

**'COMPLEX' POST TRAUMATIC STRESS
DISORDER IN BATTERED WOMEN**

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ABSTRACT OF THESIS

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It is argued that the diagnosis of Post Traumatic Stress Disorder (PTSD) fails to capture the range of psychological consequences found in populations who have been chronically traumatised (Herman 1992). 'Complex' Post Traumatic Stress Disorder has been postulated, which includes many of the commonly reported additional difficulties, in an attempt to overcome this weakness. The aim of this study is to examine the extent to which the symptoms of Complex PTSD are found in battered women (n=25), a chronically traumatised group. A sample of women in the community who have not experienced violence at the hands of a partner are used as controls (n=25). The relationship between Complex PTSD and PTSD is examined, as is the relative effects of hypothesised risk factors including; a history of childhood physical or sexual abuse, length of violent relationship, severity of violence experienced, concurrent stress and other traumatic experiences.

1.0 INTRODUCTION

Violence towards women in an adult relationship is not an uncommon event (e.g. Straus and Gelles 1986, Bullock et al 1989). However, it is relatively rarely discussed in the psychological literature (Hilberman 1980). When it is the focus of debate two main issues are usually central. Firstly, why do women stay in relationships potentially destructive to them and secondly, what are the psychological effects of being repeatedly abused by a partner. This review will focus on the latter issue whilst arguing that the psychological sequelae of abuse may partly underlie some of a woman's difficulty in taking alternative action.

It will be argued that a women's psychological response to violence by a partner is related to the trauma of being assaulted, often repeatedly, by someone they are in an intimate relationship with. However, evidence will be examined that shows that the understanding of response to trauma in terms of Post Traumatic Stress Disorder (PTSD), the most commonly used diagnosis, does not provide an adequate framework. An alternative form of the diagnosis, developed to conceptualise the psychological consequences for survivors of repeated trauma, Complex Post Traumatic Stress Disorder will be reviewed and its suitability for use with women who have been assaulted at home considered.

In order to provide the context, initially definitions and prevalence figures will be given as regards to violence in the home towards women. This is followed by a summary of research examining women's response to violence in the home. A brief account of the current understanding of trauma reactions generally is given and the synthesis proposed, Complex Post Traumatic Stress Disorder (Herman 1992), which is the basis for this research, will be outlined. Therefore, the overall aim of this research is to examine whether Complex Post Traumatic Stress Disorder is a suitable diagnostic framework within which the psychological consequences of violence towards women in the home can be conceptualised.

1.1 Definition of terms

This review is concerned with acts of violence in heterosexual relationships and how an understanding of the psychological consequences for the female survivors can be understood. The focus is on men as the perpetrators of these acts. This is not to imply that there cannot be violence in non-heterosexual relationships or that men cannot be physically victimised. However, evidence suggests that women are most commonly the victims of this type of assault. For example, Chez (1990) found that 90% of abuse towards partners was perpetrated by men and less than 2% of records of domestic violence involve assaults on men (Scotsman, January 1993 quoted in Donnellan 1993). The latter is likely to be an underestimate because of social pressures on men not to report such incidents but the figures do give an indication of the extent of the problem relatively.

A difficulty in reviewing research in this area is that acts of violence towards women by male partners have been described by a variety of terminology. In order to maintain consistency throughout

this review, a single set of terms shall be used. Previous papers have described the act of violence towards women by partners or husbands as 'violence against women', 'wife or women abuse', 'male violence', 'marital violence', 'spouse assault' or 'domestic violence' (Dobash and Dobash 1990). However, these authors argue that if the issue being discussed is violence by men towards their female partners or co-habitants, then 'wife or women abuse' should be the term of choice. Other terms, in the opinion of themselves and other authors tend to reduce the focus on issues of power between the genders which is argued to a fundamental issue (Bograd 1988, Schechter 1982, Dobash and Dobash 1990). For example, Jukes (1993) rejects the term 'domestic violence' on the grounds that it

'implies a dynamic between partners which assumes they are in some way, equally responsible for what is happening'(pg 262).

That is, the term 'domestic violence' is suggestive of violence arising out of domestic situations involving both partners in its inception. This presumption may not be accurate. The difficulty with the term 'wife abuse' is the diversity of domestic arrangements now seen in society. The generic term 'partner abuse' will be used where possible.

The phrase 'battered woman' was coined around twenty years ago, taking its name from 'battered baby syndrome' which was a highly political issue of the time (Scott 1974). From the literature this appears to be a relatively uncontroversial phrase which is widely used. The main problem associated with it is that it does suggest that the violence in a women's relationship constitutes the totality of her identity and possibly the term 'a women who has been battered' would overcome this. The literature on other victims of repeated trauma, particularly women who have experienced childhood sexual abuse, have emphasised the importance of calling the individuals involved 'survivors' instead of 'victims' (Sanderson 1995). This is felt to encourage a more positive self image in those who have had this experience. This will be used whenever possible or appropriate.

There have been a number of attempts of define what constitutes partner abuse. Scott (1974) describes a battered woman as 'a women who has suffered serious or repeated injury from a man with whom she lives' (Pg 434). Alternatively, Kemp et al (1991) describes partner abuse as a continuum from minimum physical aggression, such as pushing and shoving, to the extreme of attempted murder.

It has been questioned as to whether 'minor' forms of violence such as pushing or grabbing are part of the same phenomenon as severe battery (Margolin and Burman 1993). But if behaviour of the perpetrator creates a sense of fear or threat either to the physical or emotional integrity of the self it is argued that this should be considered within the same range. The Kemp et al (1991) concept of a continuum is useful as Scott's retains an emphasis on only the most physically dangerous events. However, Scott's definition has the advantage that it highlights the often repeated nature of the assaults, which has a major bearing on the psychological consequences as will be discussed.

1.2 Prevalence of Partner Abuse

“ ... marital conflict is always a possibility in every marriage, and that it occurs when the difference between individual needs between partners exceeds their capacity to adapt should surprise no-one... Unless both marital partners have been carefully taught not to express physical aggression within the domestic setting some degree of physical assault is very likely to occur at times of special stress...”

Scott (1974) *British Journal of Psychiatry* pg 433

Before discussing the psychological consequences of partner abuse it is necessary to highlight that there is considerable evidence that violence at home is experienced by many women. However, measuring the prevalence of a behaviour which, by its nature usually occurs in the privacy of home and is generally not publicly acknowledged by the individuals involved, is fraught with difficulties. The studies reviewed reflected the problems in obtaining accurate statistics. In addition, few studies are explicit as to their definition of assault or violence and this leads to the risk of over or under inclusiveness.

One of the most ambitious attempts to measure violence in the home generally was the National Family Violence Resurvey in the United States (Straus and Gelles 1986, Straus and Gelles 1988), a replication of a study carried out in 1975. Telephone interviews were completed with 6,002 households selected for national probability. The interview was based on the Conflict Tactics Scale (Straus 1979) which is a comprehensive tool in measuring a range of verbal and physical conflict resolution strategies. Just over 16%, or one in six American couples reported incidents involving physical assault in 1985. Most of these were described as pushing, slapping, shoving or throwing things. However, in 3.4% of households ‘serious’ assault occurred. This was a small reduction from the 1975 study.

However, the authors argue that this is an under-estimate as they are ‘virtually certain’ (pg. 17) that not every respondent was frank in describing incidents, possibly due to fear of participating. This fear represents a fundamental problem in measuring partner abuse in general. The authors estimate that, based on other studies the rate could be twice as high. The fact that a study of this size and breadth was revised in the light of smaller surveys throws doubt on the usefulness of this method of research. However, the estimate of double the rate measured would mean almost 7 out of 100 American women were severely assaulted by their partners in 1985.

Bullock et al (1989) attempted to measure self reported abuse by examining the health forms of 793 women in a planned parenthood project. They found one in 12 women or 8.3%, were assaulted at home by partners although this again depends on a women’s ability to be open in completing the forms. McLeer and Anwar (1989) in a study of battered women in an emergency room found that battering was responsible for more injuries to women than car accidents, rapes and muggings combined. The use of accident and emergency facilities does seem as to be a useful place to interview women, but precludes many who will be experiencing violence at the other, less physically damaging end of the continuum or those not seeking help. In Britain, of over 1,000 women interviewed for ‘World in Action’ (Granada TV August 1989) one-third of women reported that they had been victims

of violence at the hands of their husbands (quoted in Jukes 1993). However, the interview methods used in this study are not reported. A more objective measure of the extent of violence is provided by the Women's Aid Federation who state that in the year 1989-90 over 30,000 women and children were accommodated in refuges throughout England (Donnellan 1993). However, this only highlights those who left relationships and used refuges as a resource.

In terms of the repeated nature of the violence towards women in abusive relationships, Straus et al (1980) found in a sample living in a shelter for battered women, the number of assaults reported by residents averaged more than one per week. In the National Family Violence Resurvey the frequency reported was six per year. Dobash and Dobash (1984) found that the violence experienced by women escalates in severity and frequency over time cumulating in two attacks per week per woman. A study by the Women's Aid federation in England in 1978-1980 found that the average length of time women spent in violent relationships was 7 years (quoted in Donnellan 1993, pg 3). Therefore, it can be concluded that many women are frequently assaulted as described in Scott's (1974) definition. In addition, these assaults usually occur over many years, highlighting that women are remaining in abusive relationships for long periods of time.

The evidence from several studies shows that women of all ages and races are battered regardless of educational, economic or social background (Chez 1990, Mercy and Saltzman 1989, Walker 1989). This appears to be a consistent finding. In a review of the available literature Goodstein and Page (1981) stated that

'all studies agreed that a broad range of socio-economic groups are represented among battered wives' (pg. 1037)

The conflicting research findings as to the prevalence of partner abuse serves to confirm the methodological difficulties in obtaining reliable figures. But in summary, estimates of rates of violence towards women at the hands of their partners varies between 6% and 33% depending on the definitions and research tools used. All of the methodology reviewed contain some potential flaws and these figures do not include rates of emotional or sexual abuse which can be even more difficult to define and measure. The one apparently consistent finding is that women who are battered are not found in one particular socio-economic group.

The Centres for Disease Control (1990) notes

'Violence between persons who are related, share a household, or are otherwise intimate with each other is a widespread public health problem'(quoted in Woods and Campbell 1993 pg. 173)

Given this context that a significant minority of women are being subjected to assaults, which are often repeated and occur over a long period of time, an understanding of the potential psychological sequelae is an important endeavour. The development of research into the psychological effects of partner abuse will be reviewed.

1.3 Understanding the Psychological Effects of Partner Abuse: Historical Overview

Recognition of the psychological consequences of partner abuse has a relatively short history (Herman 1992). Early studies were mainly descriptive but the development of 'Learned Helplessness' theory (Seligman 1975) provided a useful framework for some work from a more theoretical perspective. This was followed by the literature emerging during the 1980's and early 1990's indicating that the diagnosis of Post Traumatic Stress Disorder (PTSD) was a helpful conceptualisation of the psychological consequences of partner abuse. This was based on the recognition that being assaulted at home constitutes a major trauma (e.g. Herman 1992).

The initial studies into the psychological effects of partner abuse emerged in the 1960's and the first significant ones were published in a special edition of the *Journal of Marriage and the Family* (1971). However, these studies were mainly atheoretical and descriptive, focusing on the fact that women who had been battered had scores which deviated from the norm on a wide range of psychological measuring. For example, Rounsaville and Weismann (1977 78) interviewed women who had been battered (n=37), seen in an emergency room over a one month period. They found that more than half of these women had significant symptoms of depression, 65% had a history of psychiatric treatment and 29% had made at least one suicide attempt. Scott (1974) stated that women could be driven to mental breakdown, alcoholism, crime and occasionally violence by the experience. Gayford (1975) reported that women may attend their G.P.'s with 'vague physical and mental symptoms'. Somatic symptoms, hyperventilation, anxiety and abuse of drugs were also noted (Viken 1982)

These studies indicated that partner abuse was related to difficulties in areas of psychological functioning for some of the female survivors. Walker's research with the 'Battered Women Research Centre' (Walker 1983, Walker 1988) was an early attempt to integrate these findings into a theoretical perspective. The model explicitly studied was based on Seligman's (1975) 'Learned Helplessness' theory. This predicts that a perception of helplessness or lack of control is learned during experiences of uncontrollability or non-contingency between the individual's response to a situation and the outcome. In turn, this absence of perceived control leads to an individual taking no action to avoid harm as it has been learned from past experience that this is futile. In this situation a passive, helpless stance is taken (Walker 1988). This was argued to be related to the common finding of high rates of depression among women who had been battered. It is also proposed as an explanatory framework for why women stay in abusive relationships.

Walker's study is of importance as it illustrates a number of central points, therefore the findings will be outlined. A detailed interview and standardised measures of psychological functioning and personality were completed with self-identified battered women (n=403). Experience of childhood sexual abuse was reported by 48% of the sample. The existence of a relationship between childhood sexual abuse and adult abusive relationships has been noted by a number of authors (Van Der Kolk 1989, Chu 1992, Sandberg 1994). In addition, high levels of violence in the family of origin (67%) was reported in this sample. Also many women had other childhood experiences in common, such as

being a member of a large family, moving frequently, having an alcoholic parent or parents with rigidly traditional roles. These experiences, from clearly abusive to chaotic or controlling, are hypothesised to be linked with a risk of developing a perception of lack of controllability over events in later life. This is argued to reduce a women's perception of her ability to influence the outcome of future occurrences.

It is postulated that through the process of learned helplessness this leads to a vulnerability towards being less able to cope effectively and take the self-protective action required when violence in an adult relationship emerged. As learned helplessness is hypothesised to underlie some depression, it was felt to explain the high rates of this problem. Statistical analysis of the data led to the conclusion that learned helplessness could also develop in the adult stage of the women's life as a direct response to battering. However, the childhood effects were found to be more influential.

Self-esteem in the sample was high in Walker's study, this was against the original hypothesis and at odds with higher rates of depression. It was postulated that women saw themselves as stronger and more independent as a result of surviving the battering experience. In terms of personality measures, they report that they found no evidence of a 'victim-prone' characteristic. This is important as it provided direct evidence against the theoretical position that a women's pathology underlies her reluctance to leave violent relationships. An example of this is the concept of some women having a 'Masochistic Personality Disorder' which was later renamed 'Self-Defeating Personality Disorder' (Kass et al 1989). The characteristics of which are

' a pervasive pattern of self defeating behaviour.. The person may often avoid or undermine pleasurable experiences, be drawn to situations or relationships in which she or he will suffer, and prevent others from helping him or her' (DSM-III-R).

However, this personality disorder was defined as being in need of further study and was not subsequently included in this edition of the Diagnostic and Statistic Manual, DSM-IV (Dowson and Grounds 1995).

This study is of importance as it has made a link, underpinned by a psychological framework, between the issues of the direct psychological consequences of violence and the difficulty leaving the violent relationship. It also provides an possible explanation as to why some women have a history of repeated victimisation. The position outlined suggests a vicious circle, where the traumatic experiences undermine women's coping responses and thus leave them more vulnerable to further abuse. These issues of difficulties leaving the relationship and psychological consequences of the assaults are intimately entwined throughout the literature on partner abuse. For example, repeated assaults which are hypothesised to be traumatic, could not occur if the women was separated from the perpetrator. It is therefore also necessary to acknowledge women's difficulty leaving violent relationships.

A major problem with the learned helplessness theory is that it does not explain a great number of the psychological symptoms found in women who have been battered, providing mainly a position on development of depression. Herman (1992) also suggests that women are not simply

passive in the face of violence but actively plan their 'submissive' role appreciating that this is a mechanism for avoiding further harm.

More recently the psychological sequelae of partner abuse has been conceptualised as a response to the significant trauma, mainly using the diagnosis of Post Traumatic Stress Disorder as its' basis (Diagnostic and Statistical Manual [DSM] e.g. 1980, 1994 American Psychiatric Association). This was initially due to the observation that battered women were exhibiting similar symptoms as other victims of violence such as rape (e.g. Krupnick and Horowitz 1980). In order to examine the usefulness of Post traumatic Stress Disorder (PTSD) in understanding women's response to partner abuse a general overview of the diagnosis will be outlined.

1.4 Post Traumatic Stress Disorder: Overview

Post Traumatic Stress Disorder (PTSD) rests on the principle that victims respond to their experience through an alternating sequence of intrusions and avoidance (Goodman et al 1993, Herman 1992). The key aspect of the disorder is that the person has witnessed or experienced a serious threat (real or perceived) to his or her life and physical well being, or the life of a significant other. It is unusual in terms of psychiatric diagnosis in that a particular causal event, a trauma, is required as part of the diagnosis. The person's response to the event must be 'intense fear, helplessness, or horror' (DSM-IV pg 424).

The word 'trauma' has been traced to its' Greek origin in the word for 'wound' and been defined as

'an emotional state of discomfort and stress resulting from memories of an extraordinary, catastrophic experience which shatters survivors sense of invulnerability to harm' (Figley 1985 pg. xviii).

Although as can be seen by the prevalence figures, the experience of partner abuse is not 'extraordinary' in women's lives it could certainly impinge on her sense of the safety in the world around her. It could be argued that, in fact women experiencing partner abuse would be more at risk of having their sense of invulnerability disrupted as the violence is occurring in the place most associated with safety, the home.

Post Traumatic Stress Disorder is diagnosed if the following symptoms are being experienced. The survivor is re-experiencing the event, or part of it, in some form such as nightmares or flashbacks. The individual is avoiding situations or stimuli associated with the trauma or experiencing a general emotional numbing. Finally, the individual should be suffering from hyperarousal. In order to meet this criteria these symptoms should persist for at least one month. (DSM-IV American Psychiatric Association 1994). The diagnosis should also specify whether the disorder is acute, chronic or has a delayed onset. The acute category is when the symptoms have a duration of less than 3 months, chronic being more than this time period. The delayed onset identifies a group of individuals where at least six months have passed between the trauma and the onset of symptoms. Appendix 1 includes a full description of the diagnostic criteria for PTSD.

The diagnosis specifies a number of features which may be associated with it. These include guilt feelings, termed 'survivor guilt', usually experienced if others did not survive the traumatic event. Interpersonal and work difficulties often linked to phobic avoidance may also be found. If the trauma has been of interpersonal origin (and partner abuse is included explicitly), impaired affect modulation, self destructive and impulsive behaviour, dissociative symptoms, somatic complaints, feelings of being permanently damaged, shame, despair, loss of previously held beliefs, impaired relationships, social withdrawal and personality change are noted. In addition, there is an increased risk of a range of anxiety disorder, such as obsessive compulsive disorder, social phobia and agoraphobia. However, the extent to which these may predate the trauma is considered to be unclear.

An additional syndrome of 'Acute Stress Disorder' has been added to DSM-IV (American Psychiatric Association 1994). This is the framework within which reactions that occur within the first month of the traumatic event are conceptualised, the essential features of which are anxiety and dissociative symptoms. The anxiety symptoms characteristically seen include sleeping difficulties, irritability, hypervigilance and exaggerated startle response. A subjective sense of numbing, derealisation, depersonalisation and amnesia for important aspects of the trauma are included as dissociative symptoms. Re-experiencing the trauma and avoidance of associated stimuli as in PTSD are also included. These symptoms should last for a minimum of 2 days and maximum of 4 weeks. It is unclear why the dissociative symptoms so central in the Acute Stress Disorder are relegated to an associated feature in PTSD. For a full description of the criteria of Acute Stress Disorder see appendix 2.

The incidence of PTSD in the general population ranges from 1% to 7%, depending on the diagnostic tools used. However, in Vietnam veterans, fire-fighters, rape victims and other exposed to highly stressful events, incidence is as high as 20-40% (Breslau et al 1991, Card 1987, Davidson and Fairbank 1993, McFarlane 1989).

Factors which increase the risk of developing PTSD and explain why some members of a population exposed to an event and not others develop this disorder have been extensively investigated. Several authors have postulated that, in general events which occur from intentional human action is more psychologically devastating than traumas of natural origin. This is argued to be due to the fact that in addition to destroying trust and security the events are perceived to be linked with deliberateness, malice and negligence in others (Green 1990, Karl 1989, Ochberg 1991, Tanaka 1988). This has obvious consequences for women who have been battered, particularly given that the perpetrator is someone the victim has an emotional bond with.

Research into combat-related PTSD had attributed aetiology to pre-military factors such as premorbid adjustment and family psychopathology, military factors such as adjustment to military and combat exposure and post-military variables such as homecoming and social support (Astin et al 1995). Numerous studies have found that the level of violence experienced is the single biggest contributor to the development of PTSD symptomology in both clinical and non-clinical samples (e.g. Butler et al 1988, Foy and Card 1987, Gallers et al 1988, Solkoff et al 1988, Woolfolk and Grady

1988). Although, trauma intensity is the single biggest factor found in these studies, negative intercurrent life events and lack of social support have been shown to be significantly related to PTSD among combat veterans (Butler et al 1988, Cluss et al 1983, Foy et al 1984, Frye and Stockton 1982).

When trauma intensity has been controlled for, pretrauma variables such as previous psychological adjustment have not been found to be significantly related to PTSD in many studies (Foy et al 1987). This is contradicted by research examining fire-fighters exposed to a bushfire disaster (McFarlane 1989). This author found that neuroticism and a past history of psychological disorder were better predictors of post-traumatic morbidity than the degree of exposure to the trauma or the losses sustained. Given, for example, the findings by Walker (e.g. 1988) which highlights the important role of premorbid, or childhood experiences in determining possible coping styles following a trauma in adulthood, McFarlane's findings appear consistent. Herman (1992) however integrates these findings, arguing that there is a dose-effect relationship between exposure to trauma and outcome. That is, there is a potential level of exposure to trauma at which all survivors would be vulnerable to experiencing the effects of PTSD. But premorbid personality or previous life events may influence the vulnerability of individuals to experience psychological changes at different levels of exposure. The fire-fighters were involved in a trauma with no obvious intentional human action, therefore it is possible that this would be considered a 'less' traumatic event and McFarlane was identifying a particularly vulnerable sub-group.

