

**VIOLENCE, AGGRESSION AND TRAUMATIC INCIDENTS
IN THE WORKPLACE: A STUDY OF NURSING STAFF
EMPLOYED IN ACUTE IN-PATIENT PSYCHIATRIC CARE
IN ROYAL DUNDEE LIFF HOSPITAL.**

BY

SIMON KEITH PETRIE

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CONTENTS

	PAGE NO.
Acknowledgements	i
Declaration	ii
Abstract	iii

CHAPTER 1. INTRODUCTION

1.1 Violence within the National Health Service	1
1.1.1 Introduction	1
1.1.2 Definition of violence and aggression	2
1.1.3 Rates of general workplace violence	2
1.1.4 Rates of violence in healthcare settings	2
1.1.5 Costs of violence	3
1.1.6 Violence in acute psychiatric settings	4
1.2 Occupational Stress	7
1.2.1 General definition of stress	7
1.2.2 The concept of occupational stress	7
1.2.3 Models of stress	8
1.3 Occupational stress in healthcare services	10
1.3.1 Introduction	10
1.3.2 Occupational stress in the nursing profession	10
1.4 Stressor variables	12
1.4.1 Definition	12
1.4.2 Types of stressors	12
1.4.3 Stressors within the healthcare environment	13
1.5 Mediating / moderating variables	14
1.5.1 Introduction	14
1.5.2 Personality variables as mediators/moderators in response to stressors	14
1.5.3 Coping strategies as mediators/moderator in response to stressors	17
1.5.4 Social Support as a mediator/moderator in response to stressors	20
1.6 Strain variables	23
1.6.1 Introduction	23

1.6.2	General health outcome	23
1.6.3	Burnout	24
1.7	Aims	28
1.8	Hypotheses	29
1.8.1	Hypothesis 1	29
1.8.2	Hypothesis 2	29
1.8.3	Hypothesis 3	29
1.8.4	Hypothesis 4	29
1.8.5	Hypothesis 5	29
1.8.6	Hypothesis 6	30
1.8.7	Hypothesis 7	30
1.8.8	Hypothesis 8	30

CHAPTER 2. METHOD

2.1	Participants	31
2.1.1	Participant identification	31
2.1.2	Participant consent	31
2.2	Procedure	32
2.2.1	Administration of measures	32
2.3	Measures	33
2.3.1	Demographic information	33
2.3.2	Quantitative measures	33
2.3.2.1	<i>Exposure to Aggression and Violence (EAV) scale</i>	33
2.3.2.2	<i>Social Support Scale (House and Wells, 1978)</i>	33
2.3.2.3	<i>Positive and Negative Affect Schedule (Watson et al., 1988)</i>	34
2.3.2.4	<i>Occupational Stress Indicator - 'How you cope with stress you experience' subscale - (Cooper et al., 1988)</i>	35
2.3.2.5	<i>Clinical Outcomes in Routine Evaluation - outcome measure (Mental Health Foundation & CORE System Group, 1999)</i>	36
2.3.2.6	<i>Maslach Burnout Inventory (Maslach & Jackson, 1986)</i>	36
2.3.2.7	<i>Emotional Responses to Challenging Behaviour Scale (Mitchell & Hastings, 1998)</i>	37
2.3.2.8	<i>Thoughts About Challenging Behaviour Scale (Mitchell & Hastings, 1998)</i>	38
2.3.2.9	<i>Levels of absenteeism - self report measure</i>	38

2.3.3 Qualitative measures	38
2.4 Analysis of data	39
2.4.1 Protection of data / participant confidentiality	39
2.4.2 Analysis	39
CHAPTER 3. RESULTS	
3.1 Introduction	40
3.2 Demographic results	40
3.3 Descriptive statistics and comparisons with normative data	41
3.3.1 Stressors	41
3.3.1.1 <i>Exposure to Aggression and Violence scale</i>	41
3.3.2 Mediators/moderators	42
3.3.2.1 <i>Social Support Scale (House & Wells, 1978)</i>	42
3.3.2.2 <i>Positive and Negative Affect Schedule (Watson et al., 1988)</i>	42
3.3.2.3 <i>Occupational Stress Indicator 'How you cope with stress you experience' subscale - (Cooper et al., 1988)</i>	43
3.3.3 Strains	43
3.3.3.1 <i>Clinical Outcomes in Routine Evaluation - outcome measure (Mental Health Foundation & CORE System Group, 1999)</i>	43
3.3.3.2 <i>Maslach Burnout Inventory (Maslach & Jackson, 1986)</i>	45
3.3.3.3 <i>Levels of absenteeism from work</i>	45
3.3.3.4 <i>Emotional Responses to Challenging Behaviour Scale (Mitchell & Hastings, 1998)</i>	46
3.3.3.5 <i>Thoughts About Challenging Behaviour Scale (Mitchell & Hastings, 1998)</i>	46
3.4 Statistical analysis	48
3.4.1 Hypothesis 1	48
3.4.2 Hypothesis 2	48
3.4.3 Hypothesis 3	48
3.4.4 Hypothesis 4	49
3.4.5 Hypothesis 5	49
3.4.6 Hypothesis 6	49
3.4.7 Hypothesis 7	50
3.4.8 Hypothesis 8	50

