WORKPLACE VIOLENCE AND THE EFFECT OF THE WORKING ENVIRONMENT AND SOCIAL SUPPORT WITHIN A HUMAN SERVICE ORGANISATION

A thesis presented to Massey University in partial fulfillment of the requirements for the Degree of Master of Science in Psychology.

KIM SANDRA ALLEN

1998

ACKNOWLEDGEMENTS

I would like to acknowledge the following people - my supervisor Douglas Paton for the help and support during the last year.

I would also like to thank my family, Gary, Sandra and Kirsty Allen, for their patience, encouragement and support for the past five years.

At the present time, there is an increasing awareness of the risk of workplace violence that certain occupational groups face within their professions. This study investigated violence within a human service organisation responsible for looking after profoundly intellectually handicapped individuals with little chance of being mainstreamed into normal society. Three hundred and forty three employees responded to a questionnaire about incidents of violence encountered at work, stressors within their job, and their perceptions of social support and the work environment. The hypotheses were (1) that symptoms of stress and traumatic stress increase in frequency and intensity following involvement in a violent incident, and will be cumulative and additive following repetitive exposure (2) that positive perceptions of the working environment decrease the symptoms of stress and traumatic stress ; and (3) that higher perceptions of the effectiveness of social support decrease the symptoms of stress and traumatic stress. The results showed that violence affected employees mentally, emotionally and physically. Perceptions of the work environment was found to have an effect on responses to violence but social support was not. Recommendations made included reducing violence by redesigning the physical environment, or the use of training to help with stress management. These results could help with the investigation of violence within the health care field.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Page

CHAPTER ONE

1.1 INCREASING VIOLENCE WITHIN THE WORK SECTOR

Violence within the workplace appears to be increasing in both the number of affected occupations, and the severity of the violent experience (Carroll, 1996). A 1987 study by the Labour Research Department found that employees from 67% of workplaces believed the levels of violence and abuse had increased in the last five years. Murders or attempted murders committed by disgruntled employees, former employees and clients has increased from 200% to 300% in the last ten years (Pastor, 1995). As well as the individual costs, the organisation can be affected in terms of loss of productivity, absence due to sickness, lower staff morale and recruitment difficulties (Wynne, 1995). Additional costs for the organisation include insurance losses, compensation costs and the tarnished reputation of the organisation (O'Leary-Kelly, Griffin & Glew, 1996).

While workplace violence is increasing in most occupations, one area of particular concern is violence within the health sector. Research has shown that a high number of violent incidents occur within the various health care and human service professions. For example, Cheung, Schweitzer, Tuckwell and Crowley (1996) found the rate of worker assaults by patients to be 97.6 physical assaults per 100 patients per year. A study by Pearson, Wilmot and Padi (1986) found that, within a psychiatric hospital, twenty-four incidents of violence occurred each

month. Jones et al. (1991) reported that 14% of social workers had experienced at least one physical assault, and that 3% of those individuals had been assaulted more than once. Schultz (1987) also found that a high percentage of social workers had experienced some form of violence. Caldwell (1992) found that 62% of clinical staff reported having experienced a traumatic incident involving a threat to life or physical safety, or having witnessed a serious injury or death. In another study, Ghaziuddin and Ghaziuddin (1992) found that physical assaults on employees caring for the mentally retarded were common.

1.2 UNDER-REPORTING OF VIOLENCE

However, recent information about violence within the workplace may not show the real picture. Assaults in the workplace are often under-reported (Engel & Marsh, 1986). Under-reporting can be a problem if it causes violence to be seen as a sporadic rather than a continuing threat (Norris, 1990), and therefore not as a serious problem which needs to be addressed. Understanding under-reporting is an important issue. Not only is it important from the point of view of gaining an accurate picture of the incidence of violence, its investigation may illuminate social and organisational factors that affect under-reporting and which, consequently, affect the well-being of employees.

There are many factors that contribute towards this phenomenon of under-reporting. Lion (1983; cited in Grainger, 1993) listed several reasons for the nonreporting of violent incidents - the time and effort required to fill out a report, personal inurement to violence, and fear of

blame for a lack of prediction and prevention. Other possible reasons include the belief that workers would not be dealt with sympathetically, and viewed negatively by their colleagues (Littlechild, 1995; Brown, Bute, & Ford, 1986); uncertainty about the apparent seriousness of the incident (Littlechild, 1995); lack of knowledge of the reporting procedure (Dickson, Cox, Leather, Beale & Farnsworth, 1993), the victim feeling fearful or impotent (Kidd & Chayet, 1984), and the possibility of disciplinary proceedings or an internal inquiry (McHugh, 1987; Lanza, 1985).

Perceptions and stereotypes by employees and outside groups might also affect the accurate reporting of violent incidents. Stereotypes about assaulted staff being incompetent (Baxter, Hafner & Holmes, 1992), or provocative and authoritarian (Breakwell & Rowett, 1989) may reduce the rate of violent incident reporting. Perceptions (both public and private) that members in the caring professions should be able to cope with any burdens that their job entails (Gibson, McGrath & Reid, 1989) and norms within the caring profession that accept a certain amount of violence from clients (Breakwell, 1989) could also contribute to the under-reporting of violence. It would appear that there are many factors involved in whether or not violence is reported. The possibility of under-reporting is a significant one and suggests that the incidence of violence may be higher than is indicated by existing studies.

1.3 WHY IS VIOLENCE INCREASING IN THE WORKPLACE?

Levels of Workplace Violence

Violence can be conceptualised at three levels; the individual, the organisational, and the structural and cultural level (Van Soest & Bryant, 1995). At the individual level, harmful actions are undertaken against people and property. Violence at the organisational level involves violence by social institutions, and is often caused by oppressive social policy, bureaucratic functioning and the nature of the work performed (e.g. violent clients). At the structural and cultural level, the norms and ideologies give rise to the violence at the individual and organisational levels. All three levels are interconnected and can be understood together as shown in Figure 1.

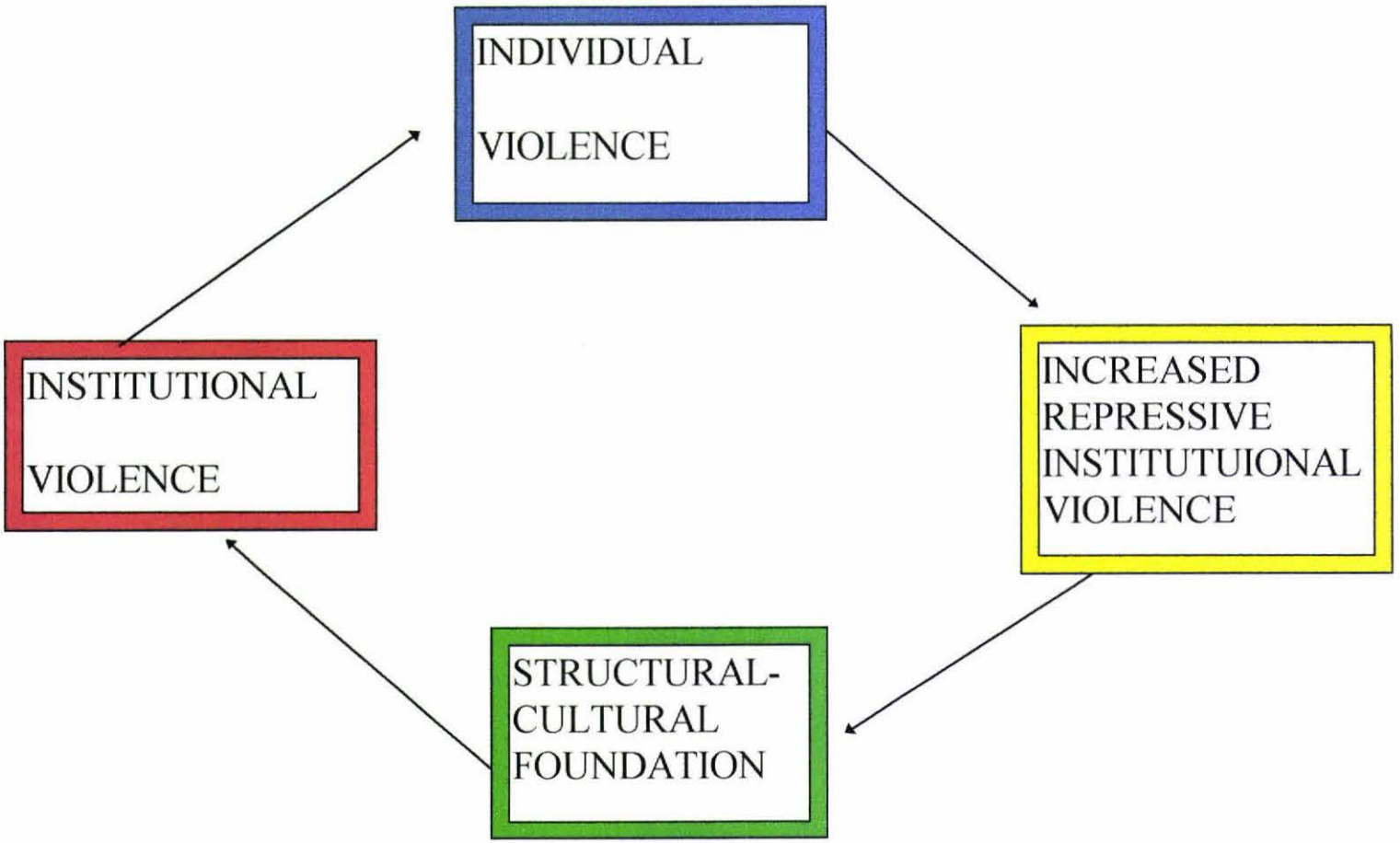

Figure 1 : The Three Levels of Violence (Van Soest et al., 1995).

Reasons for Increasing Workplace Violence

Several reasons have been proposed to account for the increasing violence within the workplace. Firstly, increasing client violence could be seen as a reflection of a violent and uncertain world (Rey, 1996). For example, a Labour Research Department report (1987) on work assaults listed an increase in unemployment, reduction in staffing levels, increased demands on public services, and an increase in community care without adequate resources as reasons for increasing violence. Economic, societal and geo-political pressures (Obholzer & Roberts, 1994; Harris & Rice, 1986), social issues such as male power and class domination (Thompson, Murphy & Stradling, 1994) and the recent movement towards less restrictive treatment and patients rights to refuse medication (Blair, 1991), are considered to be other factors underlying increases in workplace violence.

Secondly, workplace violence could be caused by internal conflicts within the assaultive patient. For example, violence could be seen as a direct way of communicating an intense human need (Boettcher, 1983); a disequilibrium in power (Kaplan & Wheeler, 1983); or a way of redressing the imbalance of power that occurs in the practitioner-client relationship (Breakwell, 1989). For example, members of the caring professions have a dilemma as they balance care for their clients and the need to exert control over them (Newhill, 1996). The ensuring role conflict within the health care workers can contribute to workers' stress and feelings of confusion and helplessness within the client. The worker may unknowingly provoke the patient, who may then respond with violence.

Regardless of the reasons why, it is important that violence be seen as a social and an organisational problem, rather than a medical or psychological problem (Morrison, 1993), and therefore as an issue that has the potential to affect every person.

1.4 MODEL OF VIOLENCE WITHIN THE WORKPLACE

Violence within the workplace can be seen as multidimensional with several possible causal influences. The relationship between the variables and violence within the workplace is illustrated in Figure 2. The assailant, the employee, the interaction between the two, and the working environment, all have an influence on the physical and psychological outcome. This model will be used to frame the analysis in this study.

The assailant, employee, interaction and outcome will be discussed further in detail. There were several factors that could have been investigated regarding their role in determining the impact of workplace violence and recovery. Data used in this study was commissioned by an organisation who identified specific areas that they wished to be investigated. Workplace violence, the work environment and the social support network were three such areas.

There is growing evidence that the work environment and social support can influence the nature and intensity of psychological responses to violence. At the present time, though, this evidence tends to be anecdotal rather than empirical. In addition to answering theoretical questions, the work environment and social support network are also factors whose nature can (compared to other factors such as assailant characteristics) be altered to help manage violence within the organisation. This study, therefore, concentrated on these variables. However, a more

comprehensive understanding of violence in the workplace requires that the role of all salient variables be understood.

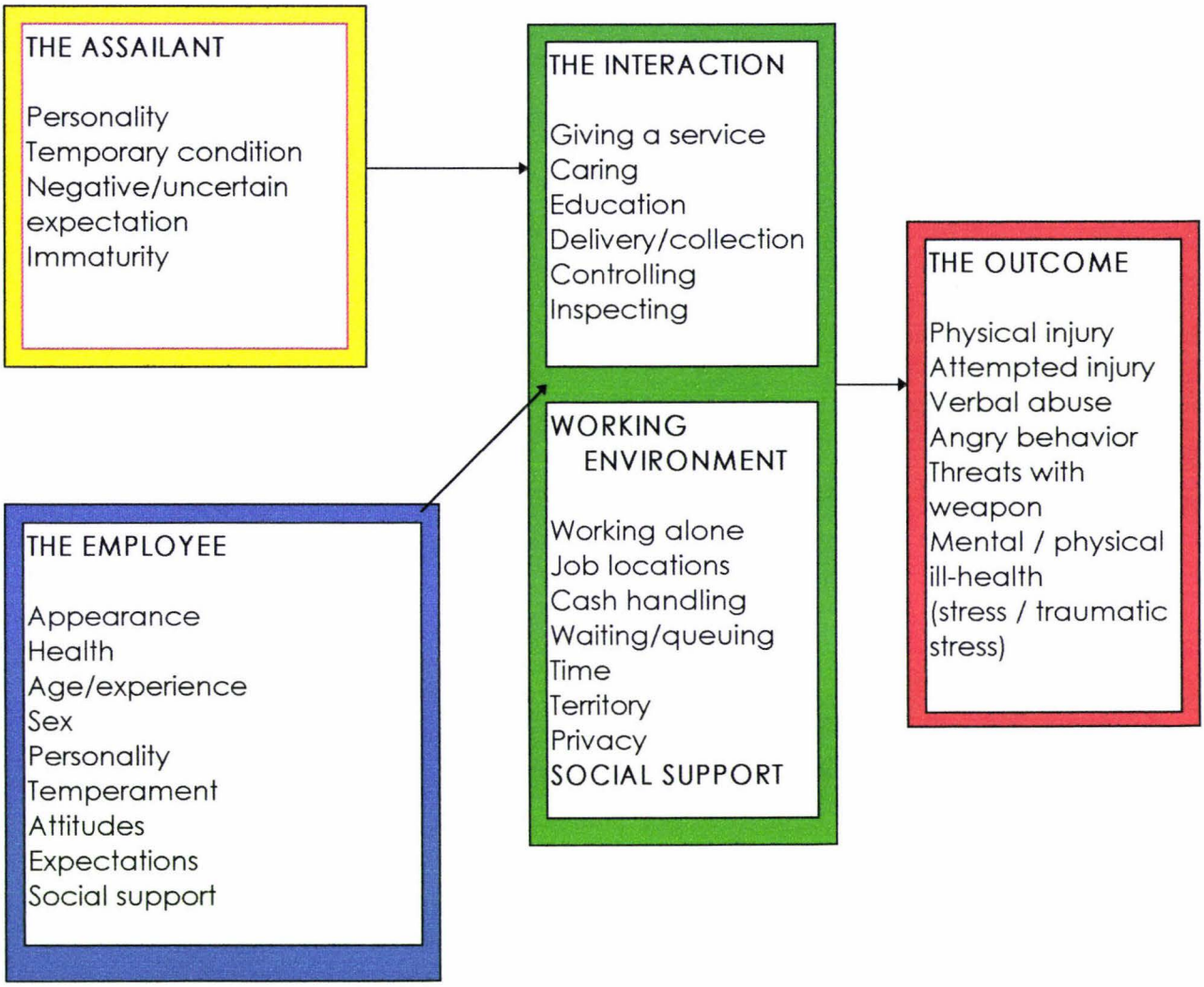

Figure 2: The Model of Violent Assaults at Work

(adapted from MacKay, 1994).