These findings are of central importance in conceptualising response to trauma. That the level of violence is one of the biggest contributors to the development of PTSD and the fact that a considerable minority will have this reaction indicates that this is a relatively normal response to the event. However, awareness of premorbid vulnerability allows targeting of resources towards those most likely to be in need. The fact that social support and post-event life experiences are protective factors allows the possibility of preventive responses from the community.

This view of women's response to partner abuse in terms of Post Traumatic Stress Disorder has several advantages. It allows women's response to partner abuse to be seen as a normal reaction to abnormal events thus depathologizing the victim, in that it is a reaction found in common with survivors of other traumas (Goodman et al 1993). It also suggests treatments based on an extensive literature and allows integration of disparate symptoms within a single diagnostic entity (McCann and Pearlman 1990). Studies which have examined women who have been battered from the viewpoint of PTSD will be reviewed. They indicate that a significant minority of women who have been battered do indeed meet the criteria for Post Traumatic Stress Disorder.

1.5 Post Traumatic Stress Disorder and Battered Women

Several studies have explored rates of PTSD in groups of battered women and found that a significant minority meet the diagnosis. However, there are a number of potential difficulties with these studies and in drawing comparisons between them. A major difficulty is in sample selection. Many of the studies use clinical samples or alternatively groups recruited from refuges or shelters for

women who have been battered. In this review no statistics could be found on the proportion or characteristics of women leaving abusive relationships who used the refuges as a resource. Therefore, the representativeness of that group is not known. Use of clinical samples obviously has a risk of targeting women with the most acute difficulties. Secondly, some studies have failed to give information on the time since the events occurred or have completed measures before the one month since event criteria in the diagnostic guidelines for PTSD. Finally, there is an issue of measurement tools as different studies use different methods, for example questionnaires and interviews.

Kemp et al (1991) found PTSD positive status in 84% in a fairly large sample (n=77) of women who had been battered. This is considerably higher than the rate found in other traumatised populations (e.g. Breslau et al 1991, Card 1987, McFarlane 1989). But this study is not reliable as it included non-standardised interview measures and the participants were interviewed within five days of arrival at a domestic violence shelter. Houskamp and Foy (1991) found 45% of a group of 26 women attending a domestic violence clinic met the criteria for PTSD using a structured clinical interview and a standardised self report measure ('The Impact of Events Scale', Horowitz et al 1979). Of a sub-group, categorised as high exposure to violence, 60% met the criteria suggesting that level of exposure to violence was an important variable in developing the disorder. Again, this is a greater rate than would be anticipated. However this study employed no control group and used a small, clinic sample where particularly high rates may be expected.

Cascardi et al (1995) compared women in physically violent relationships, discordant but non violent relationships and maritally satisfied women. They found current rates of PTSD as 33%, 0% and 11% respectively, using a structured interview schedule. The control group rates of PTSD was related to events external to the marriage such as car accidents, sexual abuse in childhood and a hurricane. This study also found that battered women had higher rates of past major depression and current major depression. However, the group with discordant marriages were characterised by higher rates of anxiety disorders such as panic and generalised anxiety. This study can be interpreted as giving direct evidence that the experience of violence was the major contributor to the development of PTSD and further supports the Houskamp and Foy (1991) finding that degree of exposure to violence was related to higher rates of the disorder.

This figures can be compared to those found by Resnick et al (1993) who measured PTSD in a sample of 4,000 nationally representative women. They found a lifetime prevalence of 12.3% and a current rate of 4.6%. Women who had been victims of crime generally had a current rate of PTSD of 25.8%, while women who have been victims of assaults had a lifetime rate of 38.5%. Those who had experienced rape had a lifetime prevalence of 32%. Women who had experienced trauma which included life threat and injury had a lifetime rate of 45.2% and a current rate of 19.5%. A structured interview for PTSD completed by trained female interviewers was used.

Some studies have attempted to explore factors external to the rates of violence which influence rates of PTSD in battered women. Astin et al (1995) used two standardised self-report measures of PTSD with a sample of 53 battered women from both shelter (a domestic violence

women's refuge) and clinic settings. Using the criteria of gaining significant results on both measures they found a prevalence of 33%. This study found, in line with other populations who had experienced trauma that positive life events and social support were related to lower rates of PTSD. The rate of PTSD found in this study is comparable to that found by Resnick et al (1993).

Kemp et al (1995) in their study of over 200 women from both shelters and the community, using a non-violent but conflictual marriage group as controls, found a number of variables which increased the likelihood of developing PTSD. These included higher rates of physical violence, verbal abuse, degree of injury, forced sex and threat. In addition, a further analysis of variables measured in the battered women's group found that a history of childhood sexual abuse, a disengaged style of coping (such as wishful thinking, social withdrawal and problem avoidance), other negative life events and poor quality of perceived social support were all related to the likelihood of developing PTSD. The battered women met the diagnosis of PTSD in 81% of cases. Interestingly 62% of the maritally conflictual group also met the criteria for PTSD. However, again non-standardised measures were used and the high rates in the group who had not experienced trauma indicates an overestimate.

Astin et al (1995) compared 50 women who had been battered with 37 women from non-violent but discordant marriages using the structured clinical interview for PTSD (Spitzer and Williams 1995). The battered women had a significantly higher rate of PTSD (58% vs. 19%). Although both had experienced similar levels of previous trauma, the battering experience and experience of childhood sexual abuse predicted 37% of the variance in overall PTSD intensity levels. These are important findings in that sexual abuse is being identified as a risk factor for PTSD after partner abuse given the studies indicating the high rates of childhood abuse in women who are battered.

Saunders (1994) used a number of PTSD self-report questionnaires with battered women from two different sources (domestic violence programs and other types of programmes). They found that 60% of the former and 62% of the latter met the criteria for PTSD. However, the main aim of their research was to identify particular profiles of responses in the women in different settings. The women in the domestic violence programme had experienced higher levels of abuse and their profiles of response differed in some ways. They were more likely to report feeling ashamed of being alive, more frequently have unpleasant memories or amnesia from the abuse, to withdraw from activities, to have symptoms of hyperarousal and to have symptoms of agoraphobia. In addition, using a cluster analysis of the Minnesota Multiphasic Personality Inventory there was evidence of a continuum rather than a definite pattern of distress in a further study (Douglas and Colantuona 1987).

Therefore, in general high rates of PTSD are found in most studies regardless of whether shelter or clinic samples are used, with estimates of rates varying from 33% -84%. Although keeping strict diagnostic guidelines is important in research terms and this precludes the results gained using non-standardised assessment, considerable distress may still be experienced among women who may not strictly meet the more conservative criteria. The studies by Kemp et al (1995) and Astin et al (1995) again highlights the importance of early experience in mediating the response to adult violence.

That is, women who had the experience of childhood sexual abuse appear to be at a higher risk of developing symptoms of PTSD in adulthood. The Sauders (1994) and Douglas and Colantuona (1987) indicate that psychological consequences of partner abuse may vary depending on the individual aspects of the experience

In conclusion, this review of relevant papers indicates that PTSD is commonly being found in women who have been battered and therefore its usefulness as a diagnosis seems undoubted. However, a number of difficulties with using PTSD as a diagnosis for women who have been battered must be highlighted.

1.6 Difficulties with PTSD as a diagnosis for understanding women who have been battered

Goodman et al (1993) argues that the PTSD model has several limitations in understanding the consequences, psychologically, of partner abuse. Firstly, they state that although PTSD accounts for many of the symptoms experienced by victims, it does not cover all of them and is failing to capture the depth and complexity of victim's experience. Depression has been consistently found in battered women (Feldman 1983, Gayford 1975, Hilberman and Munson 1977-78, Hilberman 1980, Walker 1984 Cascardi & O'Leary 1992, Cascardi et al 1992, Gleason 1993, Hartik 1982, Walker 1979). This is not included in the PTSD criteria although it does overlap with a number of symptoms (difficulties falling asleep, restricted range of affect, markedly diminished interest in activities) (Kemp et al 1991). Some research has suggested that the degree of depression is related to the degree of violence experienced (Cascardi & O'Leary 1992, Gelles & Straus 1988). General anxiety symptoms including agoraphobia, panic attacks and social phobias were found in up to 50% of battered women in a shelter and 24% of those living with the abusive partner (Gleason 1993). The increased risk of this is only noted in the associated features of the diagnostic guidelines (DSM-IV, APA 1994).

For the disorder of PTSD to be useful clinically it should identify treatment corollaries. This represents one of the most important difficulties with the diagnosis. There is no single framework of theory which adequately explains the different aspects of the criteria and suggests an optimal treatment approach. Goodman et al (1993) provide a coherent account of how women's response to battering and resultant features of PTSD can be conceptualised into various theoretic frameworks. This is briefly summarised in appendix 3. However, the most important point, from the outlook of this review is that each of these models approach different aspects of the response to a traumatic experience and each fails to capture some elements of it. Therefore, the diagnosis of PTSD does not necessarily infer a comprehensive treatment approach.

It has been argued that the most consistent findings in groups of women who have been battered are in fact depression, low self esteem, self blame and stress related physical symptoms. These are not the hallmark of PTSD and are not conceptualised within its framework (Campbell 1990). Personality difficulties or changes have also been found in some women who have been battered. For example, a Swedish study examining personality characteristics and psychiatric

difficulties in battered women found that in their sample, taken from an emergency ward, the survivors were meticulous (needed order), had a weak need for achievement and had strong nurturing needs (Bergman et al 1987). Personality profiles of battered women generally have found them to be unassertive, shy and reserved (Weitzman and Dreen 1982) or aggressive, masculine, frigid and masochistic (Ball 1977, Snell et al 1964). Gelles and Cornell (1990) argue that despite these opposing views it has tended to be assumed these are premorbid characteristics and again this has been linked to why women stay in violent relationships. This may be underlying the theory of a masochistic personality discussed previously. However, it is at least possible that personality changes are resultant from, not causal to partner abuse.

Post Traumatic Stress Disorder is structured to characterise the effects of a traumatic incident that is not ongoing, that is it explains the effects found psychologically once the trauma is past. This is argued to be insufficient to explain the consequences for people who continue to face threat or danger such as in partner abuse (Herman 1992). Additionally, it is suggested that the fact that the abuser is a trusted intimate greatly complicates the recovery process and this interpersonal element is not understood within PTSD (Dutton 1992). Astin et al (1995) argue that the experience of battering is more complex than other trauma, as the women will be assaulted repeatedly and over a long time period by a person they know and trust. A large component of their traumatic experience is the emotional abuse and betrayal. In addition, the survivors are at risk of retraumatisation due to repeated contact with the perpetrator as custodial and legal arrangements are sought. The complex matter of what are reactions to trauma and what are proactive strategies aimed to cope with it is also not being addressed (Follingstad et al 1988). In addition, the concept of PTSD offers no explanation as to why women remain in violent relationships. This is an obvious advantage of the learned helplessness position previously outlined.

These criticisms are echoed by Finklehor (1988) in a review of the use of PTSD as a diagnosis in survivors of childhood sexual abuse. There are many similarities between these two traumatic experiences in that an individual is repeatedly victimised by another who is often in a position of having an emotional bond with the survivor. However, it has been argued that a fundamental difference between these experiences is that the community response is usually more ambivalent towards women who are battered because of the perception of greater control and choice between adults (Follingstad et al 1988).

Examples of emotional reactions found in adult survivors of childhood sexual abuse, an intensively studied example of repeated trauma, are found in appendix 4. The greater range of symptoms than found in the PTSD diagnosis is clear from this summary. Although there are clear developmental issues in understanding reactions to childhood sexual abuse, there are enough similarities to consider examining these symptoms in women who have been battered.

Prior to the publication of the 4th edition of the Diagnostic and Statistical Manual, the fact that PTSD is more able to capture the sequelae of a single event such as a rape, in preference to chronically traumatic situations such that experienced by battered women was acknowledged. A

review was carried out using a range of survivors of repeated, long term or chronic trauma such as concentration camp survivors, battered women, adult survivors of childhood sexual abuse and hostages (Pelcovitz et al 1996). The main symptoms found in addition to PTSD symptomology were arranged into seven clusters. These were: alterations in affective arousal; alterations in attention and consciousness; somatisation; alterations in self-perception; alterations in perception of the perpetrator; alterations in relations with others; and alterations in systems of meaning.

These almost exactly correspond to the symptoms delineated by Herman (1992) in her treatise on the effect of chronic or repeated trauma which will be described in greater detail in the following section. Herman (1992) has named the diagnosis postulated to be related to the effect of chronic or repeated trauma 'Complex Post Traumatic Stress Disorder'. Pelcovitz et al (1996) named this group of symptoms 'Disorder of Extreme Stress (DES)' which was considered for inclusion in DSM-IV (1994). However, because the majority of survivors also reached a diagnosis of PTSD (only 3.4% had DES in isolation) the American Psychiatric Association simply broadened the existing PTSD criteria (Turnbull 1997).

The absence of an explicit category for reactions to chronic trauma which, as has been reviewed, can be a very different experience than a discrete trauma, may lead to a reduced awareness among practitioners as to the range of reactions which are possible. However, the fact that this emphasises that Disorders of Extreme Stress is related to PTSD is important. It offers an acknowledgement that as previously discussed PTSD is a common experience for battered women even if it does not provide for the whole spectrum of possible psychological reactions. The term Complex PTSD is preferred to Disorder of Extreme Stress as the former retains its emphasis on the relationship with PTSD.

Before examining the diagnosis of Complex PTSD, a further study which is illuminating will be reviewed. It argues that the sharp dichotomy between chronic and discrete trauma may not be entirely useful. Van Der Kolk et al (1996) reviewed the evidence concerning PTSD generally and argue that

'a century of clinical observations and systematic research has shown that there is a range of other symptoms associated with exposure to extreme stress which cannot be easily understood within the framework of alternating intrusion and numbing' (pg 83).

The symptoms of dissociation, somatisation and affect dysregulation (unmodulated anger, sexual involvement, self-destructive behaviour and chronic suicidality), are all listed as associated features of PTSD but Van Der Kolk et al (1996) argue that the relationship is far closer than this. In addition, numerous pieces of research have concluded that there is high co-morbidity between PTSD and affective and anxiety disorders (Breslau et al 1991, Davidson et al 1985, Kulka et al 1990).

Evidence has also suggested that there is a close relationship between PTSD and dissociation (Spiegel et al 1991, Marmar et al 1994, Spiegel 1991, Bremner et al 1992, Koopman et al 1994, Holen 1993). Dissociation has been defined as 'a complex process by which memories are disconnected from each other and to symptoms such as depersonalisation and derealisation' (Yehuda et al 1996 pg 935).

Somatisation, which is defined as 'somatic complaints in the absence of organic findings' (Van Der Kolk et al 1996 pg 85) has also been found to be related to PTSD (Walker et al 1991, Saxe et al 1994, McFarlane et al 1994) and an inter-relationship between dissociation and somatisation has also been noted (Pribor et al 1993, Coons et al 1988, Putnam et al 1984, Putnam et al 1986, Ross et al 1989, Lowenstein 1990, Gross et al 1980, Walker 1992).

In their research, Van Der Kolk et al (1996) examined 395 PTSD treatment seeking adults from five sites in the United States. Data was gathered using a number of standardised structured interviews. Their results supported the hypothesis that there was an 'intimate association' (pg. 89) between the diagnosis of PTSD, dissociation, somatisation and problems of affect regulation. Van Der Kolk et al (1996) found that the symptoms did not occur in isolation, but rather clustered together in the same individuals. They also found that this triad of symptoms persisted after the criteria for PTSD would no longer be met. They state that

' in the vast majority of patients with PTSD, this diagnosis does not adequately describe the full extent of their suffering. The occurrence of pure PTSD was the exception rather than the rule' (pg 89).

It is argued from these results that there is a need for the diagnosis of this type of reaction to be widened from that currently used. This suggests that it is not simply in the case of chronic or repeated trauma that symptoms important in the understanding of the psychological response are not being given sufficient attention in the diagnostic guidelines. These results suggest that the symptoms occurring as a response to trauma may be considered as part of a continuum with a range of overlapping and associated responses along it. This is argued to be the case by Herman (1992) with a continuum postulated which ranges from Acute Stress Disorder to Post Traumatic Stress Disorder to Complex Post Traumatic Stress Disorder.

Evidence of parts of the triad of dissociation, somatisation and affect dysregulation discussed by Van Der Kolk et al (1996) is found in the existing literature on battered women. Somatisation was found in 65% of a sample of battered women in the community (Follingstad et al 1991). In terms of affect dysregulation, unmodulated anger has been referred to on a number of occasions. For example, in a description of women who had been battered coming to the first shelters in the early days of Women's Aid, Pizzey (1974) describes graphically the difficulties some of the traumatised women have coping with their anger particularly towards their children. In a study of 13 aggressive abused women, 8 abused their children (Pfouts 1978).

Anger in some cases is identified as problematic as it is hypothesised that there may be fears of expression of this emotion due to observation of their partner's loss of control. Therefore, this emotion may be directed inwards as self-mutilation and suicide attempts (Carmen et al 1984). Self destructive behaviour and chronic suicidality is also included in Van Der Kolk et al's (1996) description of affect dysmodulation. Carmen et al (1984), in research covering a spectrum of abuse, found that abused women were more likely to become depressed and suicidal after the abuse experience. High rates of suicide attempts in battered women have been found by other authors

(Hilberman 1980, Pfouts 1978). Gayford (1975) found that of the 100 battered women in a research sample, 42 had attempted suicide. In addition, although not often studied empirically the literature suggests a high level of alcohol abuse (Carmen et al 1984, Stark et al 1979) and a high use of prescription medication (Stark et al 1979). These behaviours could also be seen as self destructive behaviour. The current review found no reference to problems of unmodulated sexual behaviour or dissociation. Given the centrality, particularly of the latter, future research must examine this.

In summary, women who have been battered are at risk of developing PTSD and high rates of this diagnosis have been found in a number of studies. However, given the difficulties described above, questions have been raised as to the suitability of explaining all the psychological sequelae found within this framework. The review carried out prior to the publication of DSM-IV did suggest a wider range of possible responses which were not included with equal emphasis as compared with the traditionally noted features of the disorder. As previously mentioned Herman (1992) had published guidelines to diagnosis of 'Complex PTSD' which incorporates most of the features described above. Herman's diagnosis and the theoretical background to it will be described and discussed with particular reference to women who have been battered.

1.7 Complex Post Traumatic Stress Disorder (Herman 1992)

Post Traumatic Stress Disorder, it has been argued, does not explain the full range of psychological symptoms experienced by women who have been battered. This is particularly the case given that partner abuse is a complex, chronic and on-going trauma. Herman (1992) attempts to make a clearer conceptualisation of the effects of various chronically traumatic situations, drawing together the evidence of psychological effects of childhood sexual abuse, political prisoners and women who have suffered partner abuse. Symptoms were identified by scanning the literature of both experimental studies and autobiographical accounts of survivors of different types of chronic trauma over the past fifty years. What was consistently reported but not covered by the existing PTSD diagnostic criteria was identified. The diagnostic criteria are described below.

'1. A history of subjection to totalitarian control over a prolonged period (months to years). examples include hostages, prisoners of war, concentration camp survivors, and survivors of some religious cults. Examples also include those subjected to totalitarian systems in sexual and domestic life, including survivors of domestic battering, childhood physical or sexual abuse, and organised sexual exploitation.

2. Alterations in affect regulation, including

- persistent dysphoria
- chronic suicidal preoccupation
- self injury
- explosive or extremely inhibited anger (may alternate)
- compulsive or extremely inhibited sexuality (may alternate)

3. Alterations in consciousness, including

- amnesia or hypermnesia for traumatic events
- transient dissociative disorder

- depersonalisation/ derealization
 - reliving experiences, either in the form of intrusive post traumatic stress disorder symptoms or in the form of ruminative preoccupation
4. Alterations in self perception, including
 - sense of helplessness or paralysis of initiative
 - shame, guilt and self blame
 - sense of defilement or stigma
 - sense of complete difference from others (may include sense of specialness, utter aloneness, belief no other people can understand, or non-human identity)
 5. Alterations in perception of perpetrator, including
 - preoccupation with relationship with perpetrator (including preoccupation with revenge)
 - unrealistic attribution of total power to perpetrator (caution ; victims assessment of power realities may be more realistic than clinician's)
 - idealisation or paradoxical gratitude
 - sense of special or supernatural relationship
 - acceptance of belief system or rationalisations of perpetrator
 6. Alterations in relations with others, including
 - isolation and withdrawal
 - disruption in intimate relationships
 - repeated search for rescuer (may alternate with isolation and withdrawal)
 - persistent distrust
 - repeated failures in self protection
 7. Alterations in systems of meaning
 - loss of sustaining faith
 - sense of hopelessness and despair'

Herman (1992) *Trauma and Recovery*, pg 121

Most of the symptoms listed above coincide with those identified by the authors described in the above review (e.g. Pelcovitz et al 1996, Van Der Kolk 1997). However, this suggests that these are not simply a set of symptoms but a complete syndrome which is precipitated by a particular set of experiences described generically as chronic trauma. In Herman's account the symptoms which transcend PTSD are divided into three main areas of symptoms.

i) *Symptomatic*: the symptom picture in Complex PTSD appears to be more diffuse and tenacious.

ii) *Characterological*: this disorder is associated with the development of personality changes including deformations of relatedness and identity.

iii) *Increased risk of repetition of harm* either self inflicted or at the hands of others is postulated to be found in survivors of chronic trauma.

These will be described in further detail and any hypothesised links to PTSD symptomology described. Herman's conceptualisation is that these symptoms are inter-related to each other and the basic PTSD criteria. Response to trauma is conceptualised as an overlapping continuum from brief stress reaction which may resolve spontaneously, to PTSD to the symptoms of Complex PTSD. As Herman's account is based on literature from a wide range of survivors of chronic trauma and from autobiographical accounts, available evidence of these symptoms from the literature reviewed specifically regarding battered women will be highlighted.

i)Symptoms

a)somatisation

Hypervigilance, anxiety and agitation without a baseline state of calm which are typically part of the PTSD symptomology is hypothesised to, over a long period of time, lead to a variety of somatic complaints including; insomnia, startle reaction, tension headaches, gastrointestinal disturbance, abdominal, back and pelvic pain. Tremors, choking sensations and nausea is also found and conceptualised in the same way. Somatisation has been found in previous studies with women who have been battered (Follingstad et al 1991).

b)Dissociation

Through the practice of dissociation, voluntary thought suppression, minimisation and sometimes denial it is hypothesised that survivors learn to cope with the reality of their ongoing traumatic situation. In the longer term however, this altered consciousness is argued to 'be at the heart of' (Herman 1992, pg 42) the third major symptom of PTSD, constriction or emotional numbing. Although dissociation at the time of trauma is an adaptive response, it is argued that in the longer term it will interfere with the process of healing by preventing integration of the experience with the rest of life. Some evidence is provided that this is also linked to difficulties anticipating and planning the future (Terr 1983). As previously stated none of the literature reviewed on battered women included measures of dissociation.

c)Affective Changes

It has been noted previously that women who have been battered have high levels of depression (i.e. Rounsaville & Weismann 1977-78). Herman's review of the literature led to the conclusion that psychological losses as a result of trauma almost universally result in a protracted depression and this is a central component of Complex PTSD. This is argued to be aggravated by the other aspects of reaction to trauma. For example, dissociation merges with lack of concentration caused by hypervigilance and the effect of trauma on self image interacts with guilty ruminations.

ii) Characterological Sequelae

a)Pathological changes in relationships

The enforced relationship in which the perpetrator monopolising the attention of the victim continues after "liberation" as the relationship is postulated to become part of the survivor's inner life. She may fear her former abuser and to expect that he will find her, but it is argued that she also may feel empty and worthless without him. In addition all other "relationships are viewed through the lens of extremity" (Herman 1992 pg 92). This is postulated to cause difficulties in forming future relationships. This is a central issue, given the evidence that social support is an important mitigating factor against the development of PTSD. Herman states that survivors are often in the double bind of finding it hard to tolerate being alone but also very wary of others. Walker (1991) notes that battered women sometimes experience interpersonal difficulties.

b) Pathological changes in identity

It is hypothesised that the experience of chronic trauma leads to a loss of the individual's sense of self, as beliefs are broken down by the experience. Herman (1992) argues that after a discrete trauma people report that a piece of themselves are changed but after chronic trauma they perceive themselves as having changed completely. Herman argues that the identity assumed during the prolonged traumatic experience cannot simply be replaced by the one previous to it. For example, the body image of a survivor must include that of a body which can be controlled and violated and their moral ideas must cope with the knowledge of the existence of evil. There is considerable evidence of personality changes in women who have been battered previously reviewed (e.g. Weitzman and Dreen 1992, Bergman et al 1987).

iii) Repetition of Harm

Herman (1992) argues that among survivors of chronic trauma there is an increased risk of further trauma or alternatively, self-inflicted harm. As has been reviewed an increased risk of partner abuse in adult survivors of childhood sexual abuse has been found (e.g. Walker 1983, 1988, Van Der Kolk 1989, Sandberg 1994). The experience of repeated trauma is particularly relevant to women who are battered and vulnerable to repeated victimisation within the same relationship. In addition, increased rates of self harm are reported in groups of women who have been battered (Gayford 1975, Hilberman 1980). However Herman argues that the majority of survivors do not abuse others. The diagnosis of Complex PTSD is making explicit the cycle of revictimisation that some survivors experience.

Herman (1992) states that it is essential that Complex PTSD is recognised as a syndrome as a failure to do so will lead to greater misunderstanding of survivors of repeated trauma by both the general public and mental health professionals. This is exemplified by Walker (1991) who notes that numbness, interpersonal difficulties and avoidance can lead battered women to appearing detached and unfeeling. In addition, it can be easily assumed that personality changes resultant from the trauma were actually causal to it. Certainly a substantial proportion of previous literature has taken this perspective, such as the now abandoned concept of Masochistic Personality Disorder. Herman (1992) particularly raises the issue of the diagnosis of Borderline Personality Disorder which she argues can be diagnosed mistakenly in cases of Complex PTSD because of the difficulties in relatedness which is central to both.

1.8 Theoretical Explanations of the symptoms of Complex PTSD

Although gathering the disparate symptoms found in survivors of chronic trauma is useful descriptively, it has little clinical significance without an underlying theoretical exposition. Herman (1992) argues, when considering the psychological consequences of any chronic trauma, a dynamic requiring exploration is the experience of 'captivity'. That is, if repeated abuse is to occur the victim must be in captivity, with an inability to take self-protective action. Although this is quite clear in for

example political prisoners, it is argued that for children and women the barriers to escape may not be physical (although they can be) but psychological, economic, social and legal. That is, there is a presumption that underlying the experience of women who have been battered is her difficulty leaving the relationship and this has a number of sources.

To achieve a situation where the women is “captive” in the relationship it is argued that psychological domination must be achieved by the partner. Walker (1979) notes that the abusers coercive techniques in situations of partner abuse although unique for each individual had a number of elements in common. Domination is achieved by violence, threats (particularly in relation to hurting the children), fear and unpredictable, inconsistent outbursts. In addition, periods of contrition and unexpected reward which keeps the hope for the relationship foremost. This account has close parallels with evidence provided by Walker (1983, 1989) of a cycle of violence where initially a stage of ‘loving contrition’ immediately following the violence is very reinforcing to the female partner. Later in the relationship this stage is no longer as necessary and the very absence of violence or tension acts as a sufficient reinforcement for remaining between assaults.

Herman (1992) argues, mirroring learned helplessness theory, that being in fear of your life and being spared repeatedly gives a sense of the omnipotence of the abuser and the futility of the individuals resistance. The women’s sense of autonomy is destroyed by constant supervision of day to day activities and social contacts. Herman argued that isolating the women is an integral part of achieving domination as it obstructs opportunities to gain validation of her experience. It is also of note that lack of social support is associated with higher risk of developing of PTSD. The experience of ‘captivity’, it is argued has additional psychological consequences over and above that of the experience of a threatening event. Captivity brings the survivor into prolonged contact with the perpetrator and under their control. This situation it is hypothesised, results in the perpetrator, in this case the violent male partner becoming the most powerful person in the victims life.

“The psychology of the victim is shaped by the actions and beliefs of the perpetrator”
(Herman 1992 pg. 75).

Thus, Herman is arguing that the experience of women who are battered and other victims of on-going trauma have the experience of captivity in common. This necessity to subjugate the needs of the survivor to the needs of the ‘captor’ is argued to be underlying many of the additional psychological sequelae found in these groups. Again, the psychological state induced by this experience may also make alternative action seem unfeasible from the perspective of the women who is being battered.

Herman (1992) has also intimated reasons for remaining in the violent relationship which are beyond psychological, that is, economic, social and legal factors. As this review is focusing on psychological consequences of partner abuse and discussing how these may underlie the perpetuation of the traumatic situation, it is beyond its scope to do more than acknowledge the existence of these additional elements. For example, Gelles and Cornell (1990) argue that cultural attitudes regarding

women and societal beliefs about using violence to resolve conflict is causal in partner abuse and in the difficulty in leaving a violent relationship.

In summary, Herman (1992) argues that the additional symptoms found in survivors of repeated trauma are resultant from the long term experience of symptoms associated with PTSD for example, somatisation arising from chronic hypervigilance or due to the additional psychological consequences of long term contact with the perpetrator. However, if Van Der Kolk et al's (1996) finding of the range of symptoms found in PTSD survivors generally is accepted, it is possible that Herman's description of underlying dynamics in terms of captivity is somewhat limited.

Wilson et al (1985) suggest an alternative viewpoint as to the link between PTSD symptomology and trauma. These authors offer a conceptualisation where the individual characteristics of the survivor and their traumatic experience interact. They argue that this

'is heuristically important since it facilitates an understanding of the dynamic mechanisms which underlie PTSD and their idiosyncratic expression in groups or individuals exposed to qualitatively different life events' (Wilson et al 1985, pg 143).

Because this review is concerned with a population rather than an individual the features of the traumatic event will be focused on and the hypothesis will be briefly outlined. Wilson et al (1985) argue that the range of PTSD symptomology experienced by a survivor is dependent on the extent to which the experience subjected them to traumatic elements as outlined by Gleser et al (1981). These authors describe the traumatic elements of an experience in terms of; degree of life threat, degree of bereavement, speed of onset, duration of trauma, degree of displacement in home community, potential for reoccurrence, degree of exposure to death, dying or destruction, degree of moral conflict inherent in the situation, role of person in trauma and proportion of community affected by trauma. Appendix 5, table A shows the relationship hypothesised between the stressor dimensions in traumatic events and psychological consequences.

In Wilson et al's (1985) study, a comparative analysis of the impact of trauma was carried out with 409 survivors of different traumatic situations including Vietnam veterans, people who had survived natural disasters, women who had been raped, battered or sexually abused and less clear traumatic events such as divorce. This is shown in full in appendix 5 table B. The table below, was modified from the Wilson et al paper, based on this review of battered women's experiences. This was necessary as the group in their study which contained women who had been battered also included survivors of other sexual assaults. Table 1.8.1 indicates how different stressor variables may influence the hypothesised range of PTSD symptomology in battered women. However, the exact mechanism of each of these is not clearly described

Table 1.8.1: Modified Stressor Dimensions for Battered Women and Link to PTSD and Associated Symptomology as outlined by Wilson et al (1985)

Stressor Dimension	Level of Stress	PTSD and Associated Symptomology
degree of life threat	***	anxiety, intrusive imagery, hypervigilance, hyperalertness, psychic numbing, sensation seeking tendencies, unconscious re-enactment of trauma
degree of bereavement	*	
speed of onset	var	anxiety, helplessness, feeling of chaos, loss of control, externalisation of attribution of causality
duration of trauma	***	severity of PTSD, level of psychic numbing and denial, psychosomatic problems, memory impairment, cognitive deficits, alcohol , drug abuse, dissociative states.
degree of displacement	Var (if leaves)	sense of anomia, rootlessness, loss of communality, changes in social bonding and increased social pathology
potential for reoccurrence	***'	anxiety, fear of recurrence, mistrust, irritability, hypervigilance, hyperalertness
exposure to death or dying	*	
degree of moral conflict	***	moral and survivor guilt, ideological changes in values, somatic complaints, upward shift in moral judgement
role in trauma	victim	paranoid ideation, rage at source, feelings of persecution, helplessness
proportion of community affected	*** (? percept ion)	loss of stable social order, illusion of centrality, loss of emotional support systems and rage at source.

Note:

***= high levels of this stress

A= agent,

**= medium levels of this stress

V= victim

*= low levels of this stress

var= variable

Using this different approach of examining the dimensions of stress in the experience of partner abuse a symptoms list very similar to that arrived at by Herman et al (1992) or Pelcovitz (1996) where the three main grouping of increased symptoms, characterological changes and risk of revictimisation are found. The one area not covered in Wilson et al 's (1985) analysis is change in view of the perpetrator. However, this does offer further evidence that the range of symptoms proposed by Herman may be relevant to this group of survivors. This also provides a different view as to how these symptoms may arise but which acknowledges the role for example, of the duration of the trauma in the understanding of the psychological sequelae. However, the exact mechanisms as to how these reactions occur is not fully explained.

1.9 Summary and Outline of Present Research

In summary, using a number of different sources of research data, there does appear to be a consensus that Post Traumatic Stress Disorder is not an adequate framework to describe the range of psychological symptoms found in individual who have experienced chronic trauma. It is postulated that the diagnosis of Complex PTSD may be more usefully utilised. This review has shown that previous research with women who have been battered provides evidence that some of the core symptoms included as part of the diagnosis of Complex PTSD have been previously recorded. However, this lacks consistent empirical evidence. The present research aims to examine whether the full range of symptoms postulated to be Complex PTSD are found in a group of women who have been battered. This is considered to be of importance, as noted by Walker (1991) and Herman (1992), without an adequate conceptualisation of the sequelae of trauma which these women have experienced, there is a risk they will be poorly understood and not given appropriate treatment. In addition, as the diagnosis includes the risk of revictimisation, it provides a context for this otherwise difficult to understand phenomenon.

A further objective in the present research is to examine whether these symptoms are associated with chronicity of abuse such as suggested by Herman (1992). In addition, the relationship between the symptoms of PTSD and Complex PTSD will be explored based on the hypothesis as suggested by this review that continuum of responses will be found.

This will be done by examining the symptoms of the hypothetical entity of Complex PTSD in a group of women in the community who have been battered. The control group used will be women who have not experienced partner abuse. It is hoped that this will provide information as to the prevalence of these symptoms in women without clear traumatic experiences.

The use of appropriate control groups has been problematic in some of the research reviewed. As outlined in table B, appendix 5 (Wilson et al 1985), examination of the different traumatogenic aspects of a life experience shows it is difficult to directly compare groups. Research with women who have had the experience of assault by a partner is particularly fraught with difficulties given that the trauma is repeated, the perpetrator is a trusted intimate and it occurs as an adult in your own home. A number of studies have employed different control groups to act as comparisons. It has been noted that battered women are unique in that they have been compared both to victims of discrete traumatic incidents and to victims of chronic victimisation (Follingstad et al 1988).

Examples of control groups used in the literature reviewed includes Astin et al (1995) who used maritally distressed women without the experience of partner abuse. This could control for the effect of violence in a population with a background of stress and emotional difficulties. Houskamp and Foy (1991) did not use a control group and instead split their sample of women who had been battered into high and low exposure groups to delineate if the intensity of violence was related to the rates of PTSD.

The present research has selected a control group of women without a history of partner abuse. Although this research cannot claim to solve the difficulties of an appropriate comparison the

hypothesis behind the selection of a normal group is that suggested by Van Der Kolk et al (1996) who argue that there is little meaningful data on the prevalence of symptoms such as dissociation, somatisation and affect dysregulation in the normal population. Therefore, it is difficult to be certain that the symptoms are only associated with trauma and it is aimed that a sample of women can provide some data as to the expected rates of these symptoms.

1.10 Hypotheses of Present Research

The main question to be answered by this research is whether Complex PTSD is an appropriate model to examine the psychological consequences of partner abuse, as suggested by the previous review. The central hypothesis is that women who have been battered will be experiencing symptoms of this disorder (increased symptoms, characterological changes and increased risk of self harm or harm at the hands of others) and that these symptoms will co-exist in the same individuals. A secondary question is as to whether Complex PTSD is on a continuum with PTSD or does it represent a qualitatively different phenomenon. The hypothesis is that a correlation between symptoms of PTSD and Complex PTSD will be found.

Finally, risk factors for developing this disorder or symptoms of it will be examined. It is hypothesised, based on the review of risk factors for developing PTSD and Herman's emphasis on chronicity of abuse, that higher rates of symptoms will be found among women who have experienced greater levels of violence, longer time period of violence, experienced other concurrent trauma or have higher rates of intercurrent life stresses and have had the experience of childhood abuse.

1.11 Summary of hypotheses

- 1a) Women who have been battered will have higher rates of symptoms associated with Complex Post Traumatic Stress Disorder than matched controls without the experience of partner abuse
- b) Women who have been battered will have higher rates of symptoms associated with Post Traumatic Stress disorder than matched controls without the experience of partner abuse.
- 2) Women who have Complex PTSD will also have PTSD.
- 3) Within the group of women who have been battered those who have complex PTSD will have experienced
 - higher rates of violence in their relationships
 - longer lengths of violent relationships
 - other traumatic events external to their relationship and higher rates of other stresses
 - sexual abuse or other childhood trauma
 - a greater number of violent relationships
- 4) Women in the community who have not experienced partner abuse but who have the symptoms of Complex PTSD
 - will have histories of childhood sexual abuse or another experience associated with repeated trauma.

2. METHOD

2.1 Subjects

Two groups of women were recruited, the first had a history of physical abuse at the hands of a partner which was defined as repeated assaults or physically threatening behaviour. The second group were women who had never had this experience. The two groups were matched as far as possible on age, number of years education, ages of children and number of children. Years of education was chosen as an estimate of socio-economic status.

When measuring socio-economic status a number of options are available. Firstly, it is possible to use occupation, income or years education (Powers 1981). Each of these had inherent problems. Women's occupation is not considered as reliable an estimate of socio-economic status as men's (Powers and Holmberg 1981) and income may only reflect the opportunities available to an often single parent. However, years education in women have been found to be correlated significantly with socio-economic status and therefore, this was selected (Cooney et al 1981). An additional benefit of this method is ease of measurement.

Matching was made more difficult because of low rates of participation in the most suitable groups of control subjects. Attempts to match the women on marital status was not possible because of the inevitable high levels of single, separated and divorced people in the battered women group and the difficulties recruiting comparable women in the community

Recruitment

The battered women group were approached by a Women's Aid hostel (16 replies, one was not contacted as she did not consent to her G.P. being informed in the case of difficulties being disclosed. This was a stipulation in order to avoid the risk of women being unable to easily access support in the event of distress). The women with the exception of 2 were not currently residents, but ex-residents who had been re-housed in the community. A local community health project (1 reply), a local college (1 reply), a local family centre (4 replies) and ad hoc contacts (3 replies) were also approached. The ad hoc contacts were friends or acquaintances of existing participants to whom the information was passed to. No participants in the experimental group were approached directly by the researcher. Either a personal contact or a letter was sent by the agencies involved along with a brief outline of the research, an information sheet and consent form. Women were asked to consider their participation and reply at a later time. When the consent forms were returned to the researcher, the participants were contacted by phone or by letter depending on the preference stated in the consent form. The research information sheets and consent form used are shown in Appendix 6.

The control group were collected from ad hoc contacts (16), a local women's rugby team (2), women involved in the refuge who had not been battered (3) and a parent support network (4). Attempts to recruit through a local public health project, colleges and local nurseries failed due to lack of interest. The ad hoc contacts tended to be acquaintances of the researcher, or of people who had already agreed to complete the research.

2.2 Design

The design of the research was a between group comparison, cross-sectionally.

2.3 Measures Used

Trauma Symptoms Inventory (TSI) (Briere 1995)

The TSI is a 100-item self report measure using a 4 point frequency score asking participants to rate how they have been feeling over the previous six months. This is advantageous in the present research because of the suspected chronic nature of the symptoms hypothesised. The TSI aims to overcome the limitations of many other PTSD questionnaires which focus only on the two constructs of intrusions and denial/avoidance. It is designed with the evidence of the effects of chronic trauma as a background and in fact, draws on the work of Herman (1992). It has 10 clinical scales including anxious arousal, depression, anger/irritability, intrusive experiences, defensive avoidance, dissociation, sexual concerns, dysfunctional sexual behaviour, impaired self reference and tension reducing behaviour. In addition, a number of critical items suggestive of more severe difficulties are included such as items of suicidal feelings, delusions and self harm such as cutting or alcohol and drug use.

It is reported to be internally consistent (mean alpha coefficients= 0.86, 0.87, 0.84 and .85) and is standardised against clinical, university, and military subjects. It had an identification rate for PTSD in 90% of previously identified cases. It also has 3 validity scales which are response level, atypical response and inconsistent response. High scores on these would question the validity and reliability of the results in that individual. Any participant scoring above the cut-off on the validity scales would be discounted. Scores for each sub-scale are calculated using a scoring worksheet and the results are plotted on a profile which translates raw scores into T-scores. The level of clinical significance is set at 1.5 standard deviations from the mean which is the T-score of 65.

General Health Questionnaire-28 (GHQ-28) (Goldberg and Williams 1988)

The General Health Questionnaire (GHQ) is designed to be a self-administered screening test aimed at detecting psychiatric disorder among respondents in community settings and non-psychiatric clinical settings such as in primary care. It aims to be easy to administrate, fairly short and objective and is aimed at identifying individuals in 'the hinterland between psychological sickness and psychological health' (Goldberg and Williams 1988 pg 2). The GHQ assumes a hierarchical model where all patients in the broad categories of neurotics, affective psychotics and schizophrenics are seen as having a basic core of symptoms referred to a neurotic (Maxwell (1973).

There is no sharp dichotomy presumed between people who are 'cases' and those who are 'normal' and the disturbance is felt to be on a continuum throughout the population. People are assigned on the basis of a probability estimate of an individual being a psychiatric 'case'. Increasing scores sharply increases the chance that the individual will be identified as a 'case'. However, contrary to the TSI, it is a present state measure.

There are various versions of the GHQ. In this research the GHQ-28 was used as it is described as the most suitable for research purposes and is claimed to be appropriate for examining the difference in rates of disorder in two populations. The four main measures included are somatic symptoms, anxiety and insomnia, social dysfunction and severe depression. The GHQ scoring system of assigning a score only to the responses which fall into positions indicating psychological ill health was chosen over the likert scoring method for a number of reasons. Firstly, it is very simple, secondly it avoids the effects of response bias caused by ‘end-users’ and ‘middle-users’ in questionnaire completion. An example of the two scoring methods is shown in table 2.3.1.

Table 2.3.1: Scoring of GHQ.

Example item: Have you recently lost much sleep over worry ?	Not at All	No More than usual	Rather more than usual	Much More than usual
<i>Likert Score</i>	0	1	2	3
<i>GHQ Score</i>	0	0	1	1

The correlation coefficients of the GHQ-28 as compared with a psychiatric interview have been measured as between 0.67 and 0.83 (Goldberg and Hillier 1979, Rabins and Brooks 1981, Banks 1983). The specificity of the GHQ-28 range from 74% (Medina-Mora et al 1983) to 93% (Rabin and Brooks 1981). The average sensitivity is 84% (Goldberg and Williams 1988).

The threshold score for ‘caseness’ which is derived from a variety of studies is suggested at 4/5. For the purposes of this study, four will be used as the evidence suggested that higher thresholds are only required when considering patients with chronic physical illnesses. As only one sub-test, the severe depression measure, is to be used in testing hypotheses in this study it was decided that a score of 2 or above on any of the items pertaining to suicidal ideation would be considered significant. The items which are relevant are D2-D4, D6 and D7. These included ‘felt that life was entirely hopeless’, ‘felt that life wasn’t worth living’, ‘thought of the possibility that you might make away with yourself’ and ‘found the idea of taking your own life coming into your mind’.

Hospital Anxiety and Depression Scale (HADS) (Snaith and Zigmond 1983)

This is a questionnaire designed for use in non-psychiatric settings and is a present state instrument asking participants to focus on the past few days. It has two subscales one measuring anxiety (A-scale) and one measuring depression (D-scale). The A-scale, measures generalised anxiety covering anxious mood, restlessness and anxious thoughts. It does not include somatic symptoms. The D-scale is largely focused on the state of loss of interest and diminished pleasure. It is advantageous in this research setting as it takes only a few minutes to complete and is equipped with clear

interpretation guidelines. Immediate results from this were available to be discussed with participants in the event of low mood or anxiety being a difficulty and further support and referrals could be arranged as necessary. Table 2.3.2 shows the interpretation guidelines

Table 2.3.2: Interpretation of HADS scores

Score	Interpretation
0-7	normal
8-10	mild
11-14	moderate
15-21	severe

Internal consistency has been measured using item subscale correlations and found to be between 0.76 and 0.41 for the A scale and 0.60 and 0.30 for the D-scale (Snaith and Zigmond 1983). Moorey et al (1991) using 568 people with cancer found Cronbach's alpha was 0.93 for the A-scale and 0.90 for the D-scale. Factor analysis on this data indicated satisfactory construct validity with two independent factors emerging which accounted for 53% of the variance.

Life Experiences Survey (LES) (Sarason et al 1978)

This questionnaire was designed initially to examine the effects of life stress on susceptibility to physical and psychological difficulties. Previously used instruments had tended to focus on life change or stress as negative and stressful regardless of the desirability of the change (Rabkin and Struening 1976) and had combined negative and positive events. The logic of this has been questioned by a number of authors (Brown 1974, Mechanic 1975, Sarason, De Monchchaux and Hunt 1975) who argue there is a need to avoid value statements about the nature of stressful events. The authors of this measure cite the example of pregnancy, for some women this may be very positive but for others it may be an unwanted negative stressful event. There is also a need to identify the direction of change for example, change in finances could be for better or for worse.

The LES is a 57 item self report measure that allows participants to indicate events they have experienced in the last year and rate them according to their perception of the impact of the event. Only part one which was designed for all respondents was used. Part two which is student specific was not used as this was not a population expected to be sufficiently represented in the groups to warrant its inclusion. Many of the items included are based on existing stress life measures and judged to occur frequently and exert a potentially significant impact on individuals lives. Three blank spaces are also included to allow rates of other, more idiosyncratic personal events to be included by the individual. There are two versions, one for men and one for women, only the female version was used.

The format of the LES asks participants to rate separately the desirability and impact of the events experienced and to indicate as to whether they occurred in the last six months or year. A

negative change value and positive change value can be calculated by adding the members of the respective categories. A total stress score is included which is the total of these two subfactors. It has been suggested that the total negative value is more predictive of health outcomes than the total score (Mueller et al 1977, Vinokur and Selzer 1975).

Two test re-test reliability studies with undergraduate psychology students indicated moderate reliability. However, the authors argue that the results may under-estimate the reliability as the 5-6 week delay between administration may have resulted in certain participants experiencing life events which would be included in the second testing. Using a group of 100 students, the relationship of this measure to anxiety was inspected. They found a correlation of .29 and .46 between negative score on the LES and trait and state anxiety scores respectively. The total score was also found to correlate with these measures although the positive did not.

In this study the positive negative and total life stress scores were calculated, although the modest reliability of the positive scores will be taken into account. The main focus is on the negative scores.

Penn Inventory for Post traumatic stress (Hammarberg 1992)

This is a 26 item self report measure designed to identify severity of PTSD. It provides a continuous score that ranges from 0 to 78 and can be fitted with a cut off of 35 for dichotomous decision making. It is designed to overcome the limitations of many PTSD measures in that it can be used for both civilian and veterans populations. In its basic design it was suitable for this study in that it does not make reference to a particular traumatic event, which is obviously preferable for a group which have experienced numerous traumatic events and a control group where asking about traumas would be presumptuous. In addition, it takes as its basic assumption that PTSD can be 'characterised as a chronic rather than an acute disorder' (pg 74).

When this was used by a population who had survived Piper Alpha disaster it was found to have a sensitivity of 94%, specificity of 100% and the predictive power of a positive result was 100% and 75% for a negative result. It correlated at .72 ($p < .0005$) with the 'Impact of Events Scale' (Horowitz et al 1979), a commonly used measure. In this study a participant was designated as PTSD positive if a score above 35 was reached.

Conflict Tactics Scale (CTS) (Straus 1979)

This is widely used as a measure of level of violence in relationships in family conflict research (i.e. Astin et al 1995, Houskamp and Foy 1991, Straus and Gelles 1986) and is described as a 'reliable and valid measure of exposure to violence' (Houskamp and Foy 1991, pg 370). It is divided into three elements; verbal reasoning, verbal aggression and physical aggression. The author argues that when measuring family conflict it is necessary to use a very structured approach as many of the conflict resolution strategies will be too much taken for granted to be reported in responses to open

ended questions and other more violent approaches may be denied due to it being unacceptable to the participant.

The verbal reasoning element is described as ‘the use of rational discussion, argument and reasoning- an intellectual approach to the dispute’ (Straus 1979 pg. 77). Verbal aggression is described as ‘the use of verbal and non-verbal acts which symbolically hurt the other, or the use of threats to hurt the other’ (Straus 1979). The physical aggression scale is defined as ‘the use of physical force against another person as a means of resolving conflict’ (Straus 1979 pg 77).

The results of factor analysis found that this corresponded closely with the groups described above. There are several versions of this scale covering different aspects of violence in families. A modified version of the ‘Form N’ was used. Form N asks both male and female partners to describe the conflict resolution tactics of the other. However, in this research only the version requiring the female to describe the male was necessary. The scoring method is to give each of the possible six responses a weighted score and to add this within each category. The weighted scores are shown in table 2.3.3. The verbal reasoning category was questions a-c, verbal aggression e-i and physical aggression j-s.

Table 2.3.2: Scoring of Conflict Tactics scale

Participants response	0	1	2	3	4	5	6
Corresponding frequency from questionnaire	Never	Once that year	twice that year	3-5 times	6-10 times	11-20 times	More than 20 times
Weighted Score	0	1	2	4	8	15	25

Copies of questionnaires used in appendix 7

Interview Schedule

This was a non-standardised interview designed for use in this study and based on the particular hypothesis to be tested. It divided into four main sections; demographic details; psychiatric history; trauma history and aspects of the complex PTSD diagnosis not covered by the existing questionnaire. The interview was structured, eliciting yes/ no responses and on a few occasions asking for further details if the women felt able to discuss it, for example the nature of sexual abuse if that had been experienced. At times the participants responded with ‘sometimes’ or ‘occasionally’, these responses were scored as 0.5 in comparison with a score of 1.0 for ‘yes’ responses and 0 for ‘no’ response.

Demographic details included age, marital status (present), number and ages of children and occupation. Psychiatric history was briefly covered by asking whether the participants had ever or were presently using a counselling service or psychotropic drugs such as anti-depressants or

anxiolytics. This was felt to be a simple way of conceptualising the presence or absence of difficulties in the past without requiring a great deal of detail. However, this obviously risks under-reporting because women may have symptoms they have not requested treatment for. Trauma history included length of time and number of violent relationships, presence of sexual abuse (contact and non-contact) or physical abuse in childhood. Childhood physical or sexual trauma was coded as present if the experience involved physical contact, was repeated and perpetrated by a person whom had some control over the child's life, for example a teacher, family member or neighbour. This strict criteria was chosen as it indicated the experience of 'totalitarian control' which is necessary to meet the criteria in Herman's (1992) diagnosis. In addition, participants were asked about witnessing or being involved in an event outside of the relationship which was 'frightening, traumatic or left you in fear of your own or someone else's life'.

The remaining questions were based explicitly on the categories 3-7 of the Complex PTSD criteria. Words similar to the criteria were used and questions were asked as consistently as possible between participants. Questions regarding changes in perception of the perpetrator were only asked to women who had been battered or women in the control group who had experienced childhood physical or sexual abuse.

Copy of the interview schedule in appendix 8.

2.4 Procedure

The women were generally approached by a member of the organisations involved, for example Women's Aid, either personally or by letter. The control group may have been approached by the organisations participating, existing participants or directly by the researcher. They were given a copy of the consent form and the research information sheet (see appendix 1) to consider and return in their own time. When these were received the participants were sent a package of pencil and paper questionnaires including the GHQ, HADS, Life Experiences Survey, Penn Inventory for Post Traumatic Stress and the Conflict Tactics Scale and an appointment to meet the researcher. If they had given permission the researcher also contacted them by phone to discuss their participation further and to arrange the interview time and venue. At the meeting the interview was completed and participants were also asked to complete the Trauma Symptom Inventory. Before starting the interview, the right to terminate it and the range of subsequent support available was emphasised.

In the case of women who became distressed during the interviews or whose scores on the HADS or GHQ-28 indicated significant difficulties the women were asked for permission to discuss their results with any other professionals involved such as psychologists, counsellors or their G.P. In the event that there was no psychological support present a referral to an appropriate agency was initiated with permission from the responsible G.P. This included an invitation to join a supportive therapy group arranged by the researcher. In addition, the women were given a phone number to contact the researcher via an answering phone which allowed for further, more immediate support if

they became distressed immediately following after or in the days following the interview. The exact nature of the information to be disclosed was discussed in some detail with each participant and it was clearly explained that, except in these circumstances, the information gathered would be completely confidential. In line with this the participants names were only included on their consent forms. The further information was given a code.

The questionnaires and interview was scored and these results allowed assignation of each participant according to the seven diagnostic criteria for Complex PTSD as outlined by Herman (1992). The method of completing this is outlined below.

2.5 Assignation of Complex PTSD Symptoms

In order that the rates of Complex PTSD could be measured, a basis which allowed membership in the groups with and without Complex PTSD was decided. This was set at least two points being given in each of seven categories included in Herman's outline, except for criterion 4 and 7 where a maximum of 2 points could be received. One point only was required to meet these criterion. The basis of this decision can be assessed retrospectively in view of the number of women that fall into each category from the two groups in the present research. Each women received a score of 0, or 1 for each subpoint in each criteria, scores of 0.5 were allocated to participants only in those aspects covered by the interview schedule. This reflected a response of 'occasionally' or 'sometimes'.

The scoring of each element was assigned in the following way

Criteria 1

- *being subjected to totalitarian control.* All women in the battered women group were treated as having been subjected to totalitarian control because of their experience of partner abuse. Therefore each received the score of (1). Women in the control group were given this score if they reported sexual or physical abuse in childhood which was described as being repeated and perpetrated by an individual who had considerable control in their lives for example, family members, neighbours or teachers.

One point was required in this category.

Criteria 2: Alterations in affect regulation

- *persistent dysphoria.* As the key issue is the persistent nature of the low mood, women were only assigned the score of (1) if they met the criteria of having an above cut-off t-score of 65 on the TSI, which asks participants to rate their mood over the past six months and a score above the normal cut-off of 7 in the HADS Depression scale which asks participants about their experiences in the last week. This ensured that the persistent nature of their experience, at least over a six month interval was captured.
- *chronic suicidal preoccupation* This was defined by having above the suggested cut-of of 2 points in section D of the GHQ-28 for severe depression. This covers 'feeling life is entirely hopeless',

'thought about the possibility that you might make away with yourself and 'found the idea of taking you own life kept coming into your mind'. In addition, in order to take the hypothesised chronic nature of this symptom into account the participant was required to mark the critical item on the TSI 'wishing you were dead' with a score greater than 0. If both of these were completed the participant was given a score of 1 for this criteria.

- *Self Injury* This was defined as intentional self-harm (for example by scratching, cutting or burning the self) without suicidal intent. This is included as a critical item in the TSI (no. 48). A score above 0 on this item was translated into a score of (1) for this element of the diagnosis of Complex PTSD.
- *explosive or extremely inhibited anger* The participant received a score of (1) if they were rated as falling above the clinically significant cut-off on the TSI anger and irritability scale. This includes items such as 'irritability', 'becoming angry for little or no reason', 'being easily annoyed by other people', 'getting angry when you didn't want to', 'feeling mad or angry inside', 'trouble controlling your temper'.
- *compulsive or extremely disinhibited sexuality* The participant was scored as (1) if they were rated as falling above the clinically significant level on the TSI scales for sexual concerns or dysfunctional sexual behaviour. The former was taken to reflect inhibited sexuality to a greater degree and the latter was more reflective of disinhibited sexual behaviour. The sexual concerns scale included items such as 'not being satisfied with your sex life', 'bad thoughts or feelings during sex', 'confusion about your sexual feelings', 'problems with your sexual relationship with another person', 'wishing you could stop thinking about sex' and 'feeling ashamed about your sexual feelings or behaviour'. The dysfunctional sexual behaviour scale included items such as 'having sex with someone you hardly knew', 'getting into trouble because of sex', 'having sex or being sexual to keep from feeling lonely or sad' and 'using sex to feel powerful or important'

A score of two out of the possible five were required to meet this criteria.

Criteria 3: Alterations in consciousness

The following three were grouped together

- *amnesia or hypermnesia for traumatic events*
- *transient dissociative disorder*
- *depersonalisation/ derealisation* A score of (1) was given if the participant had above clinical significant levels on the dissociation scale on the TSI. This includes items such as 'feeling like you were outside your body', 'your mind going blank', feeling like you were watching yourself from far away', 'not feeling like your real self', 'feeling like things were not real' and 'feeling like you were in a dream'.
- *reliving experiences, whether in the form of intrusive post-traumatic stress disorder symptoms or in the form of ruminative preoccupation.* This was scored as (1) if the participant had above

clinical significant levels on the TSI scale for intrusive experiences. Items included in this scale include 'nightmares or bad dreams', 'flashbacks', 'sudden disturbing memories when you were not expecting them' and 'frightening or upsetting thoughts popping into your head'.

One of the possible score of two was required to meet this criteria.

The following four criteria covered by questions in the interview are shown below. Please see appendix 8 for the interview schedule.

Criterion 4: Alterations in self perception

- *Sense of helplessness or paralysis of initiative*
- *shame, guilt, self blame*
- *sense of defilement or stigma*
- *sense of being completely different from others*

Criterion 5: Alterations in perception of perpetrator, including

- *preoccupation with relationship with perpetrator (including preoccupation with revenge)*
- *unrealistic attribution of total power to perpetrator*
- *idealisation or paradoxical gratitude*
- *sense of special or supernatural relationship*
- *acceptance of belief system or rationalisations of perpetrator*

Criterion 6: Alterations in relations with others, including

- *isolation and withdrawal*
- *disruption in intimate relationships*
- *repeated search for rescuer (may alternate with isolation and withdrawal)*
- *persistent distrust*
- *repeated failures in self protection*

Criterion 7: Alterations in systems of meaning

- *loss of sustaining faith*
- *sense of hopelessness and despair*

These were covered in use of the interview, the interview questions reflected each of these statements trying as far as possible to retain the same word usage although some further explanation was often required particularly for the item regarding defilement. The participant received a score of (1) for each item they agreed they were currently experiencing and (0.5) for the answer 'sometimes' or 'occasionally'. Repeated failure of self protection was scored as a (1) if the participant had a history of more than one violent relationship in adulthood. Two from each of these categories was required to

meet the criteria with the exception of criterion 7 which had a possible score of 2, therefore a score of one was required.

In total, to be categorised as Complex PTSD positive, the women must have the minimum score for each criteria.

2.6 Analysis

For each participant data was entered on all the variables described above, including raw questionnaire scores and scores translated from this for each of Herman's diagnostic criteria. The data was analysed using CSS statistic package.

3.0 RESULTS

Results are available for twenty-five women in both the battered women and control groups. The first two tables aim to examine the extent to which the battered women and control groups are matched on the measures on age of participants, age and number of children, years education (as an estimate of socio-economic status) and marital status.

Table 3.1: Demographic Details of Battered Women and Control Group

	Battered Women (n=25)		Control Group (n=25)	
	mean (std)	range	mean (std)	range
age (years)	32.92 (6.47)	24-49	34.36 (9.57)	22-50
Number of Children	2.28 (1.46)	0-5	1.8 (1.78)	0-6
Ages of Children (years)	8.48 (6.63)	0-32	9.50 (8.50)	0-27
Years Education	11.98 (1.78)	10-17	13.56 (2.74)	10-18

Age: two tailed T-test (unrelated) $t = 0.623$, $p = 0.536$

Number of children: two tailed t-test (unrelated) $t = 1.043$, $p = 0.302$

Age of children: two tailed t-test (unrelated) $t = 0.460$, $p = 0.648$

Years of education: two tailed t-test (unrelated) $t = 2.419$, $p < 0.05$

The groups appear matched, in that there are no significant differences between the group data, on age, number of children and ages of children. However, there is a difference significant at $p < 0.05$ between the groups on years education. It must be concluded the groups are not adequately matched on this measure.

Table 3.2: Marital Status in Battered Women and Control Group (%)

	Single (%)	Separated (%)	Divorced (%)	Married (%)	Cohabiting(%)
Battered Women	3 (12)	13 (52)	3 (12)	3 (12)	3 (12)
Control Group	8 (32)	0 (0)	3 (12)	11 (44)	3 (12)

The groups are unevenly matched on marital status in that 76% of the battered women group are living alone (single, separated or divorced) and only 44% of the control group are living alone. A chi square 2x2 table was used on the data which arose from by combining the single, separated and divorced groups into a 'living alone' group and combining the married and cohabiting group into a 'living with a partner' group. The Fishers exact probability < 0.05 , therefore there is a significant difference between the groups on the measure of living alone and living with a partner.

Table 3.3 (overleaf) outlines the details of the battered women group in terms of their exposure to violence and the average time elapsed since leaving the violent relationship.

Table 3.3: Relationship Details within the Battered Women Group (n=25)

	Mean (std)	Range
No. of violent relationships	1.3 (0.76)	1-3
Time in violent relationships (years)	9.14 (6.46)	1- 28
Time since leaving (years)	3.87 (5.04)	0.25-25

Further details of the distribution of women by the number of violent relationships experienced is shown in graph 3.1.

Graph 3.1: Battered Women Sample: Number of women and distribution according to number of violent relationships experienced (N=25)



Therefore, just over half (56%) of the women who had experienced violent relationships had only had one relationship where they had experienced violence. Seven of the women (28%) had two and four of the sample had experienced three violent relationships (16%).

Table 3.4: Results from Conflicts Tactics Scale; Reported levels of Verbal Reasoning, Verbal Abuse and Physical Abuse in the Battered Woman and Control Groups.

	Verbal Reasoning (std)	Verbal Abuse (std)	Physical Abuse (std)
Battered women (n=24)	10.13 (12.86)	96.63 (33.28)	89.13 (64.63)
Control Group (n=22)	7.93 (8.42)	20.74 (27.17)	0 (0)
2-tailed t	.765	9.79	not applicable
P level	.43	<.001	not applicable

Table 3.4 shows that although the levels of verbal reasoning used by partners in both groups are not statistically different that the battered women experienced significantly higher levels of verbal abuse as compared to the control group. The number of women in the control group who completed

the Conflicts Tactics Scale was reduced by women who were single and did not feel it was appropriate to complete it. All except one of the battered women completed one, usually retrospectively.

Table 3.5: Past and Present Psychiatric History in Battered Women and Control Groups(n=25 each).

	Battered Women (%)				Controls (%)			
	Drug Treatment (anxiolytics and/or anti- depressants)		Therapy or counselling		Drug Treatment (anxiolytics and/or anti- depressants)		Therapy or counselling	
	yes	no	yes	no	yes	no	yes	no
in the past	19 (76)	6 (24)	13 (52)	12 (48)	8 (32)	17 (68)	5 (20)	20 (80)
presently	9 (36)	16 (64)	7 (28)	18 (72)	1 (4)	24 (96)	2 (8)	23 (92)

In summary, approximately one-third of this sample of battered women are currently involved in therapy and just over a half have had therapy in the past. A considerable minority are currently taking medication for mood or anxiety disorders and three-quarters have taken medication for their mood or anxiety in the past. This can be compared to one-third of the control group having taken anti-depressants or anxiolytics in the past. Therefore, it can be assumed that in this sample there is a fairly high consumption of mental health or general practitioner services in the battered women group. A series of 2x2 chi-squares were used to examine the differences between the groups.

The battered women and control groups rates of use of therapy or counselling presently was not significantly different (Fishers Exact probability = 0.069). However, the difference between the groups was significant for present drug use (Fishers Exact Probability <0.01) and past drug use (Fishers Exact probability <0.005). The groups were also significantly different for rates of therapy and counselling in the past (Fisher Exact probability <0.05).

Table 3.6: History of Trauma Experiences External to Violent Relationships in Battered Women and Control Group (%).

	Self Involved in Traumatic Experience (%)		Witnessed Trauma involving someone else (%)		Experienced Repeated Childhood sexual abuse (%)		Experienced Repeated Childhood physical abuse (%)	
	Yes	No	Yes	No	Yes	No	Yes	No
Battered women (n=25)	2 (8)	23 (92)	1 (4)	24 (96)	9 (36)	16 (64)	7 (28)	18 (72)
Controls (n=25)	2 (8)	23 (92)	4 (16)	21 (84)	1 (4)	24 (96)	4 (16)	21 (84)

Table 3.6 indicates that the battered women have a higher rate of reported childhood sexual and physical abuse. The differences between the groups on trauma experiences was examined using a series of 2x2 chi-squares. The difference in rates of being involved in a traumatic experience or witnessing a trauma involving someone else were not significant between the groups (Fishers Exact Probability of 0.69 and 0.17 respectively). The difference between the groups on rates of childhood physical abuse was also not significant (Fishers Exact Probability = 0.25). However, the difference in rates of sexual abuse in childhood was significant (Fishers Exact probability < 0.005). Therefore, in line with Walker's (e.g.1983) finding there are higher rates of previous experience of childhood sexual abuse in the women who have been battered.

Table 3.7: Reported Levels of Stress as Measured by the Life Experiences Survey(LES).

	battered women	control group	t score	p level
	mean (std)	mean		
total score on life experiences survey (LES)	0.818 (13.97)	3.522 (6.40)	0.841	0.405
positive score on LES	11.636 (10.25)	6.783 (5.76)	1.969	0.055
negative score on LES	-10.545 (10.77)	-3.522 (4.65)	2.862	<.01

Life stress, as measured by the total score on the Life Experiences Survey suggests there is no significant difference between the two group. However, there is a significant difference between the two groups on the negative life events score. It would appear that the women who had been battered had more life events of negative nature in the past year. The difference between the two groups on positive life experiences score does suggest a trend towards battered women experiencing more events rated positively although not reaching significance.