3.4.8.1	<i>Dependent variable 1:- CORE score</i>	53
3.4.8.2	<i>Dependent variable 2:- emotional exhaustion</i>	53
3.4.8.3	<i>Dependent variable 3:- depersonalisation</i>	54
3.4.8.4	<i>Dependent variable 4:- personal accomplishment</i>	55
3.5	Analyses of outcome variables	55
3.6	Summary of qualitative findings	56
3.6.1	Characteristics of the sample and general views on nursing profession	56
3.6.1.1	<i>Lifestyle characteristics</i>	56
3.6.1.2	<i>The nursing profession</i>	56
3.6.1.3	<i>Job satisfaction</i>	57
3.6.1.4	<i>Future prospects</i>	58
3.6.1.5	<i>Training</i>	58
3.6.2	The acute psychiatric environment	59
3.6.2.1	<i>Patients</i>	59
3.6.2.2	<i>Ward environment</i>	59
3.6.2.3	<i>Stressful incidents</i>	60
3.6.3	Views on occupational stress	60
3.6.3.1	<i>Stress at work</i>	60
3.6.3.2	<i>Violence and Aggression</i>	61
3.6.3.3	<i>Training for dealing with violent and aggression patients</i>	62
3.6.3.4	<i>Support for dealing with stress</i>	62
3.6.3.5	<i>Personal coping</i>	64

CHAPTER 4. DISCUSSION

4.1	Introduction	66
4.2	Discussion of results of central research hypotheses	67
4.2.1	Hypothesis 1	67
4.2.2	Hypothesis 2	67
4.2.3	Hypothesis 3	68
4.2.4	Hypothesis 4	68
4.2.5	Hypothesis 5	69
4.2.6	Hypothesis 6	70
4.2.7	Hypothesis 7	71

4.2.8 Hypothesis 8	71
4.2.8.1 <i>Dependent variable one - CORE score</i>	72
4.2.8.2 <i>Dependent variable two - emotional exhaustion</i>	73
4.2.8.3 <i>Dependent variable three - depersonalisation</i>	73
4.2.8.4 <i>Dependent variable four - personal accomplishment</i>	74
4.2.8.5 <i>Summary of the prediction of psychological outcome and burnout</i>	74
4.3 Discussion of descriptive statistics, qualitative and outcome analyses	75
4.3.1 Violent and aggressive incidents	75
4.3.2 Coping and Social support	77
4.3.3 Discussion of further analyses	77
4.4 Methodological issues	78
4.4.1 Design	78
4.4.2 Participants	79
4.4.3 Measures	79
4.4.4 Analysis	79
4.5 Conclusions, implications and future directions	80
4.5.1 Overall conclusions	80
4.5.2 Commentary on psychological models of stress	80
4.5.3 Implications	81
4.5.4 Future directions	81
CHAPTER 5. REFERENCES	82

APPENDICES

Appendix A General description of the acute psychiatric wards (one to five) of Royal Dundee Liff hospital, Dundee.

Appendix B Participant information sheet

Appendix C Participant consent form

Appendix D Communication from ethics committee

Appendix E Communication with clinical nurse manager

Appendix F Quantitative measures

Appendix G Semi-structured interview

TABLES

	PAGE NO.
Table 1 Age and Experience of participants	40
Table 2 Marital Status of Participants	40
Table 3 Staff Grades of Participants	41
Table 4 Exposure to Aggression & Violence Scale - descriptive statistics	41
Table 5 Social Support Scale - descriptive statistics and normative data	42
Table 6 PANAS - Descriptive statistics and normative data	43
Table 7 OSI coping scale - Descriptive statistics and normative data	44
Table 8 CORE Outcome Measure - Descriptive statistics and normative data	44
Table 9 MBI - Descriptive statistics and normative data	45
Table 10 MBI - subscales comparative to normative data	45
Table 11 ERCB Scale - Descriptive statistics and normative data	46
Table 12 TACB Scale - Descriptive statistics	46
Table 13 EAV-CORE/MBI/ERCBS/TACBS/absenteeism correlations	47
Table 14 CORE/OSI correlations	49
Table 15 CORE/Social Support Scale correlations	50
Table 16 CORE/PANAS correlations	50
Table 17 Pearson Correlation matrix of variables in regression analysis	52
Table 18 Hierarchical regression analysis predicting CORE Score	53
Table 19 Hierarchical regression analysis predicting EE score	54
Table 20 Hierarchical regression analysis predicting DP score	54
Table 21 Pearson correlations between all outcome variables	55

GRAPHS AND FIGURES

Figure 1 Structure of a psychological model of stress	9
Figure 2 Self-reported levels of absenteeism	46

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Finally, to Kirsty, for loving and inspiring me. I couldn't have done this without you. Not a hair out of place.....