1.4.1 The Assailant

One important question to ask when looking at violence within the health service is which clients/patients are more likely to become violent? This can have an effect on how violence is managed; if violence can be explained as a problem within the client, it can be handled accordingly.

It has been found that a small number of patients are responsible for the majority of staff assaults (Cheung et al., 1996). Morrison (1989) found that those with a history of violence and a diagnosis of substance abuse were more likely to be violent. Other possible predictors of violence are age and sex (Boyd, 1995; Whittington, 1994; Davis, 1991; Haller & Deluty, 1988). Young male patients have been found to have the highest rate of violent behaviour. Patients with mental or physical illnesses (Whittington & Wykes, 1994a), or with a diagnosis of mental retardation, personality disorder, or an organic brain syndrome (Pearson et al., 1986; Tardiff & Sweillam, 1982) have also been found to be more violent than the norm population.

The population that was investigated in the present study (profoundly handicapped clients) was prone to violent outbursts. The nature of the intellectual handicaps of the client group precludes the option of focusing on changing client behaviour as a means of managing violence in this organisation. Therefore, the assailant was not investigated in the current study.

1.4.2 The Employee

At the present time, there is confusion within the literature about what factors are significant in making employees more likely to be involved in workplace violence. For example, a study by Whittington and Wykes (1994b) found that there were no particular attributes of staff members that made them more likely to be attacked. However, other studies have found several characteristics of the employee that significantly influence violent exposure and recovery.

Firstly, worker age and inexperience have been associated with an increased risk of physical assault (Whittington, Shuttleworth, & Hill, 1996; Budd, Arvey & Lawless, 1996; Arnetz, Arnetz & Petterson, 1996) and increased stress (Collings & Murray, 1996).

Secondly, some individuals may be at higher risk than others from exposure to violence and vulnerability to mental health problems including Post Traumatic Stress Disorder (PTSD ; Breslau, et al., 1991). For example, Jones, Fletcher and Ibbetson (1991) found that those who had higher stress levels were more likely to have experienced threats of violence. Personality variables have also been implicated as vulnerability factors. Lyons (1991), for example, found that workers who were in good health and not physically injured by the experience adjusted more readily than those who were injured. At present it is not clear if violence causes stress, or that higher stress levels increases vulnerability to violence.

Lastly, several studies have found that male workers are more likely to be targets of client violence (Newhill, 1996; Appelbaum & Dimieri, 1995; Jones et al., 1991; Carmel & Hunter, 1989; Rowett, 1986), while others have found no difference or the opposite (i.e., women are more likely to be assaulted) (Whittington et al., 1996; Flannery, Hanson, Penk & Flannery, 1994; Grainger & Whiteford, 1993).

Existing research thus suggests a need to examine the effects of characteristics such as gender, length of service and age on the frequency and severity of violent episodes. The relationship of dispositional and personality characteristics was beyond the scope of the present study. However, several demographic characteristics were assessed. These will be described below.

1.4.3 Factors related to the Psychological Response to Violence

Several factors can either reduce or exacerbate the psychological impact of the violent event and the recovery rate (see Figure 3). Firstly, how an individual defines the violent incident can depend on the attributions made about the incident and the individuals' expectations and behaviours (Dickson et al., 1993; Joseph, Yule & Williams, 1993). Pre-existing life stress, and past history of trauma can affect the individual's response to trauma (Hillenberg et al., 1988). Factors such as extent of impact, community response, familiarity and family support have also been found to play a key role in increasing/decreasing psychological impact (Hillenberg et al., 1988).

The unexpectedness, the continued threat, the loss of control and the ratio of loss versus available resources can all affect positive adjustment to violence (Lyons, 1991). Jones et al. (1991) found a positive correlation between the fear of violence and the number of times a person had experienced upsetting threats of violence. It has also been found that personally experiencing violence, compared to observing a violent incident, heightened feelings of vulnerability (Poster & Ryan, 1994). A study by Lanza (1983) found that workers who received the most severe injuries were less fearful of the assaultive patient than workers who had received less severe injuries.

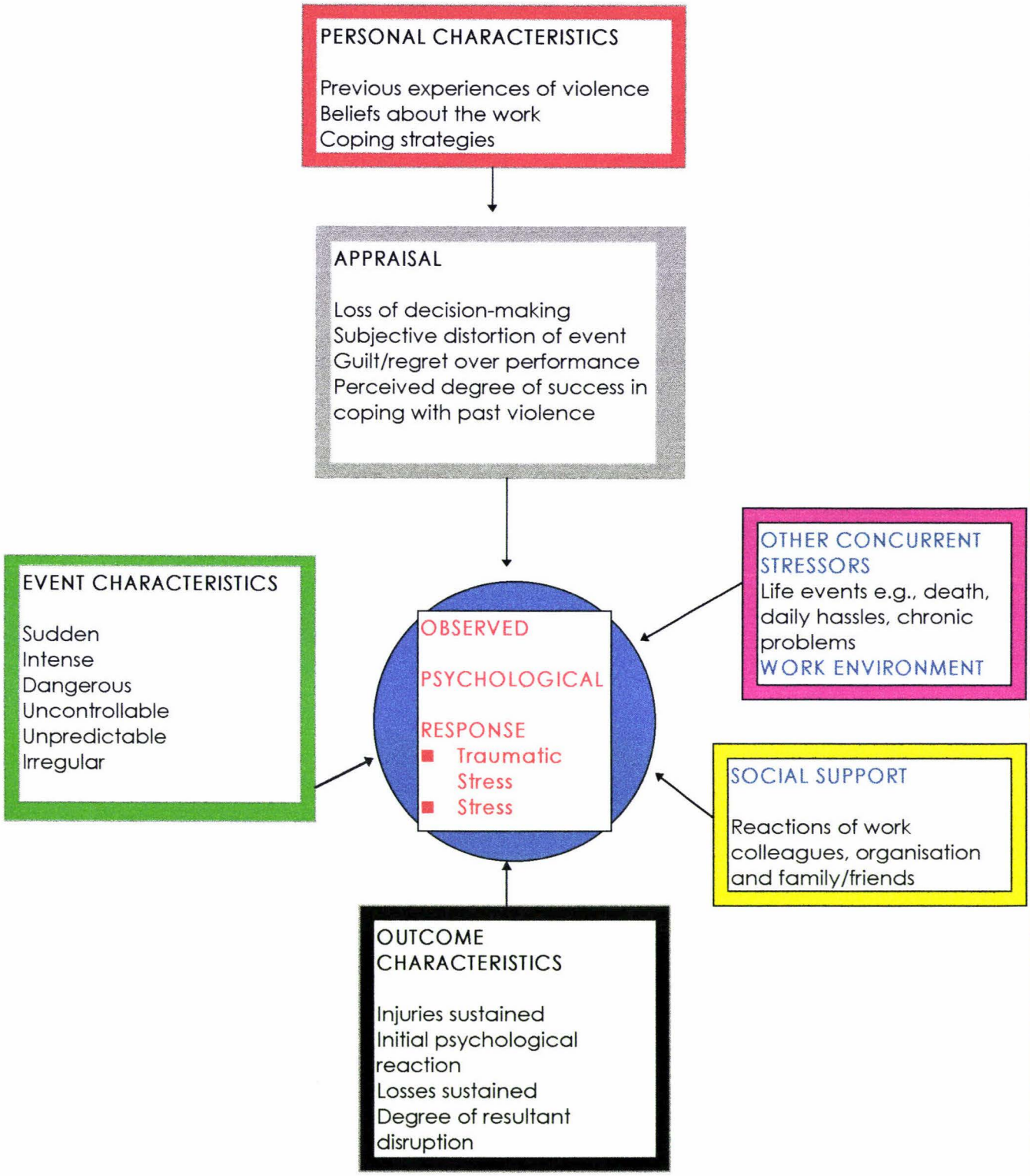

Figure 3: A Model of the Factors Related to the Psychological Response to Violent Incidents (Wykes & Whittington, 1994).

Figure 3 illustrates the psychological response to a violent incident and the involvement of factors in the development of the observed psychological response.

Figure 3 is related to Figure 2 in that they both illustrate the influence of certain factors on the psychological outcome to violence. While both models are displayed differently, both demonstrate the importance of the work environment, social support and event, personal, and outcome characteristics, as meditating factors in the response to violent incidents.

1.4.4 The Working Environment

The workplace environment has been shown to have important consequences for staff health and happiness, morale, commitment and performance (Kyrouz & Humphreys, 1997). It can influence job satisfaction (Schulz, Greenley & Brown, 1995; Tumulty, Jernigan & Kohut, 1994; McNeely, 1983), organisational performance (Lawler, Hall & Oldham, 1974), and employee frustration levels (Furnham & Walsh, 1991). An organisation can be seen as a source and a moderator of its employees' experiences of stress (Cox & Howarth, 1990). The work environment can affect employees' ability to effectively deliver health care (Cox & Leiter, 1992), and the treatment and quality of patient care. It can also help define violence within the workplace. Work trauma has its roots in the organisational culture (Wilson, 1991), and it has been found that an individual's definitions of violence can depend on the social characteristics of the assault and the wider organisational culture (Dickson et al., 1993).

Violence should be considered as an interactive phenomenon and certain aspects of the work environment could affect the possibility of violence (Davis, 1991), and its impact on staff. Norms and ideologies at the structural and cultural levels of the organisation can give rise to violence at the individual and organisational level (Van Soest et al., 1995). Several environmental factors have been linked to violence (Hunter et al., 1996). These factors include institutional procedures and practices, authoritarian staff attitudes, and periods of increased staff demands. Bensley, Nelson, Kaufman, Silverstein and Shields (1995) found that the

top five factors influencing assaults were adequate numbers of personnel, interpersonal skills, staff training in assault, legal penalties and the physical environment. In another study, Harris and Morrison (1995) found that staff ratios, staff provocation, and space were related to aggression. Patient restrictions (Powell, Caan & Crowe, 1994; Lanza, 1988), crowding (Lanza, Kayne, Hocks & Milner, 1994), length of hospitalisation (Morrison, 1989), and inadequate policies and procedures (Lipscomb & Love, 1992) have also been found to be antecedents to violence.

The organisational culture can also affect the individuals' and organisations' response to violence. The safety culture of the organisation (norms, beliefs and practices for handling risks and hazards) can influence the organisation's approach to risk of violence against staff (Pidgeon, 1991). Organisational (and the health service professions') ideology and value orientation affects its willingness to acknowledge violence as a problem (Leadbetter, 1993). The recovery environment can also affect the response and recovery rates (Creamer, Burgess, & Pattison, 1992).

Therefore, organisational attitudes to violence and the interaction between this and employee perceptions of risk and vulnerability, can help or hinder the employee's response to such events. As stated before, Dickson et al. (1993) reported that the individual's definition of violence depended on social and organisational characteristics. In another study, Herrera and Lawson (1987) found that, as staff perceptions of their working environment changed, assaultive behaviour by patients also reduced significantly. If the workers perceive the organisation as being

able to deal effectively with violence and of being supportive of them, they will have more positive perceptions of the organisation and its support, and so could respond and adapt better to violent experiences.

1.4.5 Social Support

Along with the working environment, social support within and outside the organisation can have significant effects on the reactions of the employee to a violent incident. In this investigation, social support was defined as the quality of support received from significant others within the social network, in particular, who is approached to seek advice or talk about demanding or pressured situations.

The quality/quantity of interpersonal relations and its implications for social support networks can influence responses to workplace violence and staff adaptation. The interpersonal climate provides a context within which workplace violence becomes more or less likely (Warshaw & Messite, 1996). The absence of social support has been associated with increased psychological distress (Leary, 1983), poor work performance and impaired relationships (Littlechild, 1995).

It was also found that assaulted staff members without a support network attain higher psychological risk status, including the risk of developing PTSD symptoms (Flannery et al., 1991). Those with a supportive network are more likely to adjust more readily to the consequences of violence (Lyon, 1991). Brom and Kleber (1989), for example, found that approximately eighty percent of people who have been in a violent incident coped with the informal help of others and their own resources. This has implications for dealing with violent, atypical events. It would appear that for the research, those without

adequate support are affected more and recover more slowly from such events. Therefore, social support appears to be an important factors in the management of workplace violence.

The utilisation of social support can determine how effective the social support network is. Jayaratne and colleagues (1988;1984) discovered that individuals who use support are likely to benefit from it, in that a high use of support resulted in lower levels of stress and strain. It has been found that the effect of perceived support reflects personal rather than environmental sources (Noor, 1995), and so how an individual perceives his/her social support appears to be an important factor in the effectiveness of social support. This also suggests that social support and the working environment should be considered as separate constructs.

Both quantity and quality of social support has been reliably related to physical morbidity and mortality (Uchino, Cacioppo & Kiecolt-Glaser, 1996; Shumaker & Hill, 1991; House, Umberson & Landis, 1988). Quantity of social support relates to the amount of social support received while quality refers to the effectiveness of social support. The quality of social support networks, though, appears to be more important than the quantity. For example, Porritt (1979) found that the perceived effectiveness of social support may be more important than the quantity of support. Quality of support was also found to be a better predictor of adjustment than the number of social interactions (Winefield, 1984). Therefore, it was decided that, while both quality and quantity of social support were investigated, quality was a better indicator of the employee perceptions of social support.

Social support can come from a variety of sources, from home-life and from work. At work, supervisors can offer support. For example, Flett, Biggs and Alpass (1995) found that ongoing supportive professional supervision can reduce demands within the job. Terry, Nielsen and Perchard (1993) established that the perceived availability of supervisors' support buffered the negative effects of high levels of work stress. A study by Marshall and Barnett (1992) found that the physical health of workers was associated with supervisors' support. Browner (1987) found that staff with supportive work-based social networks reported significantly better health.

Co-workers may also offer some form of support. Co-worker satisfaction has been related to perceptions of health; as co-worker satisfaction increases, health perceptions become more positive (Peterson & Wilson, 1996). Several studies have shown the importance of co-worker support. Koeske and Koeske (1989) established that social support, especially co-worker support, could buffer the negative impact of workload on burnout. Jayaratne and Chess (1984) found that supervisor and co-worker support can aid in with coping with stress, while Himle, Jayaratne and Thyness (1989) discovered that supervisor and co-worker support was associated with lower levels of burnout, job dissatisfaction and mental health strains. Erera (1992) found that subordinates were considered supportive, providing both emotional and approval support. A study by Marcelissen, Winnubst, Buunk and De Wolff (1988) found that, while co-workers provided more support than supervisors, supervisor's support was considered to be more important.

At home, social support may come from family and friends, but this social support may not be as effective as one might expect. For example, Adams, King and King (1996) found that the relationship between work and family was characterised by both support and conflict. On the other hand, Ganster, Fusilier and Mayes (1986) found that support from family and friends was significantly associated with lower levels of health symptoms, while Terry et al. (1993) found that there was no main effect of co-workers and nonwork support on the levels of well-being. Marshall et al. (1992) discovered that workers were more likely to receive work-related support from partners and are less likely to get work-related support from relatives and friends.

The importance of the social support network for health care workers can not be underestimated. The social support network can have an impact on the quality and type of social support that the health care worker can offer to their patients or clients (O'Connor, 1983). Social support can also mediate an individual's appraisal of environmental stressors (Mitchell, Billing & Moos, 1982) and therefore, is very important for both personal and professional reasons. In this investigation due to the atypical and violent incidents that the employees face, it is considered valuable to have ready access to support resources

Although social support and the working environment have been implicated as determinants of the occurrence of violence and the recovery process, they have, in the past, been treated separately. This study will examine their relative, collective influence on reactions to violence in the workplace.

1.4.6 The Outcome

The atypical nature of violent episodes and their potential for disrupting the personal and organisational integrity of the person justifies them being labelled as potentially traumatic incidents. In fact, as will be shown, this was a label readily applied by subjects in this study to workplace violence. As it has and will been shown, violence can cause traumatic stress within the individual. A traumatic stressor can be defined as a stressor that is psychologically distressing, markedly distressing to almost anyone, and is outside the usual range of human experience (DSM III, DSM-IIR; cited in Peterson, Prout & Schwarz, 1991). From this definition, violence qualifies as a traumatic stressor.

While violence within the health profession is becoming more common, most violent incidents do not seem to involve serious physical injury. Research by Haller et al. (1988), and Fottrell (1980) found that the majority of injuries that occurred as a result of violent incidents were minor and that being severely hurt was quite rare. Schultz (1987) reported that verbal abuse was the most prevalent type of violence experienced by health service workers. Rowett (1986) also found that most injuries suffered were minor.

This, though, does not imply that violence within the health service should be disregarded. Serious incidents do occur and even minor incidents can have a significant emotional and psychological impact on those involved (Wykes & Whittington, 1991), particularly if individuals are exposed to such events repeatedly. This raises the possibility that

psychological impact may be cummulative. Victims can report intense and residual emotional reactions to minor assaults (Lanza, 1992). Conn and Lion (1983; cited in Whittington & Wykes, 1992) found that the emotional impact of having been in an assault far exceeded the impact of the physical injury. Ryan and Poster (1989), for example, found that, even in the absence of major injury, some victims continue to experience moderate to severe responses six months to one year after the assault. This is an important point. Violence can have long-term effects and this can affect how violence is managed within an organisation. The risk of repetitive exposure can also affect how violence is managed.

Exposure to any violent event has been linked to increased risk of developing Post Traumatic Stress Disorder (PTSD; Ullman & Siegel, 1994). For example, Breslau, Davis, Andreski & Peterson (1991) found the rate of PTSD for individuals after exposure to violence was nearly 24%. A study by Flannery and Penk (1996) also found that 30% of staff victims reported symptoms of acute distress at the time of the attack.

Involvement in a violent incident can have profound psychological and traumatic effects on those victimised. Assaultive behaviour by patients towards staff can result in psychological trauma as well as recurrence of memories of painful past experiences (Flannery, Fulton, Tausch & DeLoffi, 1991). In fact, similarities have been found between staff victims of violence and other victims, such as victims of disaster and street crimes (Caldwell, 1992). Victims of physical and verbal assault may feel violated, helpless, vulnerable (Kidd et al., 1984), feel self-blame and anger about the traumatic incident, and have concerns about the safety

at work and at home (Littlechild, 1995). The significance of these issues increases where staff can be exposed to such events repeatedly.

Violence can be a source of conflict within the assaulted worker, as anger at the aggressor conflicts with the caring role, and causes guilt and self-doubt about the incident and their competency (Whittington et al., 1992). A violent event can challenge a victims' belief that the world is safe and predictable, and can unsettle the individuals' sense of self-trust and trust in the environment (Littlechild, 1995; Lawson, 1987). For example, Lanza, Kayne, Hicks and Milner (1991) found that half of the assault victims said that they had experienced a change in their view of the future due to the assault. Commonly held beliefs in the meaningfulness of the world and in the self as basically good can also be affected (Flannery, 1996; Joseph, Williams & Yule, 1995).

It must be noted, though, that some individuals report no reactions to an assault (Lanza, 1983) and may not be as greatly affected as others. This is an under-researched group. It would be of benefit to explore no-impact groups as well as those affected. If it is possible to distinguish the personal, event and organisational factors that mediate few or no impact situations, then this information could be accommodated in processes such as selection, training and organisational design interventions.

Three Stages of Recovery

Exposure to a violent incident results in the victim experiencing three stages of recovery (Hillenberg & Wolf, 1988). The first stage is the impact stage which is distinguished by reactions such as numbness, disbelief, withdrawal and disorientation. This can last from several hours to several days. In the second stage unstable emotional turmoil occurs, where the individual experiences a wide range of emotions from fear and guilt, to frustration and anger. This stage can last for a considerable period of time. The third stage is the adjustment phase, in which the individual attempts to control his/her emotions while trying to make sense of the violent experience. Recovery can take from several days to several months. For example, Lanza et al. (1991) found that 61% of victims took over four days to recover from an assault, 54% took greater than two weeks, and 31% in excess of a month. It has been found that reactions to an assault can last longer than the actual time the victim is away from work (Lanza, 1983). Psychological impact can last much longer than physical impact. This can affect violence management (e.g., there may be organisational or management characteristics that might prolong the psychological impact and impair recovery).

The Ripple Effect of Violence

Violence can have far-reaching effects. The ripple effect (when the impact of violence affects individuals other than those directly involved by the incident) can result in the number of victims being greater than

anticipated (Paton & Smith, 1995). For example, Robinson & Mitchell (1993) found that workplace violence had an impact on family members, and this can become an source of emotional distress for the family members (Hartman, 1995). Other staff can also be affected. One incident in the workplace can further provoke violent behaviour (Cottle, Kuiper, Murphy & Oakes, 1995; Boettcher,1983), as the interaction between the employee and client changes.

This point is significant in the context of the present study. The incidence of violence and the ripple effect could act to reduce the availability and/or effectiveness of sources of support in the workplace and beyond. This also suggests that support provision may not be provided in a neutral context.

1.5 HYPOTHESES

Research on workplace violence reveals a strong relationship between stress levels and violent episodes, irrespective of the nature of the work. There is a question of whether repeat exposure leads to inoculation and adaptation. Therefore, the first hypothesis is *Symptoms of stress and traumatic stress increase in frequency and intensity following involvement in a violent incident, and will be cumulative and additive following repetitive exposure.*

The significance of this hypothesis can be heightened by arguing that repeat exposure could lead to three possible outcomes (Smith & Paton, 1997): (1) increased stress scores; (2) decreased stress scores due to adaptation; and (3) behavioural addition (Violanti & Paton, in press) which assumes that exposure to stressful demands increases well-being, and that addition is associated with lower symptom scores. This will be discussed further in the results section.

Research does indicate that employees perceptions of the working environment affect psychological well-being following exposure to violent episodes. Therefore, the second hypothesis is *Positive perceptions of the working environment decrease the symptoms of stress and traumatic stress.*

Along with the work environment, social support also appears to exaberate or decrease individuals reactions towards a violent incident. The third hypothesis is *Higher perceptions of the effectiveness of social support decrease the symptoms of stress and traumatic stress.*

CHAPTER TWO : METHOD

2.1 SUBJECTS

The participants in the present study were employed as social workers in a human service organisation, responsible for the care of profoundly intellectually handicapped clients with little chance of mainstreaming into normal society.

Initially sixty randomly selected employees were interviewed to develop the job demands/stressors measure. The questionnaire was then sent out to all 1700 employees of the organisation, and three hundred and forty three employees completed and returned the questionnaire. The gender ratio was split with 109 males and 222 females (12 participants did not indicate which gender group they belonged to).

The average age of the participants was 38.05 years (the male average was 38.85 which was slightly higher than the female average of 37.63). The male ages ranged from 22 to 61 years of age while the female ages ranged from 21 to 59 years of age.

On average the participants had been working in the organisation for 7.4 years with the minimum length of work 1 year and the maximum 25 years.

2.2 DATA COLLECTION

The data was collected as part of an investigation in a human service organisation in Australia. The organisation was interested in investigating traumatic stress within the workplace with a view of changing training programmes, and commissioned the research.

Initially sixty employees were interviewed. This procedure was followed to identify the kinds of violent incidents and job demands that were defined as traumatic stressors by staff in this particular organisation. A traumatic incident was defined as "work-related events that (1) resulted in your (the participant) experiencing unpleasant or disturbing feelings unlike those that you normally experience from your work; (2) resulted in your experiencing feelings of being unable to perform to the level that you would have expected". The definition of a traumatic incident was chosen because it did not limit the experiences of violence to a certain kind of incident.

The content of the interviews were independently analysed to produce an inventory of job demands and organisational characteristics associated with situations defined by participants as traumatic events.

A questionnaire was then developed to investigate workplace violence and its implications for staff well-being. While the traumatic stressor measure investigated particular job demands, the Impact of Event Scale

looked at stress reactions due to a recent traumatic incident. The working environment and the social support measure were included to investigate the managerial response to traumatic events and stressors.

Once the questionnaire was completed the questionnaire was mailed out via the organisations' internal mail to all 1700 employees. The response rate was approximately 20% with 344 questionnaires being completed and returned.

2.3 MEASURES

2.3.1. Demographic Information

Various background characteristics were investigated, in particular age, gender, and length of service. Other information was asked for but not used in the current analysis (job location, job role, client group, job area).

2.3.2. Job Demands and Violent Episodes defined as Traumatic Stressors

The participants were asked to record the number of traumatic incidents they had experienced in the past six months. A six month cut-off point was selected on the grounds that recovery from a given incident can take three to four months (Horowitz, Wilner & Alvarez, 1979). Research by Lanza et al. (1991) also found that 31% of victims took in excess of a month to recover from an assault. A six month cutoff was deemed appropriate as a means of accessing symptoms of those with recent experiences to ensure, as far as possible, that those who reported no violent experiences in the previous six month period could act as a comparison group.

The number of incidents reported ranged from none to five or more traumatic incidents. A definition for what constituted a traumatic incident was given as a term of reference (as shown above).

2.3.3 Job And Traumatic Incident Stressors

Using the definition of traumatic incident described in section 2.2, sixty staff were interviewed about their experiences and asked to describe them. Content analysis of the interviews provided an inventory of the demands associated with traumatic violent encounters. The inventory of stressors varied from insufficient resources, inadequate management, accountability, to verbal and physical abuse. Eighty seven stressors were listed - eighty three specific stressors and four optional-other stressors (to be filled in by the participant if required). As the optional stressors were rarely filled in these were discarded before the analysis.

These stressors were scored on a scale as the frequency over the past 12 months ranging from 'never a source of stress' to 'a source of stress everyday'. The score from each item was added together to achieve a total score. The minimum possible score was 0 and the maximum 332.

It is interesting to note that while the core demand or stressor described by those interviewed typically involved some form of physical or verbal interpersonal violence, description of the stressor extended beyond the incident to embrace other organisational and management issues.

2.3.4 Outcome Measure : The Impact of Event Scale

The Impact of Event Scale (IES) was used as the dependent variable to assess the nature and intensity of core traumatic stress symptoms (Horowitz, et al., 1979). The IES measured the current degree of subjective impact experienced as a result of a specific event.

The two major responses measured were intrusion and avoidance. The intrusion response was characterised by unbidden thoughts and images, troubled dreams, strong pangs or waves of feeling, and repetitive behaviour. Avoidance responses included ideational construction, denial of the meanings and consequences of the event, blunted sensation, behavioural inhibition or counterphobic activity, and awareness of emotional numbness.

There were fifteen statements in the measure that was scored from 'not at all (true)'(0) to 'often (true)' (5). Eight statements measured the avoidance response and seven measured the intrusion response. The participants were asked to indicate how frequently the statements were true following the week after the traumatic incident. Scores were added together to achieve a total score. The minimum possible score was 0 and the maximum 75.

The IES has highly relevant item content, high internal consistency and cross-validation (Zilberg, Weiss, & Horowitz, 1982). The subscales of intrusion and avoidance responses have empirical validity by the

emergence of coherent clusters (Horowitz et al., 1979). The IES has been found to have adequate test-retest and sensitivity, and can be used repetitively, and by persons of various educational, economic, and cultural backgrounds (Zilberg et al., 1982).

2.3.5. Working Environment

The modified version of the Organisation Climate Questionnaire (OCQ), developed by Schnake (1983), was used to investigate the perceived work environment. The thirty statement measure contained five factors - participation and reward orientation; structure; warmth and support; standards and responsibility. The OCQ was designed in an attempt to separate objective and affective components of the organisational environment. Given the highly emotional correlates of the client group and the experiences of violence in the present study, this instrument was selected in an attempt to focus on the objective aspects of the work environment.

The participants were required to indicate how true each statement was about working within the organisation, on a four-point scale. The scale ranges from 'not at all' to 'extremely' true about work. Fifteen statements were positive statements about the working environment and fifteen were negative. The negative statements were reverse-scored so that an overall positive total score was achieved. The minimum possible score was 30 and the maximum was 120.

2.3.6. Social Support

Social support is a complex phenomenon. It is conceptualised as comprising several dimensions (e.g., informational, emotional, tangible, esteem), and being differentiated into 'given' and 'received' components. Given this complexity, the lack of any clear articulation of the relationship between components of social support and traumatic reactivity and recovery (Paton, 1997), it was decided to adopt the approach advocated by Cooper, Cooper & Eaker (1988) which identified potential sources then asked respondents to describe amount and effectiveness.

At the present time, social support measures are not specifically developed for unusual or traumatic contexts. The atypical and extreme nature of traumatic stressor and reactivity calls the validity of social support measures into question. Therefore, a more general approach to social support was employed.

Social support was defined as "the quality of support that the participant received from significant others within his/her social network" (Cooper, Cooper, & Eaker, 1988).

Various sources of support were investigated, in particular, wife/husband, close friend, work colleague, doctor, counselor, and other employees. The participants were asked to define the amount of support they received and their evaluation of that support, for each source in the past six months. Three optional-other sources were also given for those

who received support from sources other than those mentioned. These optional-other sources, though, were discarded because they were rarely filled in.

Both amount and effectiveness were ranked on a four point Likert scale. For the amount scale the rankings went from 'not available' to 'considerable support' while for the effectiveness scale the rankings went from 'not available' to 'highly effective'. For each measure, the item scores were added together to achieve a total amount and a total effectiveness score. The minimum possible source was 0 and the maximum 28 for each scale.

Initial analysis of this measure found that social support amount and social support effectiveness correlated highly with each other ($r=.9120, p<.001$). This positive correlation suggests that there is an almost perfect relationship between the two (i.e., the higher the perceived amount of social support, the higher the perceived effectiveness of social support).

Further investigation of this measure found that there was a significant association between amount and effectiveness ($F=479.527, p>.001$). This suggests that the same construct is being measured by the amount and effectiveness - not separately as thought, or that the participants assumed that amount and effectiveness were the same.

There is also a problem here, because this a cross-sectional, retrospective study. It is difficult to know what the respondents are rating support against. If respondents are asked about support in relation to a specific incident, there is no guarantee that this question is answered regarding that specific incident.

2.4 DATA ANALYSIS

Data analysis was undertaken using the computer statistical package SPSS (Statistical Package for the Social Sciences). The initial analysis involved investigating the degree of relationships between all the variables, using Pearson product-moment correlations. Alpha levels were set at the default of .01, unless otherwise stated.

As the traumatic stressor measure was developed for the present study, reliability analysis was also undertaken to investigate its internal reliability. Due to the high number of variables and participants, the SPSS programme could not do a factor analysis of the traumatic stressor measure.

A new variable was then developed. To investigate further traumatic incidents and their relationship to the other variables, the participants were divided into two groups - those who had not been exposed to any traumatic incident (NONEXP), and those who had been exposed to one or more traumatic incidents (EXPOS).

Once the initial analysis was completed, the following statistical techniques were used to investigate the hypotheses - Means analysis, T-Tests, ANOVAs and Multiple Regression. Means analysis was used to investigate if significant differences could be found between the means of certain groups, such as for men and women.

The t-test and ANOVA analyses were used to investigate the significance (or nonsignificance) of relationships between the variables. These analyses compared the means of the sample to see if there was sufficient evidence to infer that the means of the corresponding population distributions also differed. One tailed probabilities were used (which measured whether the second distribution differed in a particular direction from the first). Significance levels were indicated after the t-(or F- for ANOVA) value.

Multiple regression was used to determine the relative importance of each independent variable in the prediction of the dependent variable. Stepwise regression process was used in this analysis. Stepwise regression is a sequential process for fitting a least-squares model to the data. At each step a single variable is either added to or deleted from the model in the next fitting. At each step of the process, the p-values are determined for all the variables in the model. If the largest of the p-values is greater than POUT, then that variable is removed from the model. The POUT was set at the default of .05. The correlation matrix used in the regression analysis was displayed in Table 1.

For the multiple regression analysis the variables age (AGE), gender (SEX), length of employment (LENG), , traumatic stressors (TOTALTS), number of traumatic incidents (INCNO), working environment (TOTWEN), exposed/nonexposed groups (NOINC), social support amount (TOTSCA) and social support effectiveness (TOTSCE) were used to determine the importance of each in the prediction of post-trauma stress reactions (TOTIES).

Table 1 : Correlation matrix of the variables used in the regression analysis - post-trauma stress reactions (TOTIES), social support amount (TOTSCA), social support effectiveness (TOTSCE), traumatic stressors (TOTALTS), working environment (TOTWEN), age (AGE), length of employment (LENG), number of traumatic incidents (INCNO), exposed/nonexposed groups (NOINC), and gender (SEX).

	TOTIES	TOTSCA	TOTSCE	TOTALTS	TOTWEN	AGE	LENG	INCNO	NOINC	SEX
TOTIES	1.000									
TOTSCA	-.049	1.000								
TOTSCE	-.051	.912**	1.000							
TOTALTS	.320**	-.076	-.077	1.000						
TOTWEN	-.332**	.149	.232*	-.527**	1.000					
AGE	.081	-.042	.022	.078	-.069	1.000				
LENGTH	.056	-.153	-.169	.176	-.151	.318**	1.000			
INCNO	.194*	-.022	-.068	.466**	-.424**	.189	.042	1.000		
NOINC	.176	.030	.063	.340**	-.180	.006	-.030	.553**	1.000	
SEX	.217	.100	.127	-.071	.084	-.168	.224*	-.134	.008	1.000

KEY
** p< .001
* p< .01

CHAPTER THREE : RESULTS

3.1 Investigation of the Traumatic Stressor Measure

The stressor is a crucial part of the PTSD diagnosis (Peterson et al., 1991), but, as yet, there is no reliable and valid measure of occupational traumatic stressors. There is a need to identify the latter as a guide to work design, training and support provision. This procedure was followed in an attempt to determine whether it is possible to construct a reliable and valid traumatic stressor inventory. It is common practice to assume that a violent event is traumatic. There is increasing evidence, however, that this is inadequate and that a specific scale is required that assesses event characteristics (Paton, 1997).

3.1.1. Initial Analysis of Measure

To analyse the traumatic stressor measure, two different methods were considered. Firstly, the traumatic stressors were summed to provide a total stressor score (the higher the score, the higher the number of job/event demands). Secondly, the traumatic stressors were manually placed into groups of similar stressors. Several people, familiar to the area of psychology, grouped each of the stressors, and any stressors that were not placed in the same groups were then discussed until a consensus was achieved. Titles were decided for each group.

The final groups were :

(1) accountability (ACCJT) e.g., being accountable to client's families.

(2) expectations (EXPJT) e.g., unable to live up to personal expectations.

(3) interpersonal relationships (INPJT) e.g., having to work in isolation.

(4) job demands (JDJT) e.g., uncertainty within the job.

(5) policies and politics (PPJT) e.g., lack of confidentiality.

(6) managerial skills (MSJT) e.g., being under constant surveillance from managers.

(7) violence/abuse (VIOJT) e.g., being emotionally harassed by clients.

(8) home/work interface (HWJT) e.g., taking work problems home with you.

The smallest group was 2 items (HWJT) and the largest 38 items (JDJT). As the items in the majority of the groups were not reliable due to the limited number, this was only a initial measure to see how the data was arranged.

3.1.2 Reliability of Traumatic Stressor Measure

The traumatic stressor measure consisted of 87 statements about stressors. The last four were optional-other statements and as these were rarely answered they were deleted from the analysis, leaving 83 traumatic stressor statements.

Firstly, it was found that the subscales of the traumatic stressor measure (ACCJT, EXPJT, INPJT, PPJT, MSJT, and VIOJT) all correlate strongly with other another (correlations were between .7433 and .9300, $p>.001$). Therefore, the subscales measured similar items.

The reliability of the measure was investigated firstly with the individual traumatic stressors, and secondly, by looking at the subscales individually.

When investigating the 83 individual stressors, the alpha correlation was found to be .9924 which is a very high internal consistency value. The Spearman-Brown split-half correlation was also high, with a correlation of .9395.

When looking at the subscales ACCJT, EXPJT, INPJT, MSJT, VIOJT, HWJT, and JDJT, the alpha correlation was .8291, which also shows high internal consistency. The Spearman-Brown split-half correlation

was high with a correlation of .9795. Therefore, both methods of investigating the traumatic stressors have high reliability.

3.1.3 Factor Analysis of Traumatic Stressor Measure

Unfortunately, as the SPSS factor analysis programme did not have sufficient memory to calculate all 83 traumatic stressor variables, this was not analysed statistically.

3.1.4. Comparison with other measures

Significant correlations were found between the number of traumatic incidents and the subgroups of traumatic stressors (see Table 2). The only nonsignificant subgroup was ACCJT. These positive correlations suggest that, as the number of traumatic incidents increase, the traumatic stressors also increase. A significant correlation was also found between the total traumatic stressors and the number of traumatic incidents ($r=.4655, p<.001$).

Table 2 : Correlations between number of traumatic incidents and subgroups of traumatic stressors - interpersonal relationships (INPJT0, policies and politics (PPJT), managerial skills (MSJT), violence/abuse (VIOJT), job demands (JDJT), home/work interface (HWJT), expectations (EXPJT), accountability (ACCJT), and the total summed traumatic stressor score (TOTAL).

VARIABLE	CORRELATIONS
INPJT	.2263 **
PPJT	.2116 **
MSJT	.2242 **
VIOJT	.2517 **
JDJT	.2301 **
HWJT	.2009 **
EXPJT	.1969 *
ACCJT	.1128
TOTAL	.4655 **

KEY	
**	$p < .001$
*	$p < .01$

Table 2 showed that, as the traumatic incidents experienced by the employees increased, the more demands were encountered.

3.2 Traumatic Incidents/Stressors

1. Frequency of Traumatic Incidents

The average number of traumatic incidents experienced or observed in the past six months was **2.9** incidents per individual.

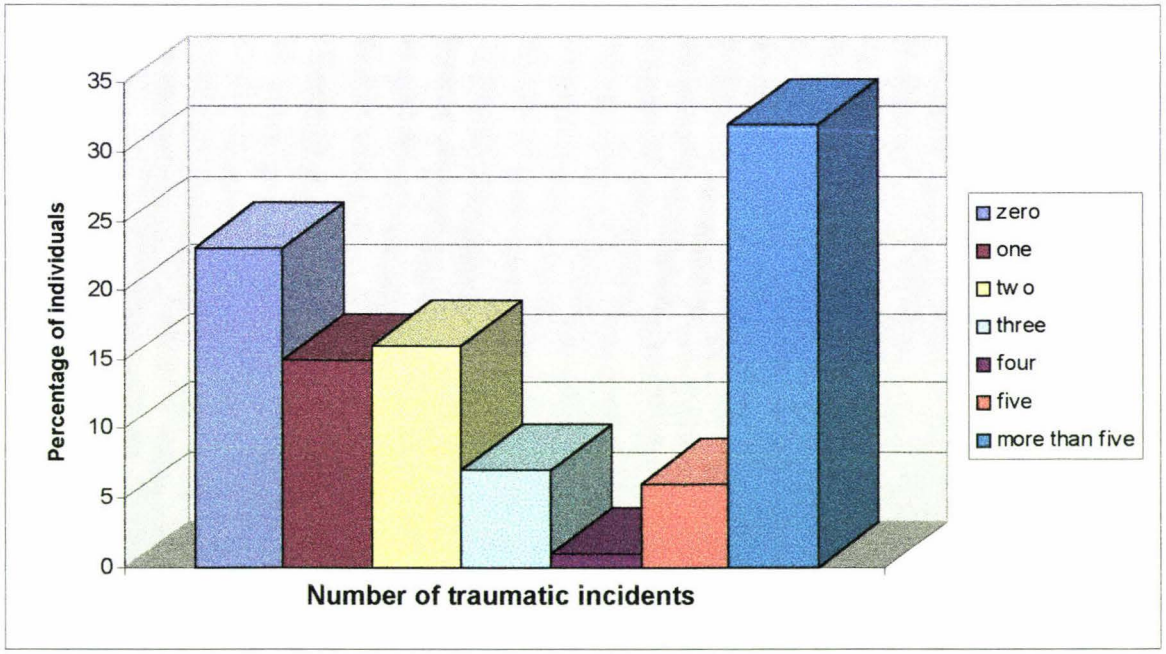

Figure 4 : Percentage of individuals exposed to traumatic incidents.

As shown by Figure 4, **23%** (72) of the participants **had not** been exposed to a traumatic incident in the past six months. **77%** of the participants who answered this question **had been** exposed to one or more traumatic incidents in the past six months - 15% (47) to one incident, 16% (49) to two incidents, 7% (22) to three incidents, 1% (4) to four incidents, 6% (17) to five incidents, and 32 % (98) to more than five traumatic incidents.

2. Gender of participants

Men were exposed to an average of 3.11 traumatic incidents in six months. Women had a slightly lower average frequency rate of 2.76 traumatic incidents in six months (see Table 3). When statistical analysis was undertaken it was found that there was no significant difference between the sexes regarding the frequency of traumatic incident exposure (F=.1490,ns). Gender was also not found to be a significant contributing factor in traumatic incident exposure when the participants were divided into exposed and nonexposed groups (F=.4938,ns).

Table 3 : Average Number of Incidents for Male and Female Participants.

GENDER	MEAN NO. OF INCIDENTS
MALE	3.11
FEMALE	2.76

As shown by Table 4, the mean number of traumatic incidents were similar for both sexes. No significant difference between the sexes regarding the number of traumatic stressors (F=.5008,ns).

Table 4 : Mean Number of Traumatic Stressors for male and female participants and the mean combined score (MSCORE).

GENDER	MEAN NO. OF STRESSORS
MALE	110.15
FEMALE	113.57
MSCORE	112.43

3. Age of the participants

There was no significant difference between the number of traumatic incidents the participants were exposed to, and their age (F=.6889,ns). When divided into exposed/nonexposed groups, a similar nonsignificant result was found (F=.7265,ns) between traumatic incident exposure and age.

4. Length of time in the organisation

The correlation between the number of traumatic incidents the participant has been exposed to and length of time the participant has been working within the organisation, was found to be nonsignificant (r =.0423,ns). When divided into exposed/nonexposed groups a nonsignificant result was also found (F=.7265,ns). Therefore, there does not seem to be a relationship between tenure and violence exposure.

5. Impact of the traumatic event

Ninety one percentage (91%) of participants reported symptoms of post trauma stress. Table 5 showed the mean scores for men and women for the IES scores, with the maximum possible score of 75.

Table 5 : The mean IES scores for each gender group, and the mean combined score(MSCORE).

GENDER	MEAN IES SCORES
MALE	23.59
FEMALE	34.20
MSCORE	30.48

Means did differ significantly at the $\alpha = .001$ level for men and women's post trauma stress reactions ($F=10.662$). It is important to note that this gender difference in stress symptom reporting exists society wide. Horowitz et al. (1979) also reported gender differences when using the IES measure. This has implications for the study of stress symptomology due to these gender differences. For example, does this represent a difference in impact or a cultural/gender predisposition, to report more mental health symptoms?

When a regression analysis was conducted on the variables mentioned above in section 2.4, the post trauma stress reactions were found to be significantly influenced by the working environment and the gender of the participant ($p<.001$).

The working environment was the most influential variable ($\beta=-.4130$) with gender being the second most influential variable ($\beta=.3000$) (see Table 6). Approximately 15% of the variance can be accounted for by the working environment. Approximately 23% of the variance can be accounted for by the working environment and gender.

Table 6 : Stepwise Regression analysis results of the influence of the working environment (TOTWEN), and gender (SEX), on post trauma stress reactions (TOTIES).

VARIABLE	B	SE B	BETA	T	SIGN T	R^2	Adj R^2
TOTWEN	-.717293	.151358	-.413021	-4.739	.0000	.1548	.1465
SEX	11.730592	3.422356	.298729	3.428	.0009	.2437	.2286
Constant	63.367232	11.786863		5.376	.0000		

Table 7 displayed the variables that were taken out during the stepwise regression analysis of the post trauma stress reactions.

Table 7 : Variables discarded in the post trauma stress regression analysis - age (AGE), length of tenure (LEN), number of traumatic incidents (INCNO), social support amount (TOTSCA), social support effectiveness (TOTSCE), traumatic stressors (TOTALTS), and exposed/nonexposed groups (NOINC).

VARIABLE	BETA IN	PARTIAL	MIN TOLER	T	SIGN T
AGE	.105605	.120052	.974905	1.203	.2318
LEN	-.009056	-.009921	.907779	-.099	.9216
INCNO	.158058	.161203	.786709	1.625	.1073
TOTSCA	-.026921	-.029982	.937714	-.298	.7660
TOTSCE	-.040362	-.044765	.93032	-.446	.6567
TOTALTS	.152017	.146566	.702358	1.474	.1436
NOINC	.069069	.077579	.950216	.774	.4406

HYPOTHESIS TESTING

The first hypothesis was that symptoms of stress and traumatic stress increase in frequency and intensity following involvement in a violent incident, and will be cumulative and additive following repetitive exposure.

A positive correlation was found between the IES scores and the number of traumatic incidents (see Table 8). Therefore, this would suggest that as the number of traumatic incidents increased, the post trauma stress reactions for the individual also increased. Continuing the discussion from section 1.5, this result suggests that (2) *decreased stress scores due to adaptation* can be ruled out but more searching analysis will be required to differentiate between (1) *increased stress scores* and (3) *behavioural addition.* The data discounted the addition possibility, however, the validity of the assumptions used in this argument need to be tested more rigorously.

Table 8 : Correlation between the number of traumatic incidents and the post trauma stress reactions (TOTIES).

VARIABLE	CORRELATION
TOTIES	.1937 *

KEY	
**	p< .001
*	p< .01

A positive correlation was found between the traumatic stressors and the IES scores (see Table 9). As the traumatic stressors increased, post trauma stress reactions also increased. Positive correlations ($p<.001$) were also found between the IES and the subgroups - ACCJT (.2663), EXPJT (.2147), INPJT (.3615), PPJT (.2976), MSJT (.2990), HWJT (.2949), and JDJT (.2684). The only subscale that was not significant was VIOJT (.1192).

Table 9 : Correlations between traumatic stressors and the post trauma stress reactions (TOTIES).

VARIABLE	CORRELATION
TOTIES	.3215**

KEY
** p< .001
* p< .01

Table 10 showed the mean scores for traumatic stressors for the exposed and nonexposed groups. This table showed that the exposed group had much higher traumatic stressor scores than the nonexposed groups. The nonexposed group, though, who had not experienced a traumatic incident, nevertheless, still recorded experiencing job demands associated with the traumatic incident.

The means between the NONEXP and EXPOS groups were found to be significantly different for the traumatic stressors measure ($p<.001$), but not for the individual subscales ($r=.0666$ to $.1212$,ns). ANOVA analysis also found a significant difference between the groups and traumatic stressors ($F=13.200, p>.001$).

Table 10 : Mean Traumatic Stressors scores for the exposed group, (EXPOSED), nonexposed (NONEXP) group, and the mean combined score (MSCORE).

GROUP	MEAN SCORE
EXPOSED	122.89
NONEXP	74.97
MSCORE	111.98

The means between the NONEXP and EXPOS groups were found to be significantly different on the Impact of Event Scale ($F=10.982, p<.001$) (See Table 11).

Table 11 : Mean IES scores for the exposed (EXPOSED) and nonexposed groups (NONEXP), and the mean combined score (MSCORE).

GROUP	MEAN SCORE
EXPOSED	31.93
NONEXP	20.38
MSCORE	30.31

These scores are high for both groups. This suggests that, on the basis of relatively high scores for the NONEXP group, that (1) traumatic victimization has a residual effect and/or (2) that traumatic reactivity is sustained over the 'recovery' period by exposure to job/organisational demands.

Therefore, from the results found on the present study, the first hypothesis was supported. The symptoms of stress and traumatic stress increased in frequency and intensity following involvement in a violent incident, and it was cummulative and additive following repetitive exposure.

3.3 The Working Environment

1. Length of time in the organisation

A nonsignificant correlation was found between the working environment and length of service in the organisation (r=-.1509,ns). The working environment was not perceived to be any more or less positively, the longer an individual worked in the organisation. This supports the view that it is the traumatic event(s) that are eliciting the reactions and the role of the environment as a causal factor. A nonsignificant correlation between the length of time and the IES scores (r=.0509,ns) could mean that tenure is less likely to be measuring the effects of cummulative occupational stress.

2. Work environment scores for the participants

Table 12 : Mean OCQ scores for male and female participants, and the mean combined score (MSCORE).

GENDER	ENVIRONMENT SCORES
MALE	71.87
FEMALE	72.64
MSCORE	72.32

The minimum possible score for the OCQ measure was 44 and the maximum 108. As shown by Table 16, the scores for both sexes were similar. No significant difference was found between gender and work environment scores (F=.5180,ns).

3. Social support

A positive correlation was found between the working environment and the perceived effectiveness of social support (r=.2317,p<.001). A nonsignificant correlation was found between the working environment and amount of social support (r=.1486,ns). This is an interesting result. The high correlation between amount and effectiveness of social support suggested that only one facet was being measured. This result, though, suggests that there is more going on within the measure than first thought.

HYPOTHESIS TESTING

The second hypothesis was that positive perceptions of the working environment decrease the symptoms of stress and traumatic stress.

Negative correlations were found between the working environment and the number of traumatic incidents (see Table 13). As the number of traumatic incidents increased, the positive perceptions of the working environment decreased or vice versa. An analysis of the data using the ANOVA procedure found significant differences between the working environment and the number of traumatic incidents ($p<.001$).

A negative correlation was found with the traumatic stressors measure and the working environment (see Table 13). As the number of traumatic stressors increased the positive perceptions of the working environment decreased, or vice versa.

A significant correlation was found between the working environment and the IES scores (see Table 13). Therefore, as the perceptions of the working environment increased, the traumatic stress reactions decreased, or vice versa.

Table 13 : Correlations between the OCQ scores and the number of traumatic incidents (NOINC), traumatic stressors (TOTALTS), and post trauma stress reactions (TOTIES).

VARIABLE	CORRELATIONS
NOINC	-.4236**
TOTALTS	-.5270**
TOTIES	-.3315**

KEY
** p< .001
* p< .01

A means analysis found a significant difference between the NONEXP/EXPOS groups and the work environment scale ($F=27.724, p<.001$). Table 14 shows the mean work environment scores for the exposed and nonexposed groups.

Table 14 : Mean OCQ scores for the exposed (EXPOS) and nonexposed groups (NONEXP), and the mean combined score (MSCORE).

GROUP	MEAN SCORE
EXPOSED	70.21
NONEXP	79.34
MSCORE	72.25

The scores for the EXPOS and NONEXP groups show that the exposed group had lower scores on the OCQ than the nonexposed group. This could reflect that the exposed group perceives a lower quality of the work environment, or that exposure to trauma lessens positive perceptions of the environment. It could also mean that lower perceptions increase susceptibility to trauma. The regression analysis (see Table 6) found that working environment was the most influential variable for post trauma stress reactions.

Therefore, the results from the present study supported the second hypothesis. Positive perceptions of the working environment decreased the symptoms of stress and traumatic stress.

3.4 SOCIAL SUPPORT

1. Gender

As shown in Tables 15 and 16 there was no significant difference between gender and social support. Means did not differ significantly for gender at the α = .001 level for amount (t=-1.16,ns) and effectiveness (t=-2.08,ns) of social support.

Table 15 : Mean Social Support Effectiveness Scores for Male and Female Participants and the mean combined score (MSCORE).

GENDER	EFFECTIVENESS
MALE	11.32
FEMALE	12.66
MSCORE	12.14

Table 16 : Mean Social Support Amount Scores for Male and Female Participants and the mean combined score (MSCORE).

GENDER	AMOUNT
MALE	12.65
FEMALE	13.44
MSCORE	13.13

HYPOTHESIS TESTING

The third hypothesis was that higher perceptions of the effectiveness of social support decrease the symptoms of stress and traumatic stress.

Nonsignificant correlations were found between the number of traumatic incidents and the social support amount (r=.0223,ns) and social support effectiveness (r=-.0682,ns). No significant differences were found between the number of traumatic incidents and the amount (F=.001,ns) and effectiveness of support (F=.068,ns).

Nonsignificant correlations were found between the IES scores and the amount (r =-.0491) and the effectiveness (r=-.0513) of social support.

No significant differences (F=.7950,ns) were found between the means of the NONEXP and the EXPOS group on the effectiveness of social support scale (see Table 17). No significant differences were found between the means of the NONEXP and the EXPOS group on the amount of social support scale (F=.9750,ns) (see Table 17).

Table 17 : Mean Social Support scores (amount (AMT) and effectiveness (EFFECT)) for the exposed (EXPOSED) and nonexposed (NONEXP) groups.

GROUP	MEAN AMT	MEAN EFFECT
EXPOSED	11.90	12.99
NONEXP	12.68	13.02

Therefore, from the present results, the third hypothesis was not supported. Higher perceptions of the effectiveness of social support did not decrease the symptoms of stress and traumatic stress.

CHAPTER FOUR : DISCUSSION

4.1 DISCUSSION OF HYPOTHESES

The first hypothesis, *that symptoms of stress and traumatic stress increase in frequency and intensity following involvement in a violent incident, and will be cumulative and additive following repetitive exposure,* was supported. Individuals who had been exposed to a traumatic incident had significantly higher post trauma stress reactions than those who had not been exposed. It was also discovered, that as the number of traumatic incidents the individual was exposed to increased, the post trauma stress reactions also increased. Those exposed to a traumatic event also perceived more traumatic stressors.

These results suggest that being involved in violent episodes defined as traumatic incidents can affect the health and stress levels of employees within the workplace. As a result, job satisfaction and worker productivity could be affected in a negative way. This would suggest that an organisation needs to implement a programme that can deal with workplace violence and its consequences. If not, then the organisation could suffer, as employee absenteeism and resignations increase as a result. The regression analysis suggests that the organisational environment plays a prominent role in the development of reactions. This has implications for the recovery intervention which will require the combination of organisation culture change and management and organisational development intervention, and personal intervention such as counselling or peer support. This finding, that the organisational

environment has a significant causal role in development of post trauma stress, is consistent with recent psychometric studies of trauma reactivity (Smith & Paton, 1997).

The second hypothesis, *that positive perceptions of the working environment decrease the symptoms of stress and traumatic stress*, was also supported. Significant differences were found between the working environment and the number of traumatic incidents. As the working environment was perceived more positively by employees, the number of traumatic incidents and traumatic stressors decreased. Those who were exposed to a traumatic incident had significantly lower scores on the work environment measure than those who had not been exposed.

It could be inferred from the data that those not exposed to traumatic incidents perceived the working environment more positively than those exposed. It could also mean that being in a traumatic incident may lower the individual's perceptions of the working environment. The regression analysis found that the work environment had a prominent role in the development of post trauma stress reactions. Perceptions of the working environment was also found to significantly influence the post trauma stress reactions. As the positive perceptions of the working environment decreased, the number of post trauma stress symptoms increased in frequency. This, of course, could be reversed - as the stress symptoms decrease, the perceptions of the working environment become more positive. These results could also relate to a reporting problem - if an employee has positive perceptions of the working environment they may be less likely to report stressors or violent incidents.

These results suggest that the perception of the working environment by its employees is important in coping with the consequences of workplace violence. This again would suggest that an organisational programme should be set up, so that the employee feels that the organisation 'cares' about its employees and their experiences with violence.

The third hypothesis, *that higher perceptions of the effectiveness of social support decrease the symptoms of stress and traumatic stress* was not supported. Social support was not found to significantly influence the number of traumatic incidents nor the traumatic stressors. Social support was not found to significantly influence post trauma stress reactions. No differences were found between the exposed and nonexposed individuals for any of the social support measures.

These results suggest that social support was a less important influence than had been expected. Social support was not found to significantly influence traumatic stress scores. This result is interesting in that programmes dealing with workplace violence often have some form of support network. Perhaps this is not as effective as first thought. Social support, though, is a very complex issue, and other factors may be interacting with the support. This needs to be investigated further in the context of workplace violence.

Several limitation of the present study have to do with the social support measure. Firstly, could the effects of social support have been muted by lower perceptions of the organisational culture? These latter perceptions

could affect the perceptions of colleagues and lessen their effectiveness as support providers. This point needs further research. It also has implications for the development of internal support resources such as peer support programmes.

Secondly, it is also possible that the perceptions of support reflected its use in routine contexts, but that support was less effective to deal with the atypical experiences of violence. Therefore, support provision must be developed to cater for atypical, traumatic incidents.

Thirdly, the instrument used may not have been sensitive to this issue.

4.2 INVESTIGATION OF OTHER RESULTS

As well as obtaining results for the investigation of the hypotheses, additional interesting results were also discovered.

Firstly, approximately 75% of the participants in the study had been exposed to some form of a traumatic incident in the past six months. One-third of those participants had been exposed to five or more incidents. On average, there were approximately three traumatic incidents per participant per six months. These figures would suggest that violence within this human service organisation was a serious problem that needed to be acknowledged and dealt with. The nature of the client group in this organisation (profoundly intellectually handicapped) precludes client-based intervention e.g., stopping violence reactions within the patient. Therefore, other areas need to be considered such as staff management of violence and the allocation of resources for managing staff reactions to workplace violence.

Secondly, approximately 90% of the participants exposed to a violent incident experienced post-trauma stress reactions. This is a very high rate. Caldwell (1992) found a rate of 61% for hospital staff while Flannery et al. (1996) found 30% reported symptoms of acute distress. Breslau et al. (1991) found the rate of post trauma stress reactions to be 24% in the general population.

There could be several reasons for this relatively higher rate of reactivity. Sixty-two percent of the participants were exposed to more than one incident in the past six months. Thirty two percent of those had been exposed to more than five incidents. This repeated exposure to violence could account for the high rate of post-trauma stress reactions in the participants. Results from the present study did find that as the number of traumatic incidents increased, so did the post-trauma stress reactions.

There also could be an interaction between past violent events and present events. At the present time, there is no definite information on the time taken for reactions to violent incidents to subside, particularly if they occur frequently. Differences in event characteristics, individual characteristics and environmental variables make describing a normative period of describing reactivity difficult to specify. There may also be confounding effects that can affect how long reactions take to subside, such as high environmental stress levels.

Other possible reasons for this high rate is the population from where the participants were drawn. The population investigated in the present study might have been in a more stressful and violent environment. The data did suggest that those exposed to a traumatic incident had higher scores on the IES measure than those who had not, but the nonexposed group also reported experiencing post-trauma stress reactions. This could indicate that everyday work within the organisation was stressful even without the occurrence of violent incidents.

This result could also mean that non-work related experiences were being tapped into or that secondary impact (hearing about a violent incident or knowing someone who was in one) had occurred. This result could also have "captured" residual traumatic stress effects from involvement in events that occurred prior to the time frame of the survey. Reactivity may have also persisted longer than the cut-off point of six months, and it may have been sustained by the working environment.

Men and women appear to be affected differently after the traumatic incident. In the study, women displayed significantly more signs of post-trauma stress. Kessler, Price and Wortman (1985) reviewed the literature and found that women may be more vulnerable to the effects of stressful events. Women may also be more willing to disclose traumatic stress reactions. This study would appear to confirm this.

Thirdly, no gender differences were found regarding the frequency of violence exposure. While this result replicated that of Whittington et al. (1996) and Grainger et al. (1993), other studies obtained contrary results. For example, Newhill (1996), Appelbaum et al. (1995), and Carmel et al. (1989) found that male workers were more likely to be attacked. Flannery et al. (1994), on the other hand, found that female workers were more likely to be in a violent situation.

There could be several explanations for the difference in results. Firstly, the investigated population could be different from those in other studies, and so may be differentially exposed to violent situations. For

example, in the organisation, the men and women might be equally exposed to violence by having similar roles within the organisation (instead of men being responsible for the more violent clients as is often the case). The results from the present study did find that men and women had a similar number of stressors. Secondly, the higher ratio of women to men could also have affected the results. In the present study, the ratio was approximately two to one. If the gender numbers were more even, a different result may have occurred, such as if there were more men in the sample the results might have been more representative of the general male population, rather than a specific group.

Fourthly, age was not found to affect exposure to traumatic incidents. This result is contrary to other studies who found that age did influence violent exposure. Whittington et al. (1996), and Arnetz et al. (1996) found that younger workers were more likely to be attacked. Budd, Arvey and Lawless (1996) found that workers under the age of twenty five were more likely to be threatened. One possible reason for this result could be that the younger employees were not given easier cases to start off with, and so were exposed to difficult clients or traumatic situations at the same frequency as older, more experienced employees.

Fifthly, no relationship was found between length of tenure and experience of violent episodes. This result is contrary to Carmel et al. (1989), and Arnetz et al. (1996), who found that the more recently hired workers were more likely to be attacked. This could have occurred because the recently hired and the longer serving employees are exposed to similar amounts of workplace violence. Experience may be a confounding variable. Perhaps the recently hired and longer serving

employees had similar levels of experience in dealing with workplace violence, and their responses to this could have been similar.

Lastly, no difference was found between men and women, and their perception of social support. This contradicts other studies, in which differences were found. Jayaratne et al. (1983) found that women were more likely to use existing support systems. Support may also have a greater impact for women (Vaux, 1985). The subject group and the uneven gender ratio may have affected the results.

4.3 IMPLICATIONS OF RESULTS

The present results have a number of implications. The data obtained from the present study reinforce the view that occupational violence can affect the emotional and physical well-being of staff. These effects can not be attributed to violent episodes *per se*. Perceptions of the working environment were implicated in this process. Contrary to expectations, social support was not found to play a significant role. However, empirical and methodological issues suggest that it should not be discounted as a determinant of reactivity and recovery. More research is required on this area. From the results from the present study, several directives can be made that could help reduce violence and its consequences within the organisation.

Prevention of Violence Programmes

Firstly, if violence occurs within the organisation, the organisation needs to have in place programmes and guidelines to deal with the effects.

Recent literature has shown several ways of reducing workplace violence. Programmes investigating characteristics of possible assaultive patients and ways of dealing with traumatic incidents could be of help. For example, risk assessment of violent offenders could be conducted and factors evaluated such as expressions of hostile intent, and social circumstances (Riley, 1997). As violence is an integral aspect of the job,

such interventions may be difficult to do within the present client population

What could work in the organisation under investigation is using the employee to help with violence management. Gritter, Love, Hunter and Hixon (1995), for example, discussed improving the ability of staff to anticipate and recognise dangerousness, and to use verbal and physical protection techniques as ways of reducing violence. A study by Infantino and Musingo (1985) found that those individuals trained in aggression-control techniques were significantly less likely to be assaulted. This could be helpful for this organisation.

Several authors have also investigated possible interventions strategies to assist with the prevention of violence. Morton (1987) looked at the importance of effective interventions and role assignment. Hurrell and Murphy (1996) discussed primary, secondary and tertiary interventions while Dickson, Leather, Beale and Cox (1994) highlighted three levels of intervention available to the organisation when dealing with violence - prevention, timely reaction and rehabilitation. Ideally, violence management should start at the primary/prevention stage of the intervention.

Other researchers do not believe that violence is easily preventable. For example, Tam, Engelsman and Fugere (1996) debated that not all violence could be spotted early and prevented, and Star (1984) stated that many assaults are not premeditated. This is true within the current

client population. Further investigation is needed to determine if there is effective means of violence prevention within this workplace.

Workplace Modifications

Secondly, the work environment might be able to be physically changed to reduce the incidence of violence. Bunce and West (1994) suggested several ways of modifying stressful environments, such as new work methods and schedules. Research by Katz and Kirkland (1990) found that social structures that provided a predictable, competent and trusting work environment inhibited violent behaviour. Therefore, it should be possible to affect violence incidence by altering perceptions of the work environment.

Organisational Culture

Thirdly, the organisations' culture could be changed to reduce negative opinions towards those involved in violent incidents. In the present study, the work environment had a prominent role in the development of post trauma stress reactions.

This could be done by supporting the victims physically and emotionally, and by having training sessions to inform individuals about possible responses to violence and how to deal with them. Changing perceptions of employees and employers to victims of violence could go a long way to

reducing negative stereotypes of assaulted employees. This could also have the effect of raising the perceptions of the working environment, and this has been found in the present study to be helpful for reducing the post-trauma responses to violence. The high incidence of events also shows the need for ready access to support resources, with peers and colleagues the most appropriate resource. Although the present study did not find that the effectiveness of social support decreased the symptoms of stress and traumatic stress, the role of social support should not be discounted, as it is an important organisational-based resource.

4.4 METHODOLOGICAL CONSIDERATIONS

Several unexpected results were found when analysing the methodology used within the present study.

Firstly, analysis of the traumatic stressor measure resulted in some unexpected findings. When the participants were interviewed about traumatic incidents within their job, while physical and verbal violence was considered a primary stressor, other stressors were also included, such as organisational and management issues. This would suggest that demands, other than workplace violence, can be as stressful for the individual as being physically or verbally abused.

This was a surprising result and it would be interesting to investigate this further. It was hoped that an inventory of demands associated with violent incidents could be developed. The analysis of the traumatic stressor suggests that there is other, as yet unknown, confounding factors that need to be investigated further before any definitive measure of traumatic stressors can be developed.

Secondly, an almost perfect correlation was found between the amount of social support and the effectiveness of that support. In current literature, the amount (quantity) and effectiveness (quality) are considered to measure different facets of social support and are measured separately (see Uchino et al., 1996; House et al., 1988; Porritt, 1979). In the present

study, the high correlation would suggest that the same facet is being measured by both the amount and effectiveness. Several times during the analysis, though, the amount and effectiveness of social support produced dissimilar results, for example, when the amount of social support was influential when investigating perceptions of working environment while effectiveness was not. Other factors may be involved in the interaction of social support and this would need to be investigated further to clarify these issues.

Within this study, a conceptually simple approach to measuring social support was used. Different types of support and the timing of the delivery has been implicated in what is a highly complex and dynamic field (Paton, 1997). What is required, therefore, is a more complex measure and longitudinal analysis of social support. Confounding of the measure in the investigation of traumatic, atypical events may also have occurred.

4.5 LIMITATIONS

There are several limitations to the present study. Firstly, the definition used in the present study to define a traumatic event may have been limiting. A traumatic event was defined as a *"work-related event that resulted in the individual experiencing unpleasant or disturbing feelings unlike those that they normally experienced from work; and resulted in the experiencing of feelings of being unable to perform to the expected level"*. This definition did not have any limits such as for verbal or physical abuse. It encompassed any event that the participant felt was a traumatic event and so might have been too unfocussed. The definition also depended on the individual's perceptions of a traumatic event and this might have differed depending on the environment or culture the individual resided in, and gender stereotypes. On the other hand, this definition helped to ensure that subjective experiences were being compared. Subjectivity, therefore, might have been achieved at the cost of specificity. It was also found, during the investigation, that the definition of the traumatic stressor needed to go beyond the narrow confines of specific incidents.

Secondly, the phenomenon of violence is not easily measured (Love et al., 1996). Violence has been found to arise from a complex interaction of multiple variables (Johnson, 1996), and therefore, it may be hard to find a universal definition. The traumatic stressor measure was an attempt at finding a structure, but this was not as successful as hoped. Until an agreed upon definition is reached it will be difficult to compare studies of workplace violence. One important step in the prevention of violence is

the development of a standardised measure of violence that would allow comparisons across settings and time, and would be a reliable indicator (Hunter & Love, 1996). This has not occurred at present, and an established standard for workplace violence looks to be some way off at the present time.

Thirdly, it has been suggested within this thesis that the gender ratio might have affected the results in some way. This needs to be investigated further. One difficulty with investigation within the health service is that the majority of workers are female. This imbalance in population can make it methodologically difficult to have equal numbers of both male and female, without compromising the sample.

4.6 FUTURE PLANS

From the results of the present study a significant relationship was found between the perceptions of the working environment and workplace violence. This relationship should be investigated further as it could be one easier, less costly way in which an organisation can begin to manage violence within its workplace.

Secondly, it would be interesting to further investigate the relationship between the effectiveness (quality) of social support and the amount (quantity) of social support. Several analyses from the present study suggested that they were the same facet while current research investigates them separately. Social support is a very complex issue and needs to be considered in conjunction with other variables.

Lastly, it would be beneficial to find a universal definition of workplace violence so that accurate records can be kept and studies can be compared.

4.7 CONCLUSIONS

From the results of the present study it would appear that violence within the health care profession is becoming an organisational as well as an employee problem. A high number of employees had been exposed to a traumatic incident and an equally high number had post-trauma stress reactions as a result of that exposure. One problem with investigating violence within the workplace is the vagueness of the term 'violence'. Until a universal definition is used, gaining an accurate picture of the extent and effects of workplace violence will be difficult.

The influence of the working environment on workplace violence looks promising and this effect will have to be looked at further, as will the influence of social support. At the current time, some ambiguity surrounds the role of working environment and social support in the prevention of workplace violence.

REFERENCES

Adams, G.A., King, L.A., & King, D.W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology,* 81, *411-420.*

Appelbaum, P.S., & Dimieri, R.J. (1995). Protecting staff from assaults by patients : OSHA steps in. *Psychiatric Services, 46,* 333-334.

Arnetz, J.E., Arnetz, B.B., & Petterson, I. (1996). Violence in the nursing profession : Occupational and lifestyle risk factors in Swedish nurses. *Work and Stress, 10,* 119-127.

Baxter, E., Hafner, J., & Holme, G. (1992). Assaults by patients : The experience and attitudes of psychiatric hospital nurses. *Australian and New Zealand Journal of Psychiatry, 26,* 567-573.

Bensley, L., Nelson, N., Kaufman, J., Silverstein, B., & Shields, J.W. (1995). Patient and staff views of factors influencing assaults on psychiatric hospital employees. *Issues in Mental Health Nursing, 16,* 433-446.

Blair, D.T. (1991). Assaultive behavior - Does provocation begin in the front office ? *Journal of Psychosocial Nursing, 29,* 21-26.

Boettcher, E.G. (1983). Preventing violent behavior - An integrated theoretical model for nursing. *Perspectives in Psychiatric Care, 21,* 54-58.

Boyd, N. (1995). Violence in the workplace in British Columbia : A preliminary investigation. *Canadian Journal of Criminology, 37,* 491-519.

Breakwell, G.M. (1989*). Problems in practice : Facing physical violence.* Leicester, England : The British Psychological Society.

Breakwell, G.M., & Rowett, C. (1989). Violence and social work. In Archer, J., & Browne, K. (eds.). (1989). *Human Aggression - Naturalistic Approaches.* London : Routledge.

Breslau, N., Davis, G.C., Andreski, P., & Peterson, E. (1991). Traumatic events and post-traumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry, 48,* 216-222.

Brom, D., & Kleber, R.J. (1989). Prevention of post-traumatic stress disorder. *Journal of Traumatic Stress, 2,* 335-351.

Brown, R., Bute, S., & Ford, P. (1986). *Social workers at risk : The prevention and management of violence.* Hampshire, England : MacMillan.

Browner, C.H. (1987). Job stress and health : The role of social support at work. *Research in Nursing and Health, 10,* 93-100.

Budd, J.W., Arvey, R.D., & Lawless, P. (1996). Correlates and consequences of workplace violence. *Journal of Occupational health Psychology, 1,* 197-210.

Bunce, D., & West, M. (1994). Changing work environments : Innovative coping responses to occupational stress. *Work and Stress, 8,* 319-331.

Caldwell, M.F. (1992). Incidence of PTSD among staff victims of patient violence. *Hospital and Community Psychiatry, 43,* 838-839.

Carmel. H., & Hunter, M. (1989). Staff injuries from inpatient violence. *Hospital and Community Psychiatry, 40,* 41-46.

Carroll, V. (1996). Violence in the workplace : We are the missing link. *American Journal of Nursing, 96,* 80.

Cheung, P., Schweitzer, I., Tuckwell, V., & Crowley, K.C. (1996). A prospective study of aggression among psychiatric patients in rehabilitation wards. *Australian and New Zealand Journal of Psychiatry, 30*, 257-262.

Collings, J.A., & Murray, P.J. (1996). Predictors of stress amongst social workers : An empirical study. *British Journal of Social Work, 26*, 375-387.

Cooper, C.L., Cooper, R.D., & Eaker, L.H. (1988). *Living with Stress.* Middlesex, England; Harmondsworth.

Cottle, M., Kuipers, L., Murphy, G., & Oakes, P. (1995). Expressed emotion attributions and coping in staff who have been victims of violent incidents. *Mental Handicap Research, 8*, 168-183.

Cox, T., & Howarth, I. (1990). Organizational health, culture and helping. *Work and Stress, 4*, 107-110.

Cox, T., & Leiter, M. (1992). The health of health care organizations. *Work and Stress, 6*, 219-227.

Creamer, M., Burgess, P., & Pattison, P. (1992). Reaction to trauma : A cognitive processing model. *Journal of Abnormal Psychology, 101,* 452-459.

Davis, S. (1991). Violence by psychiatric inpatients : A review. *Hospital and Community Psychiatry, 42,* 585-590.

Dickson, R., Cox, T., Leather, P., Beale, D., & Farnsworth, B. (1993). Violence at work. *Occupational Health Review, 46,* 22-24.

Dickson, R., Leather, P., Beale, D., & Cox, T. (1994). Intervention strategies to manage workplace violence. *Occupational Health Review, 47,* 15-18.

Engel, F., & Marsh, S. (1986). Helping the employee victim of violence in hospitals. *Hospital and Community Psychiatry, 37,* 159-162.

Erera, I.P. (1992). Social support under conditions of organizational ambiguity. *Human Relations, 45,* 247-264.

Flannery, R.B. (1996). Violence in the workplace, 1970-1995 : A review of the literature. *Aggression and Violent Behavior, 1,* 57-68.

Flannery, R.B., Fulton, P., Tausch, J., & DeLoffi, A.Y. (1991). A program to help staff cope with psychological sequelae of assaults by patients. *Hospital and Community Psychiatry, 42,* 935-938.

Flannery, R.B., Hanson, M.A., Penk, W.E., & Flannery, G.J. (1994). Violence against women : Psychiatric patient assaults on female staff. *Professional Psychology : Research and Practice, 25,* 182-184.

Flannery, R.B. Jr., & Penk, W.E. (1996). Program evaluation of an intervention approach for staff assaulted by patients : Preliminary inquiry. *Journal of Traumatic Stress, 9,* 317-324.

Flett, R., Biggs, H., & Alpass, F (1995). Job stress and professional practice : Implications for rehabilitation educators. *Rehabilitation Education, 9,* 275-291.

Fottrell, E. (1980). A study of violent behavior among patients in psychiatric hospitals. *British Journal of Psychiatry, 136,* 216-221.

Furnham, A., & Walsh, J. (1991). Consequences of person-environment incongruence : Absenteeism, frustration, and stress. *The Journal of Social Psychology, 131,* 187-204.

Ganster, D.C., Fusilier, M.R., & Mayes, B.T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology, 71*, 102-110.

Ghaziuudin, M., & Ghaziuudin, N. (1992). Violence against staff by mentally retarded inpatients. *Hospital and Community Psychiatry, 43*, 503-504

Grainger, C. (1993). Occupational violence : Managing the risk of assault in the workplace. *Journal of Occupational Health and Safety - Australia and New Zealand, 9*, 43-47.

Grainger, C., & Whiteford, H. (1993). Assaults on staff in psychiatric hospitals : A safety issue. *Australian and New Zealand Journal of Psychiatry, 27*, 324-328.

Gritter, G.W., Love, C., Hunter, M., & Hixon, D. (1995). Containing patient violence. *Psychiatric Services, 46*, 409.

Haller, R., & Deluty, R.H. (1988). Assaults on staff by psychiatry in-patients : A critical review. *British Journal of Psychiatry, 152*, 174-179.

Harris, D., & Morrison, E.F. (1995). Managing violence without coercion. *Archives of Psychiatric Nursing, 9*, 203-210.

Harris, G.T., & Rice, M.E. (1986). Staff injuries sustained during altercations with psychiatric patients. *Journal of Interpersonal Violence, 1*, 193-211.

Hartman, C.R. (1995). The nurse-patient relationship and victims of violence. *Scholarly Inquiry for Nursing Practice, 9*, 175-192.

Herrera, J.M., & Lawson, W.B. (1987). Effects of consultation on the ward atmosphere in a state psychiatric hospital. *Psychological Reports, 60*, 423-428.

Hillenberg, J.B., & Wolf, K.L. (1988). Psychological impact of traumatic events : Implications for employee assistance intervention. *Employee Assistance Quarterly, 4*, 1-13.

Himle, D.P., Jayaratne, S., & Thyness, P. (1989). The effects of emotional support on burnout, work stress and mental health among Norwegian and American social workers. *Journal of Social Service Research, 13*, 27-45.

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of event scale : A measure of subjective stress. *Psychosomatic Medicine, 41*, 209-218.

House, J.S., Landis, K.R., & Umberson, D. (1988). Social relationships and health. *Science, 241*, 540-544.

House, J.S., Umberson, D., & Landis, K.R. (1988). Structures and processes of social support. *Annual Review of Sociology, 14*, 293-318.

Hunter, M.E., & Love, C. (1996). Total quality management and the reduction of inpatient violence and costs in a forensic psychiatric hospital. *Psychiatric Services, 47*, 751-754.

Hurrell, J.J., & Murphy, L.R. (1996). Occupational stress intervention. *American Journal of Industrial Medicine, 29*, 338-341.

Infantino, J.A., & Musingo, S-Y. (1985). Assaults and injuries among staff with and without training in aggression control techniques. *Hospital and Community Psychiatry, 36*, 1312-1314.

Jayaratne, S., & Chess, W.A. (1984). The effects of emotional support on perceived job stress and strain. *The Journal of Applied Behavioral Science, 20*, 141-153.

Jayaratne, S., Himle, D., & Chess, W.A. (1988). Dealing with work stress and strain : Is the perception of support more important than its use. *The Journal of Applied Behavioral Science, 24*, 191-202.

Jobson, J.D. (1991). *Applied Multivariate Data Analysis, Volume I : Regression and Experimental Design.* New York : Springer-Verlag.

Johnson, H.C. (1996). Violence and biology : A review of the literature. *Families in Society, 77*, 3-18.

Jones, F., Fletcher, B.C., & Ibbetson, K. (1991). Stressors and strains amongst social workers : Demands, supports, constraints, and psychological health. *British Journal of Social Work, 21*, 443-469.

Joseph, S., Williams, R., & Yule, W. (1995). Psychosocial perspectives on post-traumatic stress. *Clinical Psychology Review, 15*, 515-544.

Joseph, S., Yule, W., & Williams, R. (1993). Post-Traumatic Stress : Attributional aspects. *Journal of Traumatic Stress, 6*, 501-513.

Kaplan, S.G., & Wheeler, E.G. (1983). Survival skills for working with potentially violent clients. *Social Casework, 64*, 339-346.

Katz, P., & Kirkland, F.R. (1990). Violence and social structure on mental hospital wards. *Psychiatry, 53*, 262-277.

Kessler, R.C., Price, R.H., & Wortman, C.B. (1985). Social factors in psychopathology ; Stress, social support and coping processes. *Annual Review of Psychology, 36*, 531-572.

Kidd, R.F., & Chayet, E.F. (1984). Why do victims fail to report? The psychology of criminal victimization.. *Journal of Social Issues, 40*, 39-50.

Koeske, G.F., & Koeske, R.D. (1989). Work load and burnout : Can social support and perceived accomplishment help? *Social Work, 34*, 243-248.

Kyrouz, E.M., & Humphreys, K. (1997). Do health care workplaces affect treatment environments? *Journal of Community and Applied Social Psychology, 7*, 105-118.

Labour Research Department (1987). Assaults on staff. *Bargaining Report*, 5-12.

Lanza, M.L. (1992). Nurses as patient assault victims : An update, synthesis, and recommendations. *Archives of Psychiatric Nursing, 6*, 163-171.

Lanza, M.L. (1988). Factors relevant to patient assault. *Issues in Mental Health Nursing, 9*, 239-257.

Lanza, M.L. (1985). How nurses react to patients assault. *Journal of Psychosocial Nursing and Mental Health Services, 23*, 6-11.

Lanza, M. (1983). The reactions of nursing staff to physical assault by a patient. *Hospital and Community Psychiatry, 34*, 44-47.

Lanza, M.L., Kayne, H.L., Hicks, C., & Milner, J. (1994). Environmental characteristics related to patient assaults. *Issues in Mental Health Nursing, 15*, 319-335.

Lanza, M.L., Kayne, H.L., Hicks, C., & Milner, J. (1991). Nursing staff characteristics related to patient assault. *Issues in Mental Health Nursing, 12*, 253-266.

Lawler, E., Hall, D., & Oldham, G. (1974). Organizational climate : Relationship to organizational structure, process and performance. *Organizational Behavior and Human Performance, 11*, 139-155.

Lawson, B.Z. (1987). Work-related post-traumatic stress reactions : The hidden dimension. *Health and Social Work, 12,* 250-258.

Leadbetter, D. (1993). Trends in assaults on social work staff : The experiences of one Scottish department. *British Journal of Social Work, 23,* 613-628.

Leary, R.L. (1983). Social support and psychological disorder : A review. *Journal of Community Psychology, 11,* 3-21.

Lipscomb, J.A., & Love, C.C. (1992). Violence towards health care workers : An emerging occupational hazard. *AAOHN Journal, 40,* 219-228.

Littlechild, B. (1995). Violence against social workers. *Journal of Interpersonal Violence, 10,* 123-130.

Lyons, J.A. (1991). Strategies for assessing the potential for positive adjustment following trauma. *Journal of Traumatic Stress, 4,* 93-111.

MacKay, C. (1994). Violence to health care professionals : A health and safety perspective. In Wykes, T. (ed.). (1994). *Violence and Health Care Professionals.* London : Chapman and Hall.

Marcelissen, F.H., Winnubst, A.M., Buunk, B. & De Wolff, C. J. (1988). Social support and occupational stress : A causal analysis. *Social Science and Medicine, 26,* 365-373.

Marshall, N.L., & Barnett, R.C. (1992). Work-related support among women in caregiving occupations. *Journal of Community Psychology, 2,* 36-42.

McHugh, J. (1987). Why violence against staff goes unreported. *Social Work Today, 19.*

McNeely, R.L. (1983).Organizational patterns and work satisfaction in a comprehensive human service agency : An empirical test. *Human Relations, 36,* 957-972.

Mitchell, R.E., Billings, A.G., & Moos, R.H. (1982). Social support and well-being : Implications for prevention programs. *Journal of Primary Prevention, 3,* 77-98.

Morrison, E.F. (1993). Toward a better understanding of violence in psychiatric settings : Debunking the myths. *Archives of Psychiatric Nursing, 7,* 328-335.

Morrison, E.F. (1989). Theoretical modeling to predict violence in hospitalized psychiatric patients. *Research in Nursing and health, 12,* 31-40.

Morton, P.G. (1987). Staff roles and responsibilities in incidents of patient violence. *Archives of Psychiatric Nursing, 1,* 280-284.

Newhill, C.E. (1996). Prevalence and risk factors for client violence toward social workers. *Families in Society, 77,* 488-495.

Noor, N.M. (1995). Job-role quality and women's psychological well-being : Locus of control and social support as moderators. *Journal of Community and Applied Social Psychology, 5,* 259-272.

Norris, D. (1990). *Violence against social workers - The implications for practice.* London : Jessica Kingsley Publishers Ltd.

Obholzer, A., & Roberts, V.R. (Eds.). (1994). *The Unconscious at work : Individual and Organizational Stress in the Human Services.* London : Routledge.

O'Connor, G. (1983). Presidential address 1983 : Social support of mentally retarded persons. *Mental Retardation, 21,* 187-196.

O'Leary-Kelly, A.M., Griffin, R.W., & Glew, D.J. (1996). Organization-motivated aggression : A research framework. *Academy of Management Review, 21*, 225-253.

Pastor, L.H. (1995). Initial assessment and intervention strategies to reduce workplace violence. *American Family Physician, 52*, 1169-1174.

Paton, D. (1997). Managing work-related psychological trauma : An organisational psychology of response and recovery. *Australian Psychologist, 32*, 46-55.

Paton, D., & Smith, L.M. (1995). Work-related psychological trauma : A review of methodological and assessment issues. *Australian Psychologist, 30*, 200-209.

Pearson, M., Wilmot, E., & Padi, M (1986). A study of violent behaviour among in-patients in a psychiatric hospital. *British Journal of Psychiatry, 149*, 232-235.

Peterson, K.C., Prout, M.F., & Schwarz, R.A. (1991). *Post-Traumatic Stress Disorder - A Clinician's Guide.* New York : Plenum Press.

Peterson, M., & Wilson, J. (1996). Job satisfaction and perceptions of health. *Journal of Environmental Medicine, 38,* 891-898.

Pidgeon, N.F. (1991). Safety culture and risk management in organizations. *Journal of Cross-cultural Psychology, 22,* 129-140.

Porritt, D. (1979). Social support in crisis : Quantity or quality ? *Social Science and Medicine, 13A,* 715-721.

Poster, E.C., & Ryan, J. (1994). A multi-regional study of nurses' beliefs and attitudes about work safety and patient assault. *Hospital and Community Psychiatry, 45,* 1104-1108.

Powell, G., Caan, W., & Crowe, M. (1994). What events precede violent incidents in psychiatric hospitals? *British Journal of Psychiatry, 165,* 107-112.

Rauktis, M.E., & Koeske, G.F. (1994). Maintaining social worker morale : When supportive supervision is not enough. *Administration in Social Work, 18,* 39-60.

Rey, L.D. (1996). What social workers need to know about client violence. *Families in Society, 77,* 33-39.

Riley, D. (1997). Issues in the assessment of violence and aggression. In Love, H., & Whittaker, W. (Eds.). (1997). *Practice Issues for Clinical and Applied Psychologists in New Zealand.* Wellington, New Zealand : The New Zealand Psychological Society.

Robinson, R.C., & Mitchell, J.T. (1993). Evaluation of psychological briefings. *Journal of Traumatic Stress, 6,* 367-382.

Rowett, C. (1986). *Violence in Social Work.* Cambridge : University of Cambridge Institute of Criminology.

Ryan, J.A., & Poster, E.C. (1989). The assaulted nurse : Short-term and long-term responses. *Archives of Psychiatric Nursing, 3,* 323-331.

Schnake, M.E. (1983). An empirical assessment of the effects of affective response in the measurement of organizational climate. *Personnel Psychology, 36,* 791-807.

Schultz, L.G. (1987). The social worker as a victim of violence. *Social Casework, 68,* 240-244.

Schulz, R., Greenley, J.R., & Brown, R. (1995). Organization, management, and client effects on staff burnout. *Journal of Health and Social Behavior, 36*, 333-345.

Shumaker, S.A., & Hill, D.R. (1991). Gender differences in social support and physical health. *Health Psychology, 10*, 102-111.

Smith, L.M., & Paton, D. (1997). A structural re-assessment of the Impact Of Event Scale : The influence of occupational and cultural contexts. In G. Habermann (ed.). *Looking Back, Moving Forward : Fifty years of New Zealand Psychology.* Wellington, New Zealand Psychological Society.

Star, B. (1984). Patient violence/therapist safety. *Social Work, 29*, 225-230.

Sze, W.C., & Ivker, B. (1986). Stress in social workers : The impact of setting and role. *Social Casework, 67*, 141-148.

Tam, E., Engelsmann, F., & Fugere, R. (1996). Patterns of violent incidents by patients in a general hospital psychiatric facility. *Psychiatric Services, 47*, 86-88.

Tardiff, K., & Sweillam, A. (1982). Assaultive behavior among chronic inpatients. *American Journal of Psychiatry, 139*, 212-215.

Terry, D.J., Nielsen, M., & Perchard, L. (1993). Effects of work stress on psychological well-being and job satisfaction : The stress-buffering role of social support. *Australian Journal of Psychology, 45*, 168-175.

Thompson, N., Murphy, M., & Stradling, S. (1994*). Dealing with stress.* London : MacMillian Press;

Tumulty, G., Jernigan, J.E., & Kohut, G.F. (1994). The impact of perceived work environment on job satisfaction of hospital staff nurses. *Applied Nursing Research, 7*, 84-90.

Uchino, B.N., Cacioppo, J.T., & Kiecolt-Glaser, J.K. (1996). The relationship between social support and physiological processes : A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin, 119*, 488-531.

Ullman, S.E., & Siegal, J.M. (1994). Predictors of exposure to traumatic events and post-traumatic stress sequalae. *Journal of Community Psychology, 22*, 328-338.

Van Soest, D., & Bryant, S. (1995). Violence reconceptualized for social work : The urban dilemma. *Social Work, 40,* 549-557.

Vaux, A. (1985). Variations in social support associated with gender, ethnicity, and age. *Journal of Social Issues, 41,* 89-110.

Violanti, J., & Paton, D. (1998). Occupational violence exposure and the police : Addictive processes. *Journal of Aggression and Violent Behavior (in press).*

Warshaw, L.J., & Messite, J. (1996). Workplace violence : Preventative and interventive strategies. *Journal of Environmental Medicine, 38,* 993-1006.

Whittington, R. (1994). Violence in psychiatric hospitals. In Wykes, T. (ed). (1994). *Violence and Health Care Professionals.* London : Chapman and Hall.

Whittington, R., Shuttleworth, S., & Hill, L. (1996), Violence to staff in a general hospital setting. *Journal of Advanced Nursing, 24,* 326-333.

Whittington, R., & Wykes, T. (1994a). The prediction of violence in a health care setting. In Wykes, T. (ed.). (1994). *Violence and Health Care Professionals.* London : Chapman and Hall.

Whittington, R., & Wykes, T. (1994b). Violence in psychiatric hospitals : Are certain staff prone to being assaulted ? *Journal of Advanced Nursing, 19,* 219-225.

Whittington, R., & Wykes, T. (1992). Staff strain and social support in a psychiatric hospital following assault by a patient. *Journal Of Advanced Nursing, 17,* 480-486.

Wilson, C.B. (1991). US businesses suffer from workplace trauma. *Personnel Journal, 70,* 47-50.

Winefield, H.R. (1984). The nature and elicitation of social support : Some implications for the helping profession. *Behavioural Psychotherapy, 12,* 318-330.

Wykes, T., & Whittington, R. (1994). Reactions to assault. In Wykes, T. (ed.). (1994). *Violence and Health Care Professionals.* London : Chapman and Hall.

Wykes, T., & Whittington, R. (1991). Coping strategies used by staff following assault by a patient : An exploratory study. *Work and Stress, 5,* 37-48.

Wynne, R. (1995). Workplace violence in Europe - It is time to act. *Work and Stress, 9*, 377-379.

Zilberg, N., Weiss, D.S., & Horowitz, M.J. (1982). Impact of event scale : A cross-validation study and some empirical evidence supporting a conceptual model of stress response syndrome. *Journal of Consulting and Clinical Psychology, 50*, 407-414.

APPENDIX 1 : QUESTIONNAIRE USED IN STUDY

AUTHORITY for the INTELECTUALLY HANDICAPPED PERSON
IRRABENNA
WORK DEMANDS SURVEY

Section 1 - Background Information

Age:.....years

Gender: (Circle as appropriate) Male 1 Female 2

Location: Circle as appropriate

Urban Residential 1 Urban Community 2

Rural 3 Mixture 4

Length of service with AIH.....years

Please describe your job area (e.g. Social Trainer etc) .....

Please describe your role .....

Please define the client group you most often deal with .....

In which area/region do you work .....

Section 2 - Traumatic Incident involvement:

For the purposes of this questionnaire, a traumatic/critical incident is defined as work-related events that:

i. Resulted in your experiencing unpleasant or disturbing feelings unlike those that you normally experience from your work;
ii. Resulted in your experiencing feelings of being unable to perform to the level that you would have expected.

This could include incidents that you were directly involved with, those that you witnessed, or events that you associated with (e.g. because you could have been involved)

During the past six months how many incidents that are consistent with the above criteria have you experienced?

None	1
One	2
Two	3
Three	4
Four	5
Five	6
More than five	7

Section 3. Job and Traumatic Incident Demands

3a.
Listed below are a number of characteristics associated with work and with involvement in traumatic incidents. This list was developed from interviews that were held with a random sample of AIH staff to ensure that this survey assesses staff concerns.

Against each item record the frequency with which each has been a source of stress for you over the past twelve months. Please use the following scoring system

0 - Never a source of stress
1 - A few times a year
2 - A few times a month
3 - A few times a week
4 - A source of stress every day

Being faced with inconsistent demands	0	1	2	3	4
Making important decisions for others on the basis of inadequate information	0	1	2	3	4
Lack of the resources necessary to perform your duties	0	1	2	3	4
Insufficient staff	0	1	2	3	4
Having to alter work schedules to deal with crises	0	1	2	3	4
Not knowing enough about the situations that you are faced with	0	1	2	3	4
Lack of pertinent knowledge to perform your job	0	1	2	3	4
Being 'grilled' by management about decisions you have made	0	1	2	3	4
Lack of team effort	0	1	2	3	4
Being unable to live up to the expectations created by political decisions	0	1	2	3	4
Inadequate support systems	0	1	2	3	4
Inconsistent decisions by others	0	1	2	3	4
Not knowing who to go to for advice	0	1	2	3	4
Biased promotion procedures	0	1	2	3	4
Staff changes	0	1	2	3	4
Managers acting in an untrustworthy manner towards staff	0	1	2	3	4
Lack of confidentiality	0	1	2	3	4
Poor equal employment opportunities	0	1	2	3	4
Conflict between staff	0	1	2	3	4
Inadequate staff support	0	1	2	3	4
Lack of recognition for your work	0	1	2	3	4
Inadequate feedback	0	1	2	3	4
Managers placing client needs before staff needs	0	1	2	3	4
Being under constant surveillance by managers	0	1	2	3	4
Fear of losing your job	0	1	2	3	4
Managers acting in an insensitive manner towards staff	0	1	2	3	4

Please use the following scoring system

0 - Never a source of stress
1 - A few times a year
2 - A few times a month
3 - A few times a week
4 - A source of stress every day