Table 3.8: No. Of Women in Each Group Reaching Diagnosis of Complex PTSD and PTSD.

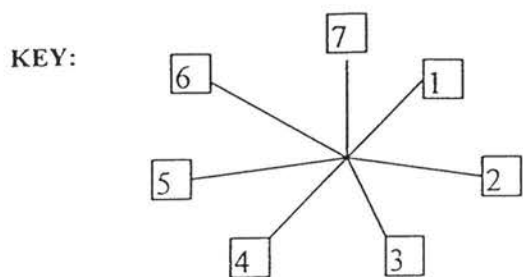
	Battered Women (%)	Control Group (%)
Complex PTSD alone	1 (4)	0 (0)
Complex PTSD and PTSD	6 (24)	0 (0)
PTSD alone	4 (16)	1 (4)
No PTSD or Complex PTSD	13 (52)	23 (92)
missing data	1 (4)	1 (4)

Table 3.8 shows that approximately one third of the battered women reach the criteria for complex PTSD as set by this study and a further 16% meet the criteria for PTSD. It is of note that the one participant who met the criteria for PTSD in the control group although, generally scoring highly on a range of measures did not report a traumatic event having occurred. A 2x2 chi-square was used to examine the differences between the battered women and control groups. the categories of having a PTSD diagnosis (either Complex PTSD or PTSD) were used. The Fishers exact probability <0.001 suggesting the difference between the groups on the PTSD diagnoses was significant.

Graphs 2 to 4, overleaf, displays some of the data gathered on the battered women and control groups visually. Graph 2 is aiming to illustrate the extent to which each of the criteria in the Complex PTSD diagnosis (each represented by an 'arm' on the star) were found in each participant. This graph allows illustration of the differences between the participants in the battered women group and the control group. In addition, the differences in scores within both groups dependent on whether or not participants were categorised as having PTSD, Complex PTSD or no PTSD are highlighted.

Graph 3 illustrates the scores each participant reached on the standardised measures; the Hospital Anxiety and Depression scale, The Penn Inventory for Post Traumatic Stress and the General Health Questionnaire-28. The aim of this graph is to highlight any relationship between the women who are categorised in the PTSD, Complex PTSD and no PTSD and measures of distress on standardised questionnaires. Graph 4 also aims to show relationships between measured distress and diagnostic category using the sub-components of the Trauma Symptom Inventory.

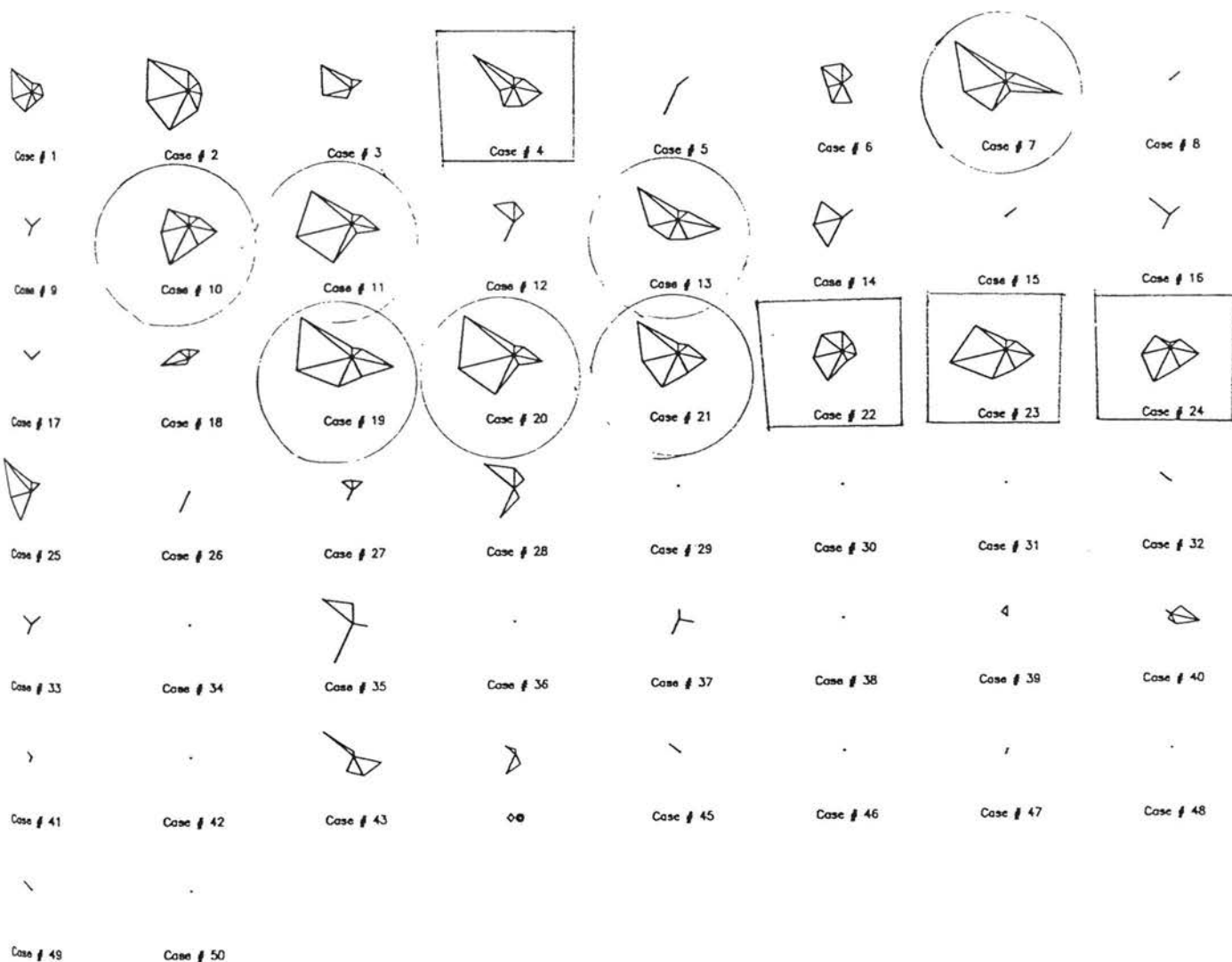
Graph 2: Graphical Representation of Data for each Participant for each of the 7 Components of Herman's(1992) Diagnostic Criteria for Complex PTSD.



- 1= presence of totalitarian control
- 2= total score on alteration of affect regulation
- 3= total score on alterations in consciousness
- 4= total score on alterations in self perception
- 5= total score on alterations in perception of perpetrator
- 6= total score on alterations in relations with others
- 7= alterations in systems of meaning

Cases number 1-25 represents the battered women group, cases numbered 26-50 represent the control group

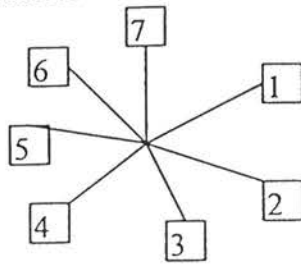
Cases circled are those which met the criteria for Complex PTSD as defined by this study and those surrounded by a square met the criteria for PTSD as defined by the Penn Inventory.



LEGEND (clockwise): TOTALIT, H2TOT, H3TOT, H4TOT, H5TOT, H6TOT, H7TOT

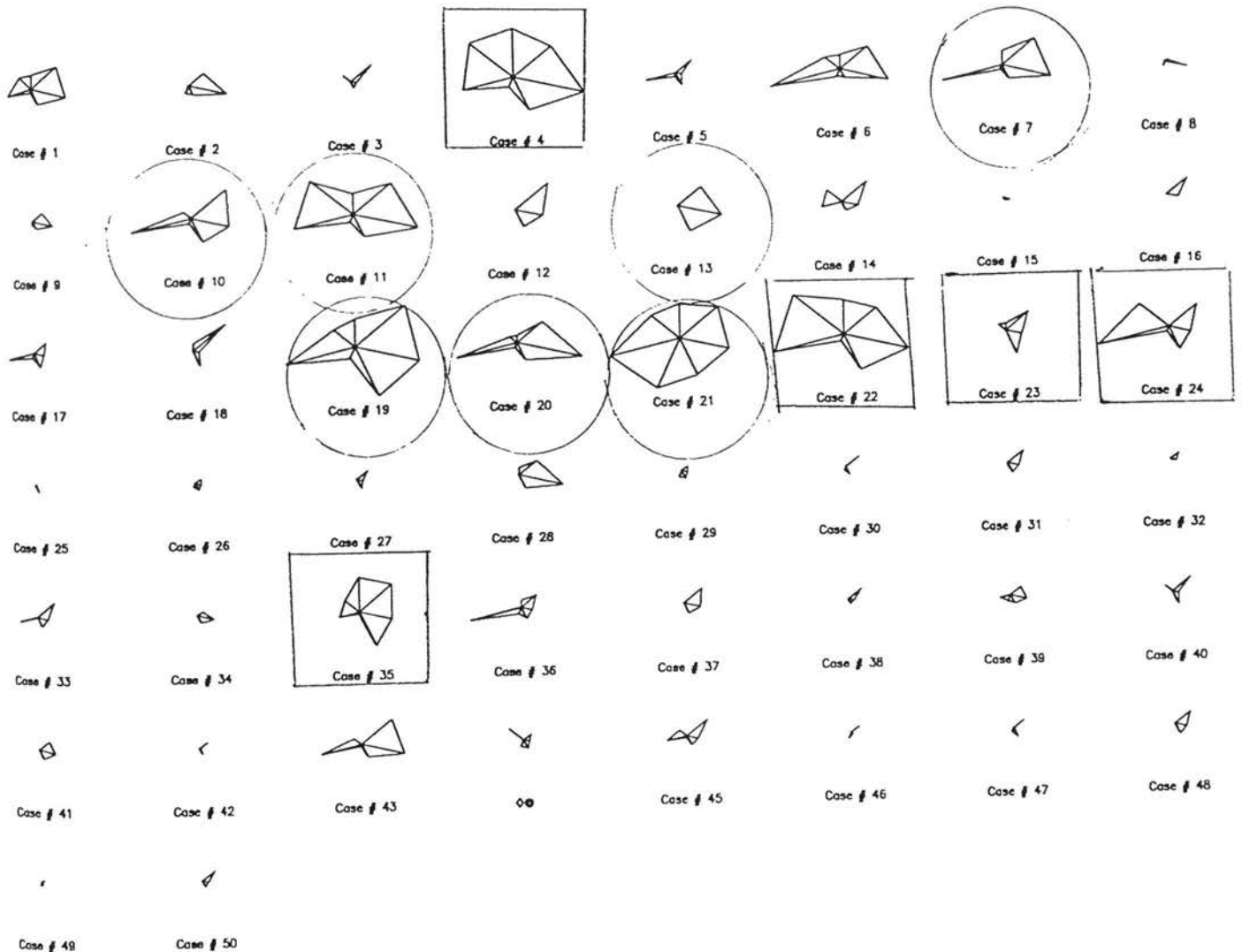
Graph 3: Graphical Representation each Participant on the Hospital Anxiety and Depression, scale, The General Health Questionnaire and the Penn inventory for Post Traumatic Stress Disorder

KEY:



- 1= Anxiety Score from HADS
- 2= Depression score from HADS
- 3= Score from Penn inventory for Post Traumatic Stress
- 4= Somatic Score from GHQ-28
- 5= Anxiety/insomnia score from GHQ-28
- 6= Social Dysfunction score from GHQ-28
- 7= Severe depression score from GHQ-28

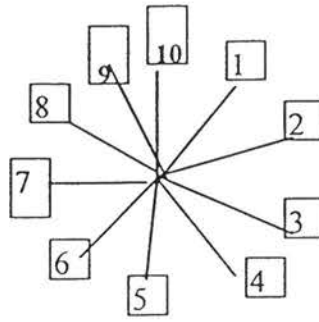
Cases number 1-25 represent the battered women group and cases numbered 26-50 represent the control group. Cases circled are those which met the criteria of Complex PTSD as defined by this study, cases surrounded by a square met the criteria for PTSD as defined by the Penn Inventory.



LEGEND (clockwise): HADSA, HADSD, PENN, GHQA, GHQAI, GHQ_SD, GHQSD

Graph 3.4: Graphical Representation for each participant on the subscales of the Trauma Symptom Inventory

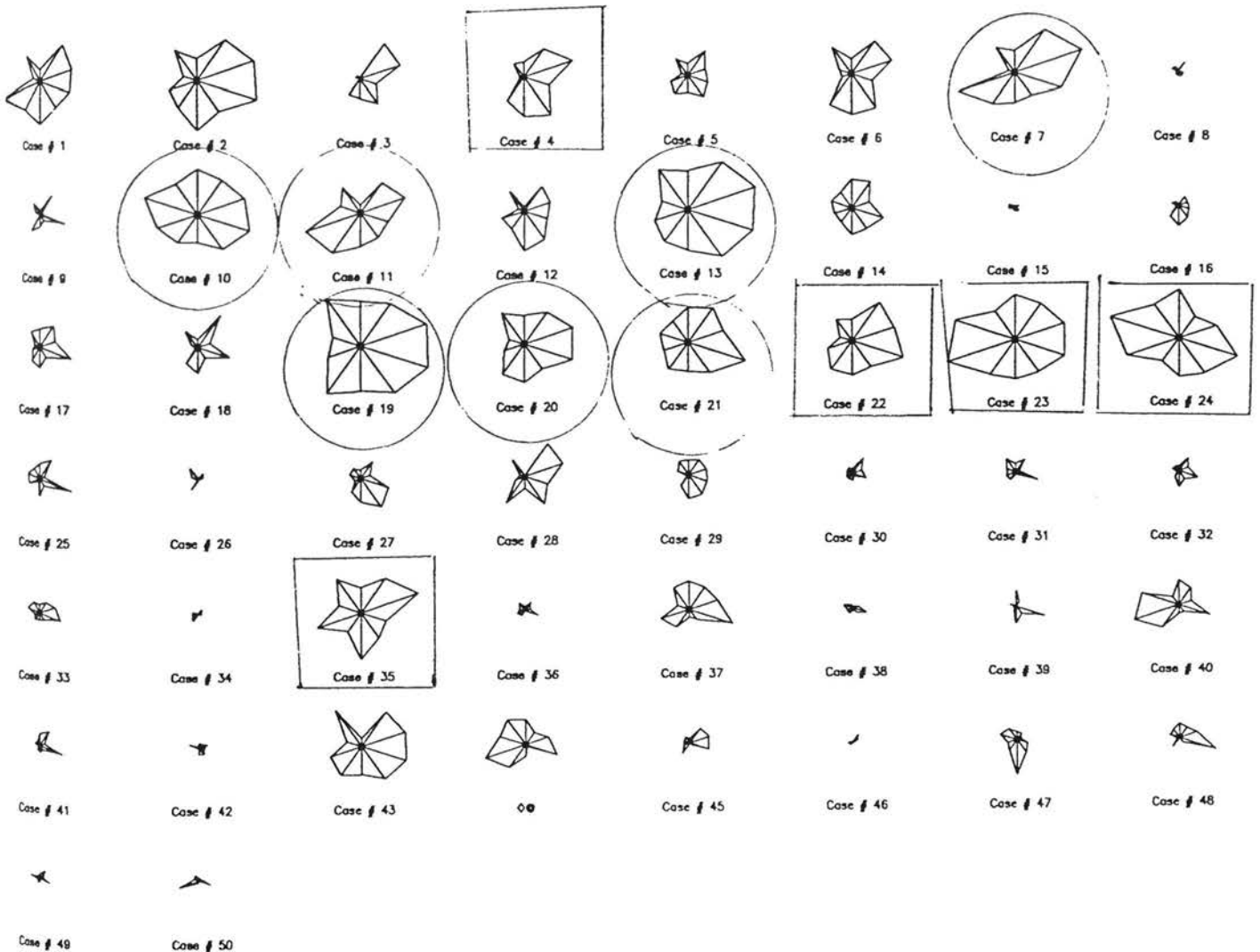
KEY:



- 1= anxious arousal score
- 2= depression score
- 3= anger/irritability score
- 4= intrusive experience score
- 5= defensive avoidance score
- 6= dissociation score
- 7= sexual concerns score
- 8= dysfunctional sexual behaviour score
- 9= impaired self reference score
- 10= tension reducing behaviour score

Cases number 1-25 represents the battered women group, cases numbered 26-50 represent the control group

Cases circled are those which met the criteria for complex PTSD, as defined by this study and cases surrounded by a square met the criteria for PTSD as defined by the Penn Inventory



Using the criteria described in the methodology for reaching the diagnostic category of Complex PTSD, the following results are summarised.

Table 3.9: Summary of Graphically Represented results (graph 2) for Battered Women only (n=25)

	Met Criteria	1 point less than criteria	2 points less than criteria	3 points less than criteria	Did not meet criteria
No. Of Women	7 (28%)	6 (24%)	1 (4%)	2 (8%)	9 (36%0

Therefore, these results indicate that 54% of the women in the sample either met the criteria or were within one point of it. That is the individual failing to meet the criteria by one point, would have met six out of seven of the criteria and failed to meet the seventh by scoring one point less than required. For example the participants would have scored above the cut-off on six of the criteria but scored one less than the cut off on the seventh.

As the research hypothesis states that the symptoms of Complex PTSD are associated with totalitarian control it is hypothesised that they should be more common in the battered women group than the controls. In order that the cut off points suggested in the methodology can be evaluated it is necessary to examine the extent to which each cut-off differentiates between the control group an the battered women group. If the cut-offs includes the scores of a number of women who have not experienced totalitarian control then they are not stringent enough and the results presented will not give a good indication of the rates of Complex PTSD in the sample.

Table 3.10 allows the number of women with each score to be examined in the light of the cut-offs suggested. Some of the women in the control sample will have experienced totalitarian control also by the fact of childhood sexual or physical abuse in their past.

Key to Table 3.10

*= N.B. women who had not experienced totalitarian control were not asked these questions therefore, the control group will be lower as only women who had experienced sexual or physical abuse in childhood were questioned.

Bold type = the participants who would have been considered meeting the criteria as set by this study.

Table 3.10: Number of Women Meeting Each Criteria in Each Group

	Score for this criteria	Battered women	Controls
		Number (%)	Number (%)
Totalitarian Control (0-1) <i>cut-off = 1</i>	0	0 (0)	21 (84)
	1	25 (100)	4 (16)
Alterations in affect regulations (0-4) <i>cut off = 2</i>	0	12 (48)	21 (84)
	1	3 (12)	2 (8)
	2	5 (20)	2 (8)
	3	4 (16)	0 (0)
	4	1 (4)	0 (0)
Alterations in consciousness (0-2) <i>cut off = 1</i>	0	11 (44)	21 (84)
	1	5 (20)	3 (12)
	2	9 (36)	1 (4)
Alterations in self perception (0-4) <i>cut off = 2</i>	0	4 (16)	17 (68)
	1	3 (12)	4 (16)
	2	5 (20)	2 (8)
	3	9 (36)	1 (4)
	4	4 (16)	1 (4)
Alterations is perception of perpetrator (0-4) <i>cut-off = 2</i>	0	7 (28)	25 (100) *
	1	2 (8)	0 (0)
	2	10 (40)	0 (0)
	3	2 (8)	0 (0)
	4	4 (16)	0 (0)
Alterations in relations with others (0-5) <i>cut-off = 2</i>	0	3 (12)	16 (64)
	1	4 (16)	6 (24)
	2	6 (24)	0 (0)
	3	3 (12)	0 (0)
	4	6 (24)	0 (0)
	5	3 (12)	0 (0)
Alterations in systems of meaning (0-2) <i>cut-off = 1</i>	0	8 (32)	20 (80)
	1	13 (52)	3 (12)
	2	4 (16)	2 (8)

*= N.B. women who had not experienced totalitarian control were not asked these questions therefore, the control group will be lower.

The aim of table 3.10 was to examine whether it appears that the cut-offs as set for this present study are actually differentiating between the two groups or whether the symptoms measured are distributed throughout the battered women and control sample. The results are summarised in table 3.11.

Table 3.11 : Summary of Number of Participants Reaching Each Criteria in the Complex PTSD Diagnosis.

	Battered Women (%) meeting criteria	Control Group(%) meeting criteria
totalitarian control	25 (100)	4 (16)
Alterations in affect regulation (score above 2)	10 (40)	2 (8)
Alterations in consciousness (score above 1)	14 (56)	4 (16)
Alterations in self perception	18 (72)	4 (16)
Alteration in perception of perpetrator (score above 2) *	16 (64)	0 (0)
Alterations in relations with others (score above 2)	18 (72)	3 (12)
alterations in systems of f meaning (score above 1)	17 (68)	5 (20)

*= N.B. women who had not experienced totalitarian control were not asked these questions therefore, the control group will be lower.

It appears that the criteria as set by this study has differentiated between the two groups to a reasonable degree. With the exception of 'alterations in perception of perpetrator' where the score will be artificially lower in the control group and 'totalitarian control' where 100% of the battered women were included, the battered women met the criteria in 40-72% of the cases and the control group met the criteria in 8-20% of the cases. This supports the hypothesis that the symptoms of Complex PTSD are found in women who have experienced traumatic events.

In order to examine the extent to which the various factors in Herman's diagnosis cluster together a series of Spearman's correlation's were carried out between the seven factors. All the correlations were significant at $p < 0.001$ with the exception of the relationship between totalitarian control and alterations in affect regulation and alterations in consciousness which was significant at $p < 0.05$. For full results of the correlations see appendix 9.

Analysis to examine the patterns of distress in the battered women as compared to the control group using the range of standardised measure was carried out using unrelated t-tests. Table 3.12 shows the group differences in scores on the Trauma Symptom Inventory (TSI). Table 3.13 shows the



results from the other standardised measures, the Hospital Anxiety and Depression Scale, the General Health Questionnaire-28 and the Penn Inventory of Post Traumatic Stress.