DECLARATION

"I certify that this is a true and accurate account of the work carried out. The thesis has been composed by myself and the work herein is my own".

Signed..

Simon Keith Petrie

ABSTRACT

Nursing staff employed in acute psychiatric care are exposed to incidents of violence, aggression and trauma at a rate far higher than that of the general population. Such staff are at an increased risk of developing psychological symptomatology and/or burnout in response to such stressors. The aims of this study are to investigate the incidence of these and other stressors within a sample of nursing staff, to examine variables within this sample which might mediate or moderate the effects of such stressors, and to examine the outcomes or responses of individuals to these variables. This study investigates the relationship between these variables, and in so doing builds on existing research and models for understanding occupational stress. Semi-structured interviews and questionnaire measures were carried out with a sample of fifty-nine members of nursing staff employed in acute in-patient psychiatric care in Royal Dundee Liff Hospital. The results are discussed in the context of the current literature, and the implications of high levels of psychological symptomatology and burnout in the nursing service are considered.

CHAPTER 1. INTRODUCTION

1.1 Violence within the National Health Service

1.1.1 Introduction

“Violence, and the threat of violence, puts people off working in the NHS, and makes others give up. The cost of violence against staff is great. Victims can suffer physical and psychological pain. Confidence can be irrevocably dented and stress levels rise. The NHS has to meet sick pay for time off work and the additional cost of temporary cover; fees for legal action; counselling; loss of experience and the cost of training, if staff leave.”

John Denham, Government Health Minister, 1999

“Violence is endemic in the mental health treatment setting, and constitutes a real, if unacknowledged occupational hazard.”

Soloff (1983)

The issue of violence and aggression against staff employed in National Health Service (NHS) settings has seen a huge increase in public profile in the past few years. The National Control and Restraint General Services Association (Scottish Forum), hosted a national conference in November 1999, to address the issue of NHS staff being assaulted by patients in the workplace. It was reported that in the previous year, a staggering total of 11,000 NHS staff had been attacked by patients, whilst at work. The conference was attended by politicians, police, union officials and officials from the Health and Safety Executive (HSE), as well as nursing staff and members of the public. The widespread interest in this conference highlighted the emerging interest in such issues in the current political climate. Healthcare Trust management have voiced an increasing concern over workplace violence, which has been emphasised by the recent proliferation of high profile media cases of staff being assaulted in NHS settings. One such recent example reported in the national press related to a psychiatric nurse who had been subject to a violent attack by a patient and had subsequently attempted to sue her employers (Dumfries and Galloway NHS Trust) for a sum in excess of a million pounds in damages, on the grounds that they had failed to provide her with a level of training sufficient for her to be able to deal adequately with such violent patients.

1.1.2 Definition of violence and aggression

Violence and aggression against NHS employed staff have recently been defined as, 'any incident in which a person working in the healthcare sector is verbally abused, threatened or assaulted by a patient or member of the public, in circumstances relating to his or her employment' (Health & Safety Commission, 1997). Definitions such as this have increasingly recognised the potential impact not only of physical assault, but also verbally abusive and threatening behaviour. Morrison (1992) detailed an eight-point hierarchy of violent and aggressive behaviour amongst psychiatric in-patients, with aggression defined as, 'any threatening verbal or physical behaviour directed toward self or others', and violence defined as, 'any physical behaviour that resulted in harm to self or others'. Definitions of violence and aggression have tended to form a continuum ranging from those which have only included physical assaults, to broader definitions which include threats, intimidation, verbal abuse, and emotional or psychological abuse. Recent research suggests that the consequences of non-physical violence may well be as serious for the victim as physical assaults (Owen, Tarantello, Jones & Tennant, 1998a; 1998b). However, methodologically non-physical violence is more difficult to measure. Surveys often underestimate these incidents, because victims either forget to report less 'serious' incidents, or do not consider non-physical violence serious enough to report.

1.1.3 Rates of general workplace violence

A British Crime Survey (BCS) report (Budd, 1999) summarised the findings on violence at work from four recent British crime surveys. In general, physical assault at work was found to be on the increase, with the suggestion that the workplace was the fastest growing of all locations for violent crime. Further crime survey data suggested that incