appropriate boxes)

Number of abusers

a) A close family member (lived in family home) []

b) Other family member []

c) A member of billeting family []

d) Acquaintance []

e) Stranger []

5. **For each person, (approx) -**

When did neglect start

When did neglect stop

6. **How often did neglect occur?**

a) Every day [] d) More than once per month []

b) More than once per week [] e) Less than once per month []

c) Less than once per week [] f) Other []

7. **Please rate *average* severity of neglect (circle)**

(where, e.g., 1 = being cold; and 10 = continuous hunger/malnourished)

1 2 3 4 5 6 7 8 9 10

8. **Please rate *most severe* occasion of neglect (circle)**

(where, e.g., 1 = being cold; and 10 = continuous hunger/malnourished)

1 2 3 4 5 6 7 8 9 10