Table 3.12: Differences Between Groups on the Trauma Symptom Inventory

	Battered Women mean score (std)	Control Group mean score (std)	Two-tailed T-	p-level
anxious arousal	62.48 (11.18)	47.48 (8.91)	5.245	<.001
depression	59.24 (12.26)	48.04 (8.26)	3.789	<.001
anger/ irritability	61.28 (12.16)	50.72 (7.90)	3.641	<.01
intrusive experience	60.32(11.05)	46.56 (8.72)	4.897	<.001
defensive avoidance	60.92 (9.59)	46.20 (9.49)	5.456	<.001
dissociation	64.28 (13.02)	50.64 (9.07)	4.292	<.001
sexual concerns	53.84 (11.23)	47.4 (7.66)	2.368	.09
dysfunctional sexual behaviour	54.64 (16.14)	48.52 (7.11)	1.735	.06
impaired self reference	58.32 (11.73)	48.28 (9.55)	3.32	<.05
tension reducing behaviours	58.44 (13.83)	49.24 (7.47)	2.926	<.05

Table 3.13: Differences in Results On The Other Psychological Measures Used

	Battered women mean score (std)	Control Group mean score (std)	Two-tailed T	p-level
Hospital anxiety & depression scale: Anxiety (0-21)	9.458 (5.10)	5.083 (2.95)	3.639	<.01
Hospital anxiety & depression Scale: Depression (0-21)	5.791 (4.25)	1.833 (1.90)	4.162	<.001
Penn Inventory for Post Traumatic Stress (0-78)	27.833 (16.47)	16.708 (8.11)	2.969	<.01
General Health Questionnaire: Somatic Symptoms (0-7)	3.542 (6.45)	1.333 (1.58)	1.630	0.11
GHQ:Anxiety Insomnia (0-7)	2.875 (3.03)	0.666 (1.37)	3.256	<.01
GHQ: Social Dysfunction (0-7)	1.667 (2.20)	0.292 (6.62)	2.945	<.01
GHQ: Severe depression (0-7)	1.292 (2.03)	0.250 (1.03)	2.239	<.05

The table 3.12 above indicates that there is a significant difference between the battered women and control groups on all the measures of the TSI except dysfunctional sexual behaviour where

both the group averages fall very close to the mean (t-score=50) and sexual concerns. However, in the dysfunctional sexual behaviour measure the standard deviation in the battered women group shows that some of the women scored above clinical significance. However, this suggests that these types of behaviours are not as important as others in discriminating between the groups. This and table 3.13 are considered to be of interest in terms of defining which questionnaires and aspects of questionnaires are most useful in discriminating between the two groups.

Table 3.13 above indicates that all of the tests and components of them discriminate between the two groups except for the GHQ section measuring somatic concerns.

In summary, the results show that in this sample, women who have been battered have also experienced higher rates of sexual abuse, more verbal aggression in their relationship and higher rates of negative life events. The women who have been battered in this sample have less years education, higher rates of past psychiatric problems and are tending to be living alone, potentially leading to less social support. The latter two are mentioned in the literature as risk factors for developing PTSD. Therefore, the higher rates of PTSD and Complex PTSD found in the sample are consistent with the hypothesis and the background in this group.

In order to explore what variables are most important predictors of the development of PTSD a multiple regression analysis was employed. Because of the need to identify a score which should be indicative of a continuum of distress the Penn inventory was chosen as the dependent variable. This score assumes that PTSD is on a continuum.

The initial analysis used the complete sample and the independent variables of violence, childhood sexual abuse, childhood physical abuse, experience of trauma out with relationships, witnessing a trauma involving someone else out with the relationship and negative life events as measured by the negative events scale on the Life Experiences Survey. Deletion was pairwise and 44 cases were included (missing data caused by five missing from the Life Experiences Survey and 3 from the Penn Inventory).

The results of this is as follows

Multiple R= 0.59

$R^2=0.35$

adjusted $R^2=0.25$

F= 3.36; df=6,37; p=0.009

The beta and correlation values from this regression are shown in table 3.14, overleaf

Table 3.14: Results from Multiple Regression with whole sample

	Beta (β)	partial correlation	semi-partial correlation
experience of partner abuse	0.24	0.24	0.20
other trauma (outwith relationships)	0.24	0.27	0.23
witnessing other trauma	0.04	0.04	0.03
childhood sexual abuse	0.41*	0.39	0.35
childhood physical abuse	0.04	0.04	0.03
negative life events	0.04	0.05	0.04

*= significant result

Examination of the correlations between variables (see appendix 10 for full details) shows that the correlation between partner abuse and childhood sexual abuse was $r= 0.4$ and between violence and negative life events, $r=0.4$. The relationships between partner abuse and the Penn Inventory was $r= 0.4$ and between childhood sexual abuse and the Penn Inventory was $r= 0.5$. However, the relationship between negative life events and the Penn Inventory was 0.11. The remaining correlations were $r > 0.34$. For a full description of the correlations found see appendix 10.

Therefore, there are correlations between partner abuse and sexual abuse in childhood and the Penn Inventory. This suggests that although sexual abuse is the most important individual predictor in this analysis of the total sample, it is not possible to disentangle the effects of childhood sexual abuse and partner abuse.

A second multiple regression was carried out on the data regarding the women who have been battered only. The independent variables were number of violent relationships, time in violent relationships, time since leaving, childhood sexual abuse, childhood physical abuse and negative life events. As previously the dependent variable was the score of the Penn Inventory for Post Traumatic Stress. Twenty four valid cases were accepted.

The results of this are as follows,

Multiple $R=0.66$

$R^2=0.43$

adjusted $R^2=0.27$, $F=2.71$; $df= 5,18$; $p=0.053$

Table 3.15 overleaf, shows the beta values and semi/partial correlations found in this multiple regression

Table 3.15: Results from Multiple Regression in Battered Women Group (n=25)

	Beta (β)	partial correlation	semi-partial correlation
Number of violent relationships	0.7 *	0.48	0.41
time in violent relationships	0.43	0.31	0.25
time since leaving	0.11	0.13	0.10
childhood sexual abuse	0.37	0.39	0.32
childhood physical abuse	0.11	0.13	0.10

* = significant result.

Therefore, within the battered women alone the number of violent relationships experienced was the most important individual predictor. However, the p value for the overall regression was below significance. therefore, this only indicates a trend. The correlations between the variables (see appendix 11 for full details) again showed a relationship between childhood sexual abuse and violence. Between childhood sexual abuse and number of violent relationships $r=0.47$ and $r= 0.40$ between sexual abuse and time spent in violent relationships. It is of note that time since leaving the violent relationship and the measure of distress are not related ($r=0.05$).

In summary, overall the measures suggest that factors associated with chronic abuse, such as sexual abuse in childhood and multiple abusive adult relationships are the most important predictors of distress in the women participating in this study. This would broadly support the main hypotheses of the research. The results and their relationship to the hypotheses stated will be discussed in greater detail in the following section.

4.0 DISCUSSION

The main aim of this research was to examine the hypotheses that women who had experienced partner abuse would have an increased rate of the range of symptoms associated with Complex PTSD as compared to a non-traumatised control sample. In addition, the research aimed to explore the relationship between PTSD and Complex PTSD and some of the traumatic factors associated with its onset for example, childhood sexual abuse, childhood physical abuse, number of abusive adult relationships, length of time in abusive adult relationships and other life stresses or trauma. In general, the results suggested that the primary hypothesis regarding rates of symptoms of Complex PTSD in women who had been battered was supported. In addition, the data leads to the conclusion that PTSD and Complex PTSD are related.

The only variables significantly predicting levels of distress in this sample were the experience of childhood sexual abuse and the number of violent relationships experienced. However, these variables were also correlated suggesting that women who had been sexually abused in childhood were at greater risk of becoming involved in multiple abusive adult relationships and these women represented those most at risk for higher levels of PTSD symptomology.

Before a detailed exploration of the results obtained and their relationship with the hypotheses previously outlined, a number of difficulties arising must be highlighted. The limits these place on the findings will be discussed under two main headings; the characteristics of the groups used and general methodological considerations.

4.1 Characteristics of the Groups Used.

This is a small sample (n=25 in each group) although the information gathered from each participant is relatively detailed. A central difficulty in this research is the control group utilised, although problems generally in selection of appropriate control groups have been discussed in a previous section. The decision to utilise a normal sample was based on the observation that there is currently little information as to the prevalence of the psychological difficulties postulated to be part of the Complex PTSD diagnosis in non-traumatised samples (Van Der Kolk et al 1996). However, at a theoretical level this may be problematic. Although it can be seen (table 3.12-3.13 and graphs 3.2-3.4) that the women who had been battered scored differently on most measures, it cannot be explicitly stated that this is unique to the experience of chronic trauma. This is because there is no control group who have experienced discrete trauma to be compared against. The addition of a second control group with this characteristic would have substantially added to the outcome findings. Despite this fact, the previous review has shown that women who are battered do experience a chronically traumatic life situation. It is therefore postulated that this is the basis of the differences between the group scores.

It emerged that the control group, although matched on age, number of children and age of children were significantly different in terms of the number of years education completed (mean= 13.6 years education in the control group and mean= 12 years in the experimental group). In addition, a significantly higher proportion of the control group were in cohabiting or married relationships (56%

of the control group as compared to 24% of the battered women group). These demographic differences reduce the ability to draw direct comparisons between the groups. This is particularly important as the number of years of education was chosen as an estimate of socio-economic status and the differences in marital status must be considered in light of the evidence that lack of supportive relationships is a risk factor for developing PTSD.

The differences between groups on these characteristics have arisen as a result of a number of factors in the methodology. Firstly, the battered women in this sample are possibly not representative of women in violent relationships (e.g. Chez 1988, Walker 1989), as they have tended on average to be a group with lower socio-economic status as measured by number of years education completed. However, this may be a problem of inappropriate measurement tools rather than a real difference. As discussed in the method section, measurement of socio-economic status in women has been seen as more difficult than in men. Measurement is complicated in this group of women who are often displaced from their usual circumstances by the break-up of their relationships with the additional difficulties of often being single parents.

Another similar study examining rates of PTSD within a group of women who had been battered had difficulties akin to this with their control sample of maritally distressed women (Astin et al 1995). The women who had been battered, as in this present study were recruited through a refuge and also differed in comparison to the control group in terms of having completed fewer years education. It is speculated that this is a reflection of a recruitment problem generally, in that women who use refuges following the break up of their relationships are those who may have fewer personal or family resources to fall back on in a crisis situation. Therefore, possibly having fewer years education, and thus a relatively smaller chance of gaining employment which will be sufficient to support a family initially means the refuge is a particularly valued resource in this group. Given that several of the studies reviewed (e.g. Astin et al 1995, Kemp et al 1991, Kemp et al 1995) used refuges in their recruitment this possibility of an unrepresentative sample must be considered when interpreting results.

In terms of relationship status, a number of factors may be relevant in the differences between groups. Women who were involved in stable relationships but were not cohabiting or married were counted as single and this may have artificially lowered the rates and excluded women who were actually in supportive relationships. Therefore, the difference may not be as large as suggested in the data presented. Recruitment of single parents in the control group proved to be difficult because of the lack of a local organisation where these women may be accessed. It is of note, as an aside, that a high proportion of the women in the battered sample perceived themselves as 'separated' rather than 'single'. Separated was a descriptor many used because the relationship they had been involved with may have been cohabiting rather than married, although some were simply waiting for divorce proceedings to be finalised. However, it is an interesting point, although not explored in the study presented, that some women who may have left relationships some time ago still considered themselves separated rather than single. In the comparison group of women, they tended to see

themselves as single if in this position. It is tentatively postulated that this may reflect the battered women's ongoing emotional involvement in the past relationship such as the element in Herman's diagnostic criteria 'pre-occupation with the relationship with the perpetrator'.

Generally, in terms of social support being involved in a stable relationship may not be the single most important source. It is possible that the group of women involved with the refuge may seek and gain support from each other and the staff available. As this aspect of social support has not been measured in the present research it remains speculative.

Once the results from the battered women sample had been gathered a control sample with similar demographic characteristics proved difficult to access due to recruitment difficulties hence the group differences. In addition, because of the effort to gain a matching sample, the control groups were eventually not drawn from one particular source. This may make replication of this study more difficult. Given the small sample involved in the present research, in order that firmer conclusions could be drawn, replication is essential.

Although, as reviewed the statistics show differences between the demographic characteristics of the battered women and control groups, the impact on the results may not be insurmountable. For example, there is no evidence in the literature reviewed that socio-economic status influences risk of development of PTSD and although social support is a relevant issue, the differences, as discussed, may not be as great as the results suggest. In addition, other sources of social support may be being accessed. Also given that changes in relatedness is included in the Complex PTSD symptomology it is possible that the difference found is in fact due to the effect of the trauma experienced.

4.2 Other Methodological considerations

From a methodological viewpoint there are a number of criticism that must be considered when discussing the present research. As Herman (1992) has not provided procedural guidelines as to the use of the Complex PTSD diagnosis in her exploratory work, some interpretation has been left to the discretion of the researcher, most importantly, deciding the number of features of each criteria that should be met in order that the diagnosis be fulfilled. However, this study is not intended to be an attempt to provide definitive prevalence rates of the hypothetical entity of Complex PTSD but rather to explore whether the symptoms described by Herman (1992) reflect what women who have been battered are experiencing and to examine its possible relationship to PTSD and other factors in the women's lives.

The cut-off points for meeting the criteria within the diagnosis of Complex PTSD were selected prospectively and their usefulness must be assessed. The criteria chosen do, in most cases seem to produce a fairly good differentiation between the two groups with 40%, 56%, 72%, 64%, 72% and 68% of the battered women achieving scores above the cut off for each of the criteria 2-7 in Herman's diagnosis respectively. In comparison 8%, 16%, 16%, 0%, 12% and 20% of the control group met these criteria (see table 3.11). It is noted that the number of women reaching the criteria which are designated by answers to the interview questions utilised (criteria 4-7) are higher. This is

probably due to the less rigorous nature of the scoring and the fact that chronicity of these aspects of the diagnosis was not taken fully into account as it was with the elements measured using standardised procedures. This is a clear methodological flaw. However, the higher rates of women who have been battered reaching the elements in the diagnostic criteria does appear to support the hypothesis that the symptoms of Complex PTSD are associated with this group.

The actual measurement of the different symptoms can be criticised for being ad hoc and using a large variety of different measurement tools. In addition, the reliance on a non-standardised interview is obviously replete with difficulties in interpretation. This is particularly the case given the above observation of higher numbers of women meeting the criteria based on these rather than based on the standardised measures. It was hoped that the use of the normal control group would act as an indicator of the expected prevalence of these symptoms in the lives of women generally and thereby suggest whether the rates found among the women who had been battered reflected a deviation from the norm. It is noted that a standardised structured interview for Disorders of Extreme Stress (the term given to this set of symptoms by DSM-IV researchers) is in press (Pelcovitz et al 1996). The publication of such a measurement tool would greatly enhance the reliability and validity of future research.

A further important note is that some of the measures used do not exactly capture Herman's criteria in the diagnosis. For example, the 'anger and irritability' subscale on the Trauma Symptom Inventory (TSI) is more concerned with the explosive or lack of control element of anger difficulties rather than the inhibited anger response and does not allow for measurement of the alternation in states of emotion that Herman suggests may occur. Similarly, compulsive rather than inhibited sexuality is over represented in the 'dysfunctional sexual behaviour' subscale in the TSI and again the alternation between states is not measured. The 'dissociation measure' is combining three of the sub-components that Herman suggests. In addition, the 'amnesia and hypermnesia' criteria included in the diagnostic guidelines is not included explicitly although hypermnesia may be subsumed by the inclusion of items describing intrusive thoughts. In general, measuring amnesia is problematic due to the subjective nature of the experience and the lack of validating evidence of objective 'fact'. Finally, the intrusive experiences subscale on the TSI does not adequately cover ruminations. However, although these criticisms are important points and suggest that the detail of Herman's diagnosis has not been adequately considered, in general the main ideas are encapsulated.

In summary, there are a number of difficulties in the control group selection (both theoretically and the practicality of whom was available for participation) and also in measurement of the items included in the diagnostic criteria. Despite these limitations, it is argued that this research provides a useful and exploratory insight into the inner experiences of women who have been battered. The data reviewed on the different rates of meeting the criteria included in the Complex PTSD diagnosis found between the two groups does appear to support the hypothesis that these symptoms are related to the experience of partner abuse.

4.3 Characteristics of the Sample of Women who had been Battered

As reviewed, the women in this sample had on average, completed 12 years of education. Their age ranged from 24-49 years old (mean= 32.9 years) and they had on average 2.28 children. The average age of the children was 8.5 years. Only six of this group were married or cohabiting with 76% living alone, therefore, being a single parent was a common experience.

The women who had been battered in this sample had experienced a mean of 1.3 violent relationships. The majority (56%) had one violent relationship in their past but a fairly large group (44%) had more than one, with 16% suffering violence in three relationships. This exemplifies the risk of becoming involved in further violence or repetition of harm as described by Herman (1992). The women who had experienced partner abuse had spent an average of 9.14 years in the violent relationships. This number was derived from the number of years that violence occurred, adding together the number of years the participant experienced violence in each relationship if more than one had been physically abusive. The number of years in relationships which were not characterised by violence was not included. Therefore, this is the absolute number of years spent with a partner who was violent towards them or in Herman's terms under totalitarian control. This underscores the chronicity of their abuse experience. As previously noted, the study by the Women's Aid Federation (1978-1980) (quoted in Donnellan [1993] pg 3) found that the average length of time that women in abusive adult relationships suffered violence was seven years. It would appear that the sample in the current research constituted women who had suffered more than the average amount of violence. But unfortunately from the stance of making direct comparisons, it is not clear whether the Women's Aid statistic reflects the average amount of time in each relationship rather than the cumulative total as given in this study.

Another finding of importance was the fact that when compared to the women in the control group, women who were survivors of battering had experienced significantly higher levels of emotional abuse as measured by the Conflicts Tactics Scale (Straus 1979). This highlights the need to take a wider conceptualisation of abuse than that measured by the presence of violence alone. That is, the additional distress associated with verbal or emotional abuse must be considered when conceptualising the response to violence. Several of the women in this study, when completing the Conflict Tactics Scale, spontaneously mentioned that the psychological trauma was more difficult to cope with in the long term than the physical violence. The average score relating to levels of physical abuse as measured by the Conflict Tactics scale was 89.1. This alone is not meaningful, but it can be compared with the average score found by Astin et al (1995) of 32.3 in their sample of 50 women who had been battered. This large difference suggests that, on average, the group of women included in this research may have been relatively more abused than that found in this other sample. This is not explained by recruitment differences, in that the participants in the Astin et al (1995) study were gathered from community clients of refuges as in this sample. It is possible that in the larger sample, a wider range of women were included, some with lesser degrees of abusive experiences. However, the fact that this sample appears to have experienced more than the average length of time in violent

relationships and have higher scores for physical abuse suggests that they are a more traumatised sample as compared to those participating in Astin et al's (1995) study. However, contrary to the hypothesis in this study that higher rates of violence would be associated with higher rates of PTSD symptomology, Astin et al (1995) found that 58% of their sample met the criteria for PTSD whilst in this sample 40% were identified as PTSD positive using the Penn Inventory cut-off point (see table 3.8). However, this anomaly may be due to the fact they used a different measurement tool, namely a structured clinical interview.

In terms of verbal abuse, some authors have also suggested that minor or verbally aggressive acts are a precursor to physical violence. That is, there is an escalation along the abusive continuum over time and this escalation could occur over the course of an abusive incident or over the course of a relationship (e.g. Kalmuss and Straus 1982, Gelles 1976). At some point, it is argued, that regardless of other factors that makes leaving the relationship difficult for the women involved, the violence will become intolerable and they will approach someone outside for assistance (Kalmuss and Straus 1982). Therefore, the presence of high levels of emotional abuse or minor violent events may be an indicator of future difficulties which may lead to severe assault.

4.4 Psychiatric Histories of the Battered Women and Control Groups

The women who had been battered used mental health services relatively frequently with 28% presently in therapy and 52% having had therapy in the past. This is compared with 8% of the control group presently in therapy and 20% having had therapy in the past. Further research could examine the reasons for referral and the formulation of the difficulties used by therapists working with these women, given their often complex history of abuse.

In this sample of women who had been battered, 12% were currently prescribed anxiolytics and 24% were taking antidepressants. Approximately half of the sample had taken antidepressants in the past with a quarter having taken anxiolytics in the past. The relatively high rate of prescribed medicine given to the women in the experimental group must reflect an awareness among prescribers (often General Practitioners) of the level of distress experienced by female survivors of partner abuse. Bergman et al (1987) call for an increased awareness of the difficulties faced by women who have been battered and better access to other services. However, it appears in this sample that referrals to other agencies is being made in a relatively high number of cases, although in discussion with some of the participants, few of the women appeared convinced of the benefits. However, this requires further research.

4.5 Other Traumas and life events in the two groups

The rates of childhood sexual abuse reported in the battered women group was 36% compared to 4% of controls, which is significantly different. This finding is in line with many others (e.g. Walker 1983) that women who have been sexually abused are over-represented among women who are survivors of partner abuse. The rates in this group are lower but generally comparable to the

rate of 48% in Walker's (1983) much larger sample. However, the interview conducted in this study was much shorter and less in-depth than in the latter. In Walker's research the women were given a 200 page questionnaire and 6-8 hours of face to face interviewing. In the present study the women completed approximately 15 pages of questionnaires and had 1-3 hours (with an average of 1.5 hours) contact with the researcher. Given that the information is of a very sensitive nature and the relatively short time the researcher had to build up sufficient rapport with the women involved, the possibility is that in this study, the figures obtained are an under-estimate in each group.

In addition, the criteria in this research for a participant being included in the sample with a history of childhood sexual abuse were relatively strict. The experience must have involved physical contact, must have been perpetrated by someone who had a degree of control in the child's life (for example, a family member, a family friend, a neighbour or a teacher) and have been repeated. Therefore, many women reporting one-off or non-contact abusive experiences such as one off 'touching' by a stranger or being the victim of a stranger exposing himself, were not included. These criteria were set to capture the group of women who had experienced totalitarian control in childhood, in order to retain consistency with Herman's key concept in the adult abused sample. This obviously has a significant risk of under-estimating or minimising the psychological impact of one-off or non-contact abusive events. However, use of these criteria does maintain consistency and is more in line with what might be considered traumatic abuse.