Feeling that your skills are being underutilized	0	1	2	3	4
Frequent changes in policies affecting your work	0	1	2	3	4
Frequent changes in work conditions	0	1	2	3	4
Lack of promotion opportunities	0	1	2	3	4
Poor communication between staff and managers	0	1	2	3	4
Involvement in staff selection	0	1	2	3	4
Performing work of a confidential nature	0	1	2	3	4
Dealing with politics / politicians	0	1	2	3	4
Dealing with political constraints	0	1	2	3	4
Not having the training to deal with job demands	0	1	2	3	4
Loss of authority / control	0	1	2	3	4
Being accountable to client's families	0	1	2	3	4
Being accountable to politicians	0	1	2	3	4
Being accountable to management	0	1	2	3	4
Being accountable to subordinates	0	1	2	3	4
Managers putting organizational needs before staff needs	0	1	2	3	4
Your peer group acting in an untrustworthy manner	0	1	2	3	4
Your subordinates acting in an untrustworthy manner	0	1	2	3	4
Performing emotionally demanding work	0	1	2	3	4
Being unable to influence **personal** outcomes as much as you would have liked	0	1	2	3	4
Being unable to influence **client's** outcomes as much as you would have liked	0	1	2	3	4
Having to put up with verbal abuse from clients	0	1	2	3	4
Having to put up with verbal abuse from other professionals	0	1	2	3	4
Having to put up with physical abuse from clients	0	1	2	3	4
Having to put up with physical abuse from client's families	0	1	2	3	4
Not knowing whether clients will be alright	0	1	2	3	4
Being unable to live up to personal expectations	0	1	2	3	4
Having to work in isolation	0	1	2	3	4
Being unable to live up to the expectations of clients	0	1	2	3	4
Getting personally involved in client's problems	0	1	2	3	4
Having to deal with emotionally distraught clients	0	1	2	3	4

Please use the following scoring system

0 - Never a source of stress
1 - A few times a year
2 - A few times a month
3 - A few times a week
4 - A source of stress every day

Unsupportive managers	0	1	2	3	4
Responsibility for client outcomes	0	1	2	3	4
Working under constant pressure	0	1	2	3	4
Being emotionally harassed by clients	0	1	2	3	4
Complaints by clients	0	1	2	3	4
Explaining to parents that their child is dying	0	1	2	3	4
Feeling responsible for client's injuries	0	1	2	3	4
Dealing with epileptic clients	0	1	2	3	4
Dealing with client's whose behaviour is unpredictable	0	1	2	3	4
Dealing with client's whose emotions are unpredictable	0	1	2	3	4
Dealing with violent clients	0	1	2	3	4
Dealing with clients who have high support needs	0	1	2	3	4
Complaints by parents of clients	0	1	2	3	4
Dealing with the needs of clients' families	0	1	2	3	4
Dealing with families who do not understand their child's needs	0	1	2	3	4
Dealing with over-protective parents	0	1	2	3	4
The suffering of clients	0	1	2	3	4
Client suicide	0	1	2	3	4
Attempted client suicide	0	1	2	3	4
Not knowing what is going to happen	0	1	2	3	4
Dealing with HIV / Hepatitis clients	0	1	2	3	4
Media attention paid to AIH activities	0	1	2	3	4
Finding difficulty disengaging from clients	0	1	2	3	4
Dealing with child abuse	0	1	2	3	4
Taking work problems home with you	0	1	2	3	4
Work -related activities interfering with home life	0	1	2	3	4

If you experienced any stressors which are not on the above list, please list them and their frequency of occurrence below.

.....	0	1	2	3	4
.....	0	1	2	3	4
.....	0	1	2	3	4
.....	0	1	2	3	4

3b

When were you last involved in a critical or traumatic incident (that satisfies the criteria listed in section 2)? It may include one or more of the demands listed above or it may have involved something so far not mentioned. How long ago did this happen?

.....years months..... weeks.....

Please describe what happened. (continue on a separate sheet of paper if necessary)

3 c
Do you feel that you are still experiencing problems as a result of involvement in critical/traumatic/disturbing events that happened more than 12 months ago?

Yes No (if no, please proceed to question 4a.)

If you answered yes, please comment on the nature of the event and the nature of the unresolved problems that it created.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Section 4: Personal Reactions and Feelings to Job and Traumatic Incident Demands

On.....date, your most recent critical/traumatic event was

.....

4a. Impact of Event Scale

Below is a list comments made by people after stressful life events. Please check each item, indicating how frequently these comments were true for you DURING THE SEVEN (7) DAYS FOLLOWING THIS EVENT. If they did not occur during that time, please mark the "not at all" column.

Please use the following scoring system

0: Not at all; 1: Rarely 3: Sometimes; 5:Often

1.	I thought about it when I didn't mean to		0	1	3	5
2.	I avoided letting myself get upset when I thought about it		0	1	3	5
3.	I tried to remove it from my memory		0	1	3	5
4.	I had trouble falling asleep or staying asleep, because pictures or thoughts about it that came into my mind	0	1	3	5	
5.	I had waves of strong feelings about it		0	1	3	5
6.	I had dreams about it		0	1	3	5
7.	I stayed away from reminders about it		0	1	3	5
8.	I felt as if it hadn't happened or it wasn't real	0	1	3	5	
9.	I tried not to talk about it		0	1	3	5
10.	Pictures about it popped into my mind		0	1	3	5
11.	Other things kept making me think about it	0	1	3	5	
12.	I was aware that I still had a lot of feelings about it, but I didn't deal with them		0	1	3	5
13.	I tried not to think about it		0	1	3	5
14.	Any reminder brought back feelings about it	0	1	3	5	
15.	My feelings about it were kind of numb		0	1	3	5

4b. SYMPTOM CHECKLIST

The following questionnaire is a standard one dealing with general stress symptoms. Please describe how much each of the symptoms you experienced **during the past seven days**. Please use the following scale to record your responses.

Not at all	1
A little bit	2
Quite a bit	3
Extremely	4

Difficulty in speaking in times of excitement	1	2	3	4
Trouble in remembering things	1	2	3	4
Concerns about sloppiness or carelessness	1	2	3	4
Blaming yourself fro things	1	2	3	4
Pains in the lower part of your back	1	2	3	4
Feeling lonely	1	2	3	4
Feeling 'blue'	1	2	3	4
Your feelings being easily hurt	1	2	3	4
Feeling that others do not understand you, or are unsympathetic	1	2	3	4
Feeling that people are unfriendly, or dislike you	1	2	3	4
Having to do things slowly, to ensure that you're doing them properly	1	2	3	4
Feeling inferior to others	1	2	3	4
Muscle soreness	1	2	3	4
Having to check and double check what you do	1	2	3	4
Occasional hot or cold spells	1	2	3	4
Your mind occasionally going blank	1	2	3	4
Either a numbness or tingling in your body	1	2	3	4
A lump in your throat	1	2	3	4
Trouble in concentrating	1	2	3	4
Feeling of weakness in parts of your body	1	2	3	4
Occasional 'heavy' feelings in your arms and legs	1	2	3	4

Please use the following scale to record your responses.

Not at all	1
A little bit	2
Quite a bit	3
Extremely	4

Feeling lethargic	1	2	3	4
Feeling inadequate	1	2	3	4
Feeling pushed to the limit	1	2	3	4
Feeling angry	1	2	3	4
Feeling more dependent on others	1	2	3	4
Crying easily	1	2	3	4
Feeling confused	1	2	3	4
Sleep problems	1	2	3	4
Feelings of helplessness	1	2	3	4
Feeling tense	1	2	3	4
Feelings of hopelessness	1	2	3	4
Feelings of guilt	1	2	3	4

Section 4c

For all the items listed below, please circle the number that best describes your work experience. Please use the following scale:

Never	0
A few times a year	1
Once a month	2
A few times a month	3
Once a week	4
A few times a week	5
Every day	6

I feel emotionally drained from my work	0	1	2	3	4	5	6	
I feel used up at the end of the working day	0	1	2	3	4	5	6	
I feel fatigued when I get up in the morning and have to face another day on the job	0	1	2	3	4	5	6	
Working with people all day is really a strain for me	0	1	2	3	4	5	6	
I feel burned out from my work	0	1	2	3	4	5	6	
I feel frustrated by my job	0	1	2	3	4	5	6	
I feel I'm working too hard on my job	0	1	2	3	4	5	6	
Working with people directly puts too much stress on me	0	1	2	3	4	5	6	
I feel like I'm at the end of my rope	0	1	2	3	4	5	6	
I can easily understand how my clients feel about things	0	1	2	3	4	5	6	
I deal very effectively with the problems of my clients	0	1	2	3	4	5	6	
I feel I'm positively influencing people's lives through my work	0	1	2	3	4	5	6	
I feel very energetic	0	1	2	3	4	5	6	
I can easily create a relaxed atmosphere with my clients	0	1	2	3	4	5	6	
I feel exhilarated after working closely with my clients	0	1	2	3	4	5	6	
I feel I have accomplished many worthwhile things in this job	0	1	2	3	4	5	6	
In my work, I deal with emotional problems very calmly	0	1	2	3	4	5	6	
I feel as if I treat some clients as if they were impersonal 'objects'	0	1	2	3	4	5	6	
I've become more callous toward people since I took this job	0	1	2	3	4	5	6	
I worry that this job is hardening me emotionally	0	1	2	3	4	5	6	
I don't really care what happens to some clients	0	1	2	3	4	5	6	
I feel similar to my clients in many ways	0	1	2	3	4	5	6	
I feel personaly involved with my clients problems	0	1	2	3	4	5	6	
I feel uncomfortable about the way I have treated some clients	0	1	2	3	4	5	6	

Section 5 Working Environment

Over the last seven days, how much would you say the following statements are true about work at AIH. Please use the following scale.

Not at all	1
A little bit	2
Quite a bit	3
Extremely	4

Assignments for each person are clearly defined	1	2	3	4
Little reliance is placed on individual judgement: almost everything is double checked	1	2	3	4
Very high standards for performance are set	1	2	3	4
If people make mistakes, they will be criticised for them	1	2	3	4
All employees are proud of AIH	1	2	3	4
AIH policies and goals are clearly understood	1	2	3	4
The goals people are responsible for are clearly understood	1	2	3	4
A feeling of pressure to improve personnel and group performance in AIH	1	2	3	4
The underlying AIH philosophy is that people should solve problems by themselves	1	2	3	4
Not enough reward and recognition is given in AIH for good work	1	2	3	4
There is no basic trust between members of AIH	1	2	3	4
Procedures appearing to be disorganized	1	2	3	4
Most AIH members don't take much pride in their performance	1	2	3	4
There is good communication throughout AIH	1	2	3	4
Management dislike people checking everything with them: if people think they have the right approach, they go ahead and do it	1	2	3	4
The promotion system helps the best person rise to the top	1	2	3	4
A basic 'distance' and coldness between people in AIH	1	2	3	4
Effective work sometimes suffering from lack of organization and planning	1	2	3	4
Immediate superiors taking time to review the overall performance and effectiveness of their subordinates	1	2	3	4
Challenging goals are set by management	1	2	3	4
AIH members are rewarded in proportion to the excellence of their job performance	1	2	3	4
Performance is evaluated regularly, using agreed goals and standards	1	2	3	4
The standards of AIH do not usually demand the maximum effort from each person	1	2	3	4
There is not much encouragement to take on increased responsibility in AIH	1	2	3	4

Please use the following scale.

Not at all	1	Quite a bit	3
A little bit	2	Extremely	4

Rewards and encouragement usually outweigh criticisms	1	2	3	4
There is a lot of warmth between management and other personnel	1	2	3	4
AIH members have very little opportunity to say what they think about the goals and standards that apply to their work	1	2	3	4
People are encouraged to initiate projects that they think are important	1	2	3	4
Good performance is recognized fairly quickly in AIH	1	2	3	4
Each person has a clear idea of what they do in their job	1	2	3	4

Section 7 Social Support

This section asks about the quality of support that you receive from significant others within your social network. Within the last six months, when something at work has been particularly demanding or put you under a lot of pressure, who have you approached to seek advice or talk about the situation. Please use the following scoring system to define (a) the amount of support received, and (b) your evaluation of its effectiveness.

Amount		Effectiveness	
Not available	0	Not available	0
No support	1	Completely unhelpful	1
A little support	2	A little helpful	2
Quite a bit of support	3	Very helpful	3
Considerable support	4	Highly effective	4

	Amount					**Effectiveness**				
Wife husband or partner	0	1	2	3	4	0	1	2	3	4
Close friend	0	1	2	3	4	0	1	2	3	4
Work colleague	0	1	2	3	4	0	1	2	3	4
Your immediate superior at work	0	1	2	3	4	0	1	2	3	4
Doctor	0	1	2	3	4	0	1	2	3	4
Counsellor (eg Occupational health)	0	1	2	3	4	0	1	2	3	4
Other AIH employee	0	1	2	3	4	0	1	2	3	4
Other	0	1	2	3	4	0	1	2	3	4
Other	0	1	2	3	4	0	1	2	3	4
Other	0	1	2	3	4	0	1	2	3	4

(Please specify 'other')

Thank you for your cooperation

APPENDIX 2 : GROUPING OF THE TRAUMATIC STRESSOR MEASURE

Accountability

Being accountable to client's families (38).

Being accountable to politicians (39).

Being accountable to management (40).

Being accountable to subordinates (41).

Responsibility for client outcomes (59).

Expectations

Being unable to live up to the expectations created by political decisions (10).

Being unable to live up to personal expectations (53).

Being unable to live up to the expectations of clients (55).

Job Demands

Uncertainty within the job

Being faced with inconsistent demands (1).

Making important decisions for others on the basis of inadequate information (2).

Having to alter work schedules to deal with crises (5).

Not knowing enough about the situation that you faced with (6).

Lack of pertinent knowledge to perform your job (7).

Inconsistent decisions by others (12).

Not knowing who to go to for advice (13).

Staff changes (15).

Fear of losing your job (25).

Frequent changes in work conditions (29).
Not having the training to deal with job demands (36).
Not knowing whether clients will be all right (52).
Not knowing what is going to happen (77).

Control within the job

Loss of authority/control (37).
Being unable to influence personal outcomes as much as you would have liked (46).
Being unable to influence client's outcomes as much as you would have liked (47).

Dealing with the client's family

Explaining to parents that their child is dying (63).
Complaints by parents of clients (70).
Dealing with the needs of the clients' families (71).
Dealing with families who do not understand their child's needs (72).
Dealing with overprotective parents (73).

The nature of the client

Having to deal with emotionally distraught clients (57).
Complaints by clients (62).
Dealing with epileptic patients (65).
Dealing with clients whose behaviour is unpredictable (66).
Dealing with clients whose emotions are unpredictable (67).
Dealing with clients who have high support needs (69).
The suffering of clients (74).
Client suicide (75).
Attempted client suicide (76).
Dealing with HIV/Hepatitis clients (78).

Dealing with child abuse (81).

Personal involvement with the client

Performing emotionally demanding work (45).

Getting personally involved in client's problems (56).

Feeling responsible for client's injuries (64).

Finding difficulty disengaging from clients (80).

Limited resources

Lack of the resources necessary to perform your duties (3).

Insufficient staff (4).

Interpersonal Relationships

Lack of team effort (9).

Inadequate support systems (11).

Conflict between staff (19).

Inadequate staff support (20).

Your peer group acting in an untrustworthy manner (43).

Your subordinates acting in an untrustworthy manner (44).

Having to work in isolation (54).

Policies and Politics

Biased promotion procedures (14).

Lack of confidentiality (17).

Poor equal employment opportunities (18).

Lack of recognition for your work (21).

Inadequate feedback (22).

Feeling that your skills are being underutilized (27).

Frequent changes in policies affecting your work (28).

Lack of promotion opportunities (30).

Involvement in staff selection (32).

Performing work of a confidential nature (33).

Dealing with policies/politicians (34).

Dealing with political constraints (35).

Working under constant pressure (60).

Media attention paid to AIH activities (79).

Managerial Skills

Being grilled by management about the decisions you made (8).

Managers acting in an untrustworthy manner toward staff (16).

Managers placing client needs before staff needs (23).

Being under constant surveillance by managers (24).

Managers acting in an insensitive manner towards staff (26).

Poor communication between staff and managers (31).

Managers putting organisational needs before staff needs (42).

Unsupportive managers (58).

Violence/Abuse

Having to put up with verbal abuse from clients (48).

Having to put up with verbal abuse from other professionals (49)

Having to put up with physical abuse from clients (50).

Having to put up with physical abuse from client's families (51).

Being emotionally harassed by clients (61).

Dealing with violent clients (68).

Home and Work Interface

Taking work problems home with you (82).

Work-related activities interfering with home life (83).