The rate of 4% of women reporting childhood sexual abuse in the control group is lower than would be expected if considering the population as a whole. Finkelhor (1984) surveyed the then published data and found that between 12% and 38% of women reported being sexually assaulted as children. Again, the stricter criteria set by this research may be excluding women from the figures who might be included in the above research samples. It is also possible that this research has found a bias towards the women who were prepared to be interviewed as members of the control group being individuals who had not had many significant abusive experiences. Alternatively, it is possible that the organisations involved approached women who were the least traumatised by previous experience. This must be seen as a possible methodological flaw. It is suspected that a combination of both participant selection and strict criteria would be underlying the lower rates than expected found.

When compared to Walker's research the rates of reported physical abuse in childhood among the battered women sample was considerably smaller at 28% as compared to 67% in her study. A smaller but not significantly different rate to the current battered women sample, of 16% was found in the control group. Given the difficulties described above of a relatively brief interview as compared to Walker's study and the strict criteria, interpretation of these results should be tentative. However, it does appear that women who have been battered have an association with childhood abuse in approximately one-third to a half of the group in the present study. But in the absence of physical or sexual abuse, the rates of emotional abuse in childhood or other risk factors identified by Walker (1983) such as having a parent who is alcoholic, being a member of a large family or general disruption in families of origin were not explicitly measured in this study.

It is of interest that there is no difference in rates of other traumas experienced between the groups and in real terms, more of the control sample had witnessed trauma involving other people than the battered women sample. The risk of experiencing further trauma seemed in this sample to be related only to interpersonal abuse in a relationship setting. This is not supported by evidence in the literature which suggests a higher risk of rape or other trauma in women who had been sexually abused in childhood (Fromuth 1986, Koss and Dinero 1989). The Fromuth (1986) study indicates that the role of childhood sexual abuse in adult victimisation remained even when the effect of parental supportiveness was controlled for. As the women who have been battered also have higher rates of childhood sexual abuse, higher rates of other trauma would have been anticipated.

In terms of other life stresses, although the two groups did not differ significantly on the total scores on the Life Experiences Survey, the differences in experience of negative life events were found to be significant. Therefore, it can be concluded that the women who had been battered had more life events in the last year which were perceived negatively. However, it appeared subjectively that many events such as moving house and separation from partner which traditionally would be rated negatively were rated positively in this group, possibly due to the perception of taking control in leaving the abusive situation. This supports the contentions of the authors designing this survey form that there is a need to allow participants to put their own interpretations on life events ratings. Although not statistically significant the trend was the women who had survived battering had more positive life events, this may be partly explained by the above observation. A further qualitative comment on impressions of the data gathered was that a higher rate of women who had been battered who answered the item 'outstanding personal achievement' (item 9 on the Life Experiences Survey) as positive with regard to leaving their abusive partner. In general, few other women completed this item.

Walker (1983) found self-esteem in her sample to be high and postulated that this was due to their sense of being a survivor. It appeared that this group were also drawing positive self-regard from a similar factor although this was not measured explicitly. However, the authors of the Life Experiences Survey (Sarason et al 1978) also suggested that the positive events scale is less reliable than the total and negative scores and this must be taken into account. The main conclusion must be that women who had been battered also had higher levels of intercurrent negative life events. This is of important given the that this has been identified as a risk factor for developing PTSD (e.g. Butler et al 1988). However, the hypothesis in the present study postulated based on this was not supported, in that negative life events scores did not significantly predict PTSD symptomology (see table 3.14). In this research it appeared that only the most traumatic events, such as childhood sexual abuse and multiple abusive adult partners were significant predictors of overall distress.

To summarise, in line with the other research reviewed, women who have survived partner abuse had higher rates of childhood sexual abuse and physical abuse, verbal abuse in adulthood and negative life events. A complex inter-relation between childhood life experience, adult abusive experience and general negative life stresses is emerging in this sample. It is likely that these factors are underlying the participants reporting of higher levels of prescription medication for mood and

anxiety disorders and higher rates of use of therapy. However, it appears that this group may not be necessarily representative of women who have been battered in general, in that participants in this study are reporting longer durations of violent relationships and higher rates of abuse than found in other research reviewed.

The hypothesis regarding the higher rates of Complex PTSD in women who have been battered emerges from the duration of their abuse and the expected finding of high rates of early childhood abusive experiences.

4.6 Differences in Rates Diagnosis of Complex PTSD and PTSD Between the two Groups

The main hypothesis in this research was that women who are survivors of partner abuse will have higher rates of Complex PTSD than a control group of women who had not been assaulted in their relationships. This is supported in the evidence shown in table 3.8 and graph 3.2. These figures also support the second hypothesis, that Complex PTSD and PTSD are related.

Table 3.8 shows that 28% of the battered women met the criteria as set by this study, for Complex PTSD. Of the seven women that met the criteria, six also met the criteria for PTSD, suggesting an intimate relationship between the two diagnoses as hypothesised. In fact, a continuum of distress is suggested by this data with a further 4 women (16%) in the battered women sample, reaching the criteria for PTSD alone. Further research, with larger samples, would be indicated to confirm this and possibly determine factors which predisposed an individual to a particular reaction.

In total, 40% of the women who had been battered in this sample were PTSD positive as ascribed by the criteria set by the Penn Inventory for Post Traumatic Stress. This compares favourably with the most reliable estimates available in the literature reviewed. For example, Houskamp and Foy (1991) found that 45% of their sample (n=26) met the criteria for PTSD using two different standardised measures and Cascardi et al (1995) found a rate of 33% using a standardised structured interview.

Graph 3.2 showing the individual data for each participant on the seven of Herman's criteria illustrates a number of interesting points. It supports the idea described above, of there being a continuum of psychological response along which survivors of partner abuse fall. The cases (n=7) where women fully met the criteria and were coded as being a member of the Complex PTSD category shades into the group of five women who would have been designated to this category but for one more element of one criteria being present (see table 3.9) and the group with PTSD alone. This also suggests it would not be clinically useful to see Complex PTSD as a discrete entity but as at the end of a range of possible responses to traumatic events. This view would avoid categorising the person who met the criteria fully as 'more distressed' than someone who was very nearly a member of this group. For example, case two did not meet the criteria on affect dysregulation, but the pattern of distress in not clearly different from case ten. In addition, the cases, 4, and 22 to 24 which met the criteria for PTSD alone but not Complex PTSD, although not dramatically different in pattern, do appear to be showing the additional features, to a less marked degree. The presence of these factors such as

dissociation or difficulties with relatedness, even to a lesser extent, may need to be addressed to resolve PTSD even if the patient does not reach the threshold for diagnosis of Complex PTSD.

With the exception of case two, the delineation between the women who have a PTSD diagnosis as set by this research and those who do not does seem quite clear in terms of the size of the graphs for the participants in the battered women sample. However, few of the women who have been battered have patterns which are directly comparable to the control sample. In fact, the only member of the control group who has a diagnosis of PTSD has a quite distinct pattern from those with PTSD in the battered women sample. Obviously in a sample of one, drawing conclusions is impossible, but it does reflect the possibility that the psychological response of women who have experienced totalitarian control such as battered women is distinct from women who have a diagnosis of PTSD arising from other sources of stress. However, as previously noted, this may be an unusual case as the participant did not report any particular trauma associated with her symptoms.

In the control group, cases 27, 28, 33, 39 and 40 had experiences of totalitarian control in childhood. They tended to score more highly on the elements measured than other non-battered women who did not have this experience. However, none of the control group were measured as having the magnitude of scores found in the group of women who had been battered. Therefore, the final hypothesis that women in the control group with Complex PTSD would have experience of childhood sexual abuse could not be tested in this sample. Again, a bias towards women who were relatively psychologically healthy agreeing to participate in the study is suspected. Alternatively, it is possible that women who have been sexually abused in childhood but not abused in adulthood do develop a different range of responses to this trauma. It could also be conceptualised that positive adult experiences may mediate against the range of possible psychological consequences in adulthood found in some women who have experienced childhood abuse (e.g. Sanderson 1995).

The results of graphs 3.3 and 3.4 suggest that the criteria as set by this research has captured women who are most distressed. Graph 3.3 represents the scores on the range of standardised measurements used and graph 3.4 shows the scores on the Trauma Symptom Inventory. Again, the view that a continuum of distress is being experienced among the sample is supported. In general, the women who reached the diagnosis having the highest levels of distress followed by the other women who had been battered and the control group participants. The graph showing TSI scores illustrates a lesser degree of differentiation between the groups. But on this measure only t-scores above 65 are considered clinically important, therefore many of the graphs for control group and those generally less distressed will be indicating scores below the threshold of interest.

The analysis completed to examine the difference between the groups on all the measures used supports the previous documented literature that battered women scored differently from the control group on most measure of psychological health. The exceptions to this is the somatic sub-scale of the General Health Questionnaire-28, where no difference was found statistically. This may be due to the fact that this factor in addition to measuring somatic anxiety symptoms also has items which may be experienced in a wide range of normal physical illnesses. The results also suggest that the

measures of dysfunctional sexual behaviour and sexual concerns on the TSI does not significantly differentiate between the groups (see table 3.12) However, the standard deviation for the former measure in the group of women who have been battered shows that some of the women will have reached clinical significance on this measure although none of the control group did.

In terms of symptoms measured by the Hospital Anxiety and Depression Scale (HADS), depression is significantly higher in the group of women who have been battered compared to the comparison group as would be hypothesised based on the existing literature (see table 3.13). Bergman et al (1987) felt that the levels of depression in women who had been battered was such, and given the prevalence of partner abuse in the community, that all women presenting with depression should be considered as possibly being assaulted at home by a partner. The battered women group were also significantly more anxious.

The core symptoms of PTSD, anxious arousal, intrusive experience and defensive avoidance appear to differentiate clearly between the groups on the TSI scale. In addition, the measure for dissociation, a core feature in the Acute Stress Reaction diagnosis but not PTSD, also differentiates highly between the groups. In fact, the mean score for dissociation in the group of women who had been battered was less than one point from clinical significance, thus indicating that this is an important factor. The levels of dissociation in women who had been battered could not be found in other studies surveyed but could be postulated based on the extensive literature on dissociation in other trauma groups (Tillman et al 1994).

The fact that dissociation is the highest score, with the mean value almost reaching clinical significance warrants further discussion. Dissociation has been conceptualised in a number of ways, for example, non-conscious or non-integrated mental modules or systems, an alteration in consciousness to disengage from the self or the environment experienced or a defence mechanism. It is argued that dissociation is underpinned by neurological and psychological processes which are on a continuum from normal and even useful through to pathological (Cardena et al 1994). Although the process of distancing the self from the abusive experience can be seen as an adaptive process at the time of the trauma it can become problematic in the future if its use is continued. This is argued to be because dissociation prevents integration of the traumatic memories into consciousness which has been postulated to be essential for recovery (Maldonada and Spiegel 1994). An analysis of the role of dissociation in PTSD is described below.

'[the victims].. are unable to work through, in a conscious way, the meaning of their stressful event and to put into perspective the facts surrounding the traumatic experience. This adds to the trauma by creating more anxiety. The dissociated feelings of fear and shame can leak into the conscious mind without the associated memories, and thereby create a state of panic since the patient feels that the content of these memories is so terrible it cannot be faced. Eventually, many trauma victims with PTSD isolate themselves from others based on the shame they feel in relation to the trauma. Furthermore, they become unable to enjoy personal pleasure or intimate relationships because of the numbing of feelings.'

Maldonada and Spiegel 1994 pg 228

The excerpt highlights some important points. It shows the connection between dissociation and the PTSD symptom of numbing as suggested by Herman et al (1992) and also suggests a further mechanism by which the symptoms associated with Complex PTSD, such as dysphoria and interpersonal difficulties may arise, mediated by the process of dissociation. In addition, it outlines a possible explanation why dissociation, in the longer term, might inhibit the process of recovery. These points are of importance given the finding that the average score in this sample of women who had been battered was only one point from clinical significance and was the highest average score in the range of measures included in the TSI. It also seems to be an element not given attention in the existing literature reviewed.

In summary, the hypotheses reviewed were supported in that women who had been battered were found to have higher rates of Complex PTSD and PTSD. In addition, these diagnosis appear to be related. The findings reviewed are indicative of a continuum of psychological response to partner abuse which includes the symptoms of both PTSD and Complex PTSD. Inevitably, given the small sample size in the present study, this requires further research.

4.7 Variables Associated with the Development of PTSD Symptomology

The hypotheses to be tested was that Complex PTSD symptomology would be associated with higher rates of sexual and physical abuse in childhood, multiple experiences of partner abuse, higher rates of violence in relationships, longer lengths of violent relationships or other traumas or life stresses. In this sample only childhood sexual abuse and multiple adult abusive relationships were found to significantly predict distress. Prior to discussing the details of the multiple regression used a difficulty with the statistic must be highlighted. That is, that the dependent variable used, the Penn Inventory for Post Traumatic Stress will not have captured the Complex PTSD criteria in its' entirety. However, the questionnaire is designed to examine PTSD from the standpoint of a continuum and the findings in this and other research projects (Pelcovitz et al 1996) suggest that PTSD and Complex PTSD are highly correlated.

The evidence that sexual abuse in childhood is the only independently significant predictor variable in the whole sample initially suggests that the experience of violence in a relationship in adulthood does not significantly influence the outcome for the survivor psychologically. However, further analysis of the results indicates a more complex picture. The experience of childhood sexual abuse is correlated with the experience of violence in adulthood therefore, the presence of childhood sexual abuse also indicates an increased risk of adult partner abuse in relationships. The experience of partner abuse also correlates with the measure of distress.

Three possible models are suggested by this first result. The first possibility is a 'ceiling' model where, after the abusive experience of childhood, further abuse is not significantly adding to the traumatogenic effects. That is, the traumatic effects of childhood sexual abuse are not significantly changed by subsequent trauma. Alternatively, the finding that sexual abuse and violence in adult relationships are correlated as would be expected from the previous literature reviewed, suggests other

partner abuse and psychological distress are also correlated, suggests other possibilities. Firstly an 'additive' model where childhood abuse and violence in an adult relationship have a summed or 'piling on' effect. Another possibility is a 'multiplicative' model where early abuse sensitises the survivor to the effect of adult partner abuse, therefore the effect of later abuse having a combined or multiplicative effect.

The second multiple regression supports either the 'additive' or 'multiplicative' positions (see table 3.15). Within the group of women who had been battered, the most important individual predictor was the number of violent relationships that a women experienced. As would be suspected intuitively this is correlated with the amount of time that women spent in violent relationships ($r=0.76$) and time spent in abusive relationships was the predictor with the next highest result in the multiple regression. Sexual abuse in childhood accounted for the next highest amount of the variance. Therefore, as described in the introductory section, there appears to be a complex interaction of traumatogenic effects. Within this sample, as in other studies, a significant minority of women had been repeatedly victimised, with early experience of childhood sexual abuse being related to the number of violent relationships in which they were involved in as adults ($r=0.47$) and the amount of time they spent in abusive relationships as adults. These factors influenced resultant PTSD symptomology.

An important non-significant result in the data is that time since leaving the relationship is not related to distress ($r=-0.05$). The range of time since leaving a violent relationship was wide in this study, from 3 months to 25 years, with a mean of 3.9 years. Therefore, it appears that 'just leaving it alone' will not lead to resolution of the difficulties in these survivors. This possibly reflects the finding in the Van Der Kolk et al (1996) study where the triad of other symptoms explored for example, affect dysmodulation were found to continue after the sufferer of PTSD no longer met this diagnosis. The long term effect of sexual victimisation in childhood, which may last for many years is well documented, and may be retriggered at later milestones in life such as having a family or new relationship (Sanderson 1995).

Although the group who had been sexually abused accounted for a large amount of the total distress, the graphical representations 3.2-3.4 and tables 3.12 and 3.13 suggest that this must not be the only focus of concern. There appears to be a continuum of distress and most of the sample had symptoms of Complex PTSD or PTSD to some degree. This will possibly impinge on future fulfilment in life and relationships and the evidence in the literature (e.g. Herman 1992) also suggests may increase the risk of further victimisation.

In summary, the hypotheses outlined were partly supported in that the experience of childhood sexual abuse and multiple experiences of partner abuse were found to be predictive of higher rates of symptoms associated with PTSD.

4.8 Implications and suggestions arising from Present Research findings

The results presented in the current research suggest that women who have been battered experience a wide range of symptoms which do not necessarily fit with PTSD, but may be usefully understood from the framework of Complex PTSD. However, as has been seen PTSD and Complex PTSD are highly correlated and are therefore possibly underpinned by similar psychological mechanisms. Therefore, despite the difficulties with PTSD as a diagnosis the range of expertise build up by researchers and clinicians can be usefully utilised. Information from PTSD suggests a number of strategies which mental health services might consider. For example, use of de-briefing or crisis intervention, possibly tapping into the resources already available in refuges and hostels which many women utilise could be considered. De-briefing has been used for people who have experienced trauma since the First World War (Glass 1975, Kormos 1978). It aims to

“diminish the impact of catastrophic events by promoting support and encouraging processing of traumatic experiences...It facilitates the piecing together of traumatic information whilst personal experiences are normalised and participants are helped to look to the future. It attempts to accelerate recovery”

Busuttil and Busuttil 1997 pg 239

Although there is little empirical evidence of the efficacy of de-briefing (Bisson and Deahl 1994), its wide use does indicate some possible benefit.

The evidence in this research, even given its small sample, which is possibly not representative in terms of demographics and trauma experience, and limited control group suggests that Complex PTSD may be a successful explanatory diagnosis for women who have been battered. The elements are highly correlated and not found in a population which had not experienced trauma. Before this is considered for future research a number of cautionary notes must be considered.

It appears, from reviewing the literature on PTSD that the popularity of this diagnosis may have actually stifled the development of understanding of responses to trauma. This is because patients or research participants were interviewed or completed questionnaires with this criteria at the forefront of researchers mind. This may have created a procrustean bed into which survivors experiences were analysed and possibly reduced attention on other important aspects of their accounts which is now emerging in the context of the diagnosis of Complex PTSD. As Van Der Kolk et al (1996) noted, ‘pure’ PTSD was the exception rather than the rule.

This research indicates that women who have been battered have a range of psychological responses possibly with the Complex PTSD as its end point. This should be considered if it is translated into clinical reality. It is possible otherwise, that this ‘new diagnosis’ will follow a similar pattern of reification and the individuality of sufferer’s experience will not be acknowledged. The framework provided by Wilson et al (1995) which indicates the range of symptoms associated with traumatogenic elements of events provides a useful individualised approach. Undoubtedly, ‘pure’ Complex PTSD will also be the exception to the rule.

In addition, the concept of PTSD has been criticised on the grounds that it was not underpinned by a suitably comprehensive theoretical rationale. In a similar way there is no adequate

conceptual framework within which Complex PTSD is currently embedded, although there are several which show promise and need further exploration (i.e. the role of 'captivity', dissociation and Wilson et al (1985) person x event analysis). Finally for a diagnosis to be useful it should indicate treatment corollaries with evidence of efficacy. Obviously these are the early stages of evaluation of the concept of Complex PTSD, but this should be a research priority if further studies suggest it should be accepted within the clinical community.

4.9 Summary and Conclusions

In summary, women who have been battered have higher rates of Complex PTSD and PTSD as measured by this study than a control group of women who have not experienced partner abuse. However, even in such a small sample, the usefulness of defining the diagnosis in strict terms is questioned given the evidence of a continuum of distress. Very few of the women who had been battered had scores on the measures used which were directly comparable to a control sample of women. This suggests that although there is a core of women who have a history of revictimisation in relationships who are definitely in need of identification and psychological support to help them break this cycle of violence most women who have been battered are in need of support to help them process the trauma and reduce the risk of a continuation in this line.

The aim of this research was to investigate whether the diagnosis of Complex PTSD as described by Herman (1982) and Pelcovitz (1996)[under the name Disorders of Extreme stress] was found in a population of women who had experienced partner abuse. In this sample, using the criteria's laid down previously, 28% of the women had Complex PTSD. In the studies reviewed, no research to date has provided empirical evidence of this sort. The project also provided evidence supporting the secondary hypothesis that Complex PTSD is related to PTSD and that the symptoms of Complex PTSD are highly correlated, indicative of the fact that this is a diagnosis where the symptoms are not randomly appearing, but are inter-related as Herman describes.

In addition, data which is indicative of a continuum of distress in response to traumatic events is presented. This appeared quite distinct to that experienced by women in the community who had not experienced violence in a relationship, even if they had experienced childhood traumatic events.

In the whole sample, childhood sexual abuse was the single most important predictor of distress. However, this was correlated with the presence of partner abuse. This is in line with the literature on revictimisation in a sub-sample of women. In the battered women sample, the number of violent relationships was the most important single predictor of distress. This again was correlated with the length of time women spent in violent relationships and the presence of childhood sexual abuse. The hypotheses that other traumatic events or higher levels of other life stresses would be related to PTSD symptomology were not supported.

Thus for some women, symptoms of Complex PTSD appears to be a result of an interaction between the effects of abuse in childhood and adulthood. This suggests that Herman's hypothesis as to the underlying dynamics in terms of repeated abuse may be correct. However, other women can

develop symptoms of Complex PTSD as a result of adult abusive relationships alone although the possibility of other childhood vulnerability factors such as emotional abuse which was not explicitly studied in this research cannot be discounted.

These findings are of important as they suggest that women who have been battered need to be recognised more widely as being at risk of developing a disorder which the evidence provided by the multiple regression suggests may not be necessarily healed by time alone. It is hypothesised that the high levels of dissociation in the sample may be mediating against the restorative effect of time.

Many of the women were known to adult mental health services or general practitioners, it is suspected that the traumatic impact of their experience is not being appreciated with the possibility of increased focus on the elements of the disorder most commonly dealt with in these services such as depression and anxiety being seen in isolation. The symptoms of Complex PTSD may result in women who have been battered and managed to overcome the hurdles of leaving the relationship at risk being left with symptoms which over a long period of time may seriously impinge on their quality of life. However, a further important point is that these women may be at risk of revictimisation in the future if suitable support and counselling where the therapist has an awareness of the underlying dynamics of their experience is not made available.

This research with a small sample requires replication, however, it is suggested that the addition of a second control group who had experienced a discrete trauma would substantially add to the conclusions as to the psychological effect of the experience of partner abuse.

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APPENDIX 1

CRITERIA FOR POST-TRAUMATIC STRESS DISORDER

(DSM-IV, American Psychiatric Association 1994)

(notes for children omitted)

A. The person should have been exposed to a traumatic events in which both of he following were present:

- (1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or threat to the physical integrity of others
- (2) the person's response involved intense fear, helplessness, or horror.

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

- (1) recurrent and intrusive distressing recollections of the event including images, thoughts, or perception.
- (2) recurrent distressing dreams of the events
- (3) acting or feeling as if the traumatic events were recurring (includes a sense of re-living the experience, illusions, hallucinations and dissociative flashback experience, including those that occur on waking or when intoxicated
- (4) intense psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event.
- (5) physiological reactivity on exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event.

C. persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

- (1) efforts to avoid thoughts, feelings, or conversations associated with the trauma.
- (2) efforts to avoid activities, places or people that arouse recollections of the trauma.
- (3) inability to recall an important aspects of the trauma
- (4) markedly diminished interest or participation in significant activities
- (5) feeling of detachment or estrangement form others
- (6) restricted range of affect (e.g. unable to feel loving feelings)
- (7) a sense of foreshortened future (e.g. does not expect to have a career, marriage, children or a normal life span)

D. Persistent symptoms of increased arousal (not present before the trauma) as indicated by two (or more)of the following:

- (1) difficulty falling or staying asleep
- (2) irritability or outbursts of anger

- (3) difficulty concentrating
- (4) hypervigilance
- (5) exaggerated startle response

E. Duration of the disturbance (symptoms in criteria B, C, D) is more than 1 month

F. The disturbance causes clinically significant distress or impairment in the social, occupational, or other important areas of functioning

specify if:

acute: if duration is less than 3 months

chronic: if duration of symptoms is 3 months or more

specify if

With delayed onset: if onset of symptoms is at least 6 months after the stressor

APPENDIX 2:

CRITERIA OF ACUTE STRESS DISORDER (DSM-IV American Psychiatric Association 1994)

A. the person has been exposed to a traumatic event in which both of the following were present:

- (1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or threat to the physical integrity of self or others
- (2) the person's response involved intense fear, helplessness, or horror

B. Either while experiencing or after the distressing event, the individual had three (or more) of the following dissociative symptoms:

- (1) a subjective sense of numbing, detachment, or absence of emotional responsiveness
- (2) a reduction in awareness of his or her surroundings (e.g. 'being in a daze')
- (3) derealisation
- (4) depersonalisation
- (5) dissociative symptoms (i.e. inability to recall an important aspect of the trauma)

C. The traumatic event is persistently reexperienced in at least one of the following ways: recurrent images, thoughts, dreams, illusions, flashback episodes, or a sense of reliving the experience; or distress on exposure to reminders of the traumatic events.

D. Marked avoidance of stimuli that arouse recollections of the trauma (e.g. thoughts, feelings, conversations, activities, places, people.)

E. Marked symptoms of anxiety or increased arousal (e.g. difficulty sleeping, irritability, poor concentration, hypervigilance, exaggerated startle response, motor restlessness).

F. The disturbance causes clinically significant distress or impairment in the social, occupational, or other important areas of functioning or impairs the individual's ability to pursue some necessary task, such as obtaining necessary assistance or mobilising personal resources by telling family members about the traumatic experience.

G. The disturbance lasts for a minimum of 2 days and a maximum of 4 weeks and occurs within 4 weeks of the traumatic event.

H. the disturbance is not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition, is not better accounted for by Brief Psychotic Disorder, and is not merely an exacerbation of a pre-existing Axis I or Axis II disorder.

APPENDIX 3

Examples of Theoretical Models Underlying PTSD in Battered Women (Goodman et al 1993).

Psychoanalytic models

Freud (1896) first attempted to understand the numbing symptoms and repetition tendency found among trauma sufferers although describing the symptoms in terms of hysteria. He argued that the traumatic event could be so massive and produces such an emotional response that the sufferer is unable to resolve it through conscious channel due to the contradictions between the ego and the incompatible material. Instead huge amounts of energy must be expended 'warding off' memories of the experience. This leaves the sufferer with so little remaining psychic energy that other psychological functions were diminished, leading to symptoms of numbing. Freud also noted that the sufferer often became fixated on the event and experienced unwanted 'flashbacks' in the form of waking memories or nightmares where the trauma was represented in literal or symbolic forms. This he termed 'repetition compulsions' which he postulated was the sufferers attempt to master the stressful event.

Linderman (1944) argued that these symptoms of numbing only became maladaptive once the traumatic events were no longer on-going. It is possible that this is underlying Walker's finding that rates of depression are higher in women who have left the violent relationship. He also argued that despite the efforts of the sufferer that traumatic material would return in the form of intrusive thoughts and nightmares. This account does not explain the experience of hyperarousal found in PTSD sufferers.

Schema-based models

This is a model proposed by Horowitz (1975, 1976) which is an attempt to integrate cognitive and psychoanalytic theories and which is useful in understanding the alternating intrusions and denial elements of PTSD. Individual are hypothesised to have central 'schemas' or internal representations to see the world as orderly and meaningful and themselves as worthy and invulnerable. Schema are strengthened by compatible material gathered throughout the individuals lifespan.

However, when a traumatic event occurs these basic assumptions are challenged (Janoff-Bulman & Frieze 1983). Horowitz argues that this new information which cannot be easily integrated into existing models of the world form 'active memories' which continue to intrude into consciousness until such time as 'completion' is reached. This occurs when the sufferer manages to develop a conception of the world which includes the event and other existing internal material. Until this time denial and emotional numbing are strategies which protect the individual from the intense emotional reaction that re-experiencing the event produces.

Behavioural learning

This is based on Mowrer (1960) two-factor learning theory to explain PTSD symptoms of avoidance and withdrawal. This is based on the postulate that two types of learning occurs in acquiring fear and anxiety; classical conditioning and operant learning.

The former is the process by which a neutral stimuli is associated with an unconditioned response that provokes fear or discomfort. By the process of stimulus generalisation stimuli that are similar to the original begin to evoke the same response. Operant conditioning proposes that a response such as avoidance decreases the emotional response which the stimuli provokes. It is proposed that extinction does not occur for victims of assault because the victims avoid reminders which leads to a failure to expose themselves to the conditioned cues which is necessary for habituation (Keane et al 1985).

Personal Control and Learned Helplessness

This is an approach drawing on cognitive and behavioural theories and the evidence that a trauma influences the degree of control a person perceives themselves as having on events and their ability to predict and terminate these events (Langer 1983, Peterson and Strunkard 1992, Rodin and Salovey 1989, Seligman 1975). This results in a feeling of helplessness and hopelessness. This was a model underpinning Walker's (1978) research with women who had been victims of abuse in the home. It has also been used with victims of sexual assault (Peterson and Seligman 1983) where they argue that the experience leads to a generalised lack of perceived efficacy of personal control leaving victims feeling passive and numb. Goodman et al (1993) argue that this theory can explain feelings of low self esteem and self-blame particularly in chronically abusive situations.

Emotional Processing

This was developed by Foa et al (1986, 1989) based on their work with rape victims. It is underpinned by Lang's theory of fear structures (1977). These are schemas which have numerous connections with other schemas in the memory network and contains three types of information; about the characteristics of feared situations; about verbal, physiological and behavioural responses and interpretative information about the meaning of the fear and the response. PTSD is distinguished from other anxiety disorders by the fact that the stimuli are of enormous significance and that a large set of stimuli and responses previously associated with safety are now associated with danger. The entire world becomes more dangerous and threatening therefore.

To avoid the emotional reactions which are associated with these stimuli the sufferer develops numbness, avoidance (behavioural) and dissociation behaviour which in turn prevents emotional processing and reformulation.

APPENDIX 4

Summary of Psychological Responses Found in Adult Survivors of Childhood Sexual Abuse (Sanderson 1995)

A list of psychological effects of childhood sexual abuse taken from Sanderson (1995) who is summarising a number of different studies.

Emotional effects

Depression, low self esteem, guilt, anxiety, obsessive/compulsive, anger

Interpersonal effects

Isolation/alienation, general social relationships, relationships with men, relationships with women, relationships with parents, effects on parenting, fear of intimacy, revictimisation.

Behavioural Effects

Self destructive behaviours, self mutilation, suicide, eating disorder, alcohol abuse, drug abuse.

Cognitive/ Perceptual Effects

Denial, cognitive distortion, dissociation, amnesia, multiple personality, nightmares, hallucinations.

Physical Effects

Psychosomatic pains, sleep disturbance.

Sexual Effects

Impaired motivation, phobias/aversions, impaired arousal, impaired orgasm, sexual dissatisfaction, vaginismus, dyspareunia, inability to separate sex from affection, oversexualisation, sexual orientation, promiscuity, prostitution.

APPENDIX 5:

Table A: Hypothesised Relation Of Stressor Variables to the Development of PTSD Symptoms
(Wilson et al 1985)

Nature of Stressor Variable in Trauma	Hypothesised Relationship to PTSD Symptoms
Degree of life threat	anxiety, intrusive imagery, hypervigilance, hyperalertness, psychic numbing, sensation seeking tendencies, unconscious re-enactment of trauma,
Degree of bereavement or loss of significant other	depression, impacted grief, search for meaning, rage at source, symbolic death,
speed of onset	anxiety, helplessness, feeling of chaos, loss of control, externalisation of attribution of causality
Duration of trauma	severity of PTSD, level of psychic numbing and denial, psychosomatic problems, memory impairment, cognitive deficits, alcohol and drug abuse, dissociative states
degree of displacement in home community	sense of anomia, rootlessness, loss of communality, changes in social bonding and increased social pathology (delinquency, child abuse etc.)
potential for reoccurrence	anxiety, fear of recurrence, mistrust irritability, hypervigilance, hyperalertness
degree of exposure to death dying and destruction	intrusive imagery, numbness, survivor guilt, nightmares, rage at source, humanitarian-pro-social values, fear if loss of loved ones, intimacy conflict, suicidal ideation, fear of isolation
degree of moral conflict inherent in the situation	moral and survivor guilt, ideological changes in values, somatic complaints, upward shift in moral judgement
role of person in trauma: agent or victim	agent: guilt, search for meaning, stigmatisation, confusion, ideological change, suicidal ideation, self recrimination victim: paranoid ideation, rag at source, feelings of persecution, helplessness
proportion of community affected by trauma	loss of stable social order, illusion of centrality, loss of emotional support systems and rage at source.

Appendix 5

Table B: Hypothesised Level of Stressor Dimensions Present in Different Stressful events
(Wilson et al 1985)

Dimension of stressor	Vict. combat	No Event	Death of Loved one	Rape/ battered/ sexual abuse	Divorce	Serious illness	life threat	family trauma	multiple trauma
Degree of life threat	***	*	*	***	*	*	***	*	var
loss of significant other	***	*	***	*	***	var	var	var	var
speed of onset	***	*	var	***	*	var	***	*	var
duration	***	*	*	var	var	var	var	*	var
displacement from home	*	*	*	***	***	*	var	*	var
potential for reoccurrence	***	*	var	var	var	var	var	var	var
exposure to death, dying destruction	***	*	***	*	*	var	var	*	var
degree of moral conflict	***	*	*	var	var	var	*	var	var
role in trauma	A,V	-	V	V	A,V	V	V	V	V
proportion of community affected	*	*	*	*	*	**	var	var	var

Note:

***=high levels of this stress

**=medium levels of this stress

*=low levels of this stress

A=agent,

V=victim

var=variable

APPENDIX 6: Research Information Sheets and Consent Forms

Includes:

- i) Research information sheet for battered women group
- ii) Research information sheet for control group
- iii) Consent Form

Research Information Sheet

I am grateful to you for taking the time to consider this. I am a trainee Clinical Psychologist who is interested in completing some research into the psychological consequences for women who have experienced violence in a relationship with a husband or partner. The person who has given you this form is aware that you have experienced this.

It is hoped that the outcome of this research will contribute to professionals, such as psychologists and counsellors, understanding of women who have had these experiences.

Women who agree to participate in this study, will be sent a pack of questionnaires and an appointment to meet with the researcher. The questionnaires cover a wide range of issues, some of which will be relevant and others which will not, to any particular women. These should take about an hour to complete. The researcher will visit soon after receiving these and this appointment will take approximately an hour in a venue which is suitable to yourself, such as your home, a local health centre or a the department of clinical psychology. The aim of this is to complete an interview covering issues relating to your relationships and some aspects of personal history. If there are any questions included in this that anyone is not comfortable answering they are not required to do so. I will remind everyone of this at the meeting.

Confidentiality is ensured to participants and in the event of anyone experiencing difficulties, follow up support can be arranged.

If you are willing to help with this research please complete the attached consent form and return it to the person who gave it to you. They should be able to answer some questions about the research but if you require further details please do not hesitate to contact me on 01896 822727 et 217 and I will be glad to discuss it further.

Research Information Sheet For Comparison Group

Thank you for taking the time to complete this. I am a trainee clinical psychologist who is completing some research into the psychological consequences for women who have experienced domestic violence. In order to draw conclusions from these results I am asking a number of women who have never had this experience to act as a comparison group. The use of a comparison group is essential in this type of research.

It is hoped that the outcome of this study will contribute to professionals such as psychologists, counsellors and doctors understanding of women who have had the experience of domestic violence.

Women who agree to participate in this study will be sent a pack of questionnaires and an appointment to meet the researcher. The questionnaires cover a wide range of issues some of which will be relevant to some women and other which will not. The interview should take approximately 30 minutes to an hour at a venue suitable to yourself, for example home, a local health centre or the clinical psychology department. The aim of this is to gain some further information on aspects of personal and relationship history. If there is any questions which you are not comfortable answering then you are not required to do so. I will remind everyone of this at the time.

All replies will be held in complete confidentiality. In the event of difficulties or distress follow up support is available.

If you feel you would be able to help please complete a consent form and post it in the pre-addressed envelope provided or contact me on 01896 822727 ex 217 for more information and I would be glad to discuss it further.

With many thanks for your time.

CONSENT FORM

ALL INFORMATION IS CONFIDENTIAL

To be completed by the individual

- Have you read the information sheet? YES / NO
- Are you happy that you understand what will take place? YES / NO
- Do you understand that you can withdraw consent and stop taking part without giving any reason? YES / NO
- Do you understand that taking part will not adversely effect any other services you are receiving? YES / NO
- Do you agree to take part in this study? YES / NO
- Do you have any objections to your G.P. being informed? YES / NO
(you will be fully consulted if this is done)

signed..... Date.....

Name.....

Address.....

.....

.....

Phone number.....

G.P's Name and address.....

.....

.....

- Do you wish the researcher to contact you by phone to give further information and/or arrange the interview (if no an interview will be sent through the post) YES / NO

Where would be the most suitable place to meet

Is there any time which is more suitable to you

APPENDIX 7: Copies of Questionnaires Used

Includes:

- i) Trauma Symptom Inventory (Briere 1995)
- ii) General Health Questionnaire-28 (Goldberg and Williams 1988)
- iii) Hospital Anxiety and Depression Scale (Snaith and Zigmond 1983)
- iii) Life Experiences Survey (Sarason et al 1978)
- iv) Penn Inventory for Post Traumatic Stress (Hammarberg 1992)
- v) Conflict Tactics Scale (Straus 1979)

APPENDIX 8: Copy of Interview Schedule

INTERVIEW SCHEDULE

Give explanation of reasons for research, possible distress that questions may provoke, the right to terminate the interview at any stage and the possible supports that are available if any distress is provoked.

Name/No.

Address

Age /DOB

Marital status

If separated/divorced how long since the relationship was over?

No. Of Children

Ages of Children (if any)

Education

Current and/or usual occupation

Have you had a violent relationship in your adult life (if yes how many)

Time in present or last relationship (in years)

Time over which violence occurred (if appropriate)

Any medication prescribed by your doctor which is aimed to improve your nerves or your mood ?

YES NO

Are you seeing a counsellor/ therapist currently with a view to helping your nerves or your mood?

YES NO

Have you taken any medication for your nerves or your mood at any time in the past ?

YES NO

If yes could you estimate how long ago this was?

Have you seen a counsellor/ therapist in the past because of problems with your nerves or your mood in the past?

YES NO

If yes could you estimate how long ago this was?

Have you had any experiences over the past few years which have been very frightening or traumatic or left you in fear of your safety or life?

YES **NO**

If YES describe the experience

i.e. car crash, house fire, assault/mugging, rape, burglary, illness

How long ago was this experience ?

Have you witnessed anything where you were frightened for someone else's safety or their life ?

YES **NO**

If YES describe the incident

i.e. car crash, car accident involving a pedestrian, house fire, assault/mugging

How long ago was this incident?

In your childhood or teenage years did anyone talk to you or show you material which was sexual in nature and left you feeling uncomfortable or scared ?

YES **NO**

In your childhood or teenage years did anyone touch you in a way which was sexual in nature and left you feeling uncomfortable or scared?

YES **NO**

If you answered yes to either of the above questions and you feel able to briefly describe your experience

In your childhood or teen age years did any one discipline you or treat you in a way which was very frightening or violent?(please circle)

YES **NO**

If yes, please describe below

Do you ever experience a sense of helplessness or a feeling that it is difficult to take the initiative?

YES **NO**

Do you ever have feelings of shame, guilt or self blame

YES **NO**

Do you ever have a feeling of being defiled or stigmatised

YES **NO**

Do you ever have a feeling of being completely different from other people ? (i.e. feeling of specialness, utter aloneness, belief no other people understand or a non-human identity)

YES **NO**

if any history of abuse or any kind only

Do you feel preoccupied with the relationship with the perpetrator (including preoccupation with revenge) ie. can't stop thinking about the relationship

YES **NO**

Do you feel the perpetrator has or had complete power over you?

YES **NO**

Do you feel any gratitude towards the perpetrator or in any way see them as better than you are (idealisation) ?

YES **NO**

Do you feel the relationship with the perpetrator is a special one (or supernatural)?

YES **NO**

Do you accept the beliefs or rationalisations of the perpetrator ?

YES **NO**

For all participants

Do you feel isolated or withdrawn ?

YES **NO**

Do you find that intimate relationships are disrupted ?

YES **NO**

Have you tried to get into relationships to be 'rescued' from your situation ?

YES **NO**

Do you find it difficult to trust people ?

YES **NO**

Have you found yourself in more than one relationship where you have been in danger?

YES **NO**

Have you found in changes in you usual faith?

YES **NO**

Do you experience a sense of hopelessness and despair?

If any cause for concern, ensure the participant has

- my contact telephone number
 - hostel contact telephone number and contact name
 - G.P. number
 - given consent for G.P. to be contacted and an explanation that this is happening
- an explanation that if there is an increase in distress that this is usual in the circumstances but that appropriate support is necessary.

APPENDIX 9

Correlations Between the Results on the Seven of Herman's (1992) Criteria for Complex PTSD

Relationship between variables		R	t (n-2)	p
totalitarian control	& alterations in affect regulation	.38	2.87	<.01
	& alterations in consciousness	.46	3.60	<.01
	& alterations in self perception	.59	5.04	<.0001
	& alterations in perception of perpetrator	.62	5.48	<.0001
	& alterations in relations with others	.62	5.47	<.0001
	& alterations in systems of meaning	.46	3.67	<.001
Alterations in affect regulation	& alterations in consciousness	.81	9.66	<.0001
	& alterations in self perception	.64	5.91	<.0001
	& alterations in perception of perpetrator	.68	6.4	<.0001
	& alterations in relations with others	.66	6.05	<.0001
	& alterations in systems of meaning	.52	4.25	<.0001
Alterations in consciousness	& alterations in self-perception	.66	6.08	<.0001
	& alterations in perception of perpetrator	.67	6.52	<.0001
	& alterations in systems of meaning	.59	5.09	<.0001
Alterations in self perception	& alterations in perception of perpetrator	.7	6.89	<.0001
	& alterations in relations with others	.76	8.12	<.0001
	& alterations in systems of meaning	.70	6.88	<.0001
Alterations in perception of perpetrator	& alterations in relations with others	.77	8.29	<.0001
	& alterations in systems of meaning	.6	5.3	<.0001
Alterations in relations with others	& alterations in systems of meaning	.73	7.39	<.0001

APPENDIX 10

Correlations between variables in Multiple Regression using Whole Sample

	violence in relationship	other trauma outside relationship	witnessed traumatic event involving another	childhood sexual abuse	childhood physical abuse	negative life events score	Penn Inventory for PTSD
violence in relationship	1.00	.00	.20	.40	.14	.4	.4
other trauma outside relationship	.00	1.00	.10	.04	.20	.10	.20
witnessed traumatic event involving another	.20	.10	1.00	.00	.14	.01	.06
childhood sexual abuse	.40	.04	.00	1.00	.34	.08	.50
childhood physical abuse	.14	.20	.14	.34	1.00	.06	.15
negative life events score	.4	.10	.01	.08	.06	1.00	.11
Penn Inventory for PTSD	.40	.20	.06	.50	.15	.11	1.00

APPENDIX 11

Correlations between variables in Multiple Regression using sample of women who had been battered

	No. of violent relationships	time spent in violent relationships	time since leaving violent relationship	childhood sexual abuse	childhood physical abuse	Penn Inventory for PTSD
No. of violent relationships	1.00	.76	0.11	.47	.26	.53
time spent in violent relationships	.76	1.00	.37	.40	.15	.27
time since leaving violent relationship	.11	.37	1.00	.09	.19	.05
childhood sexual abuse	.47	.40	.09	1.00	.34	.50
childhood physical abuse	.26	.15	0.19	.34	1.00	0.15
Penn Inventory for PTSD	.53	.27	.05	.50	.15	1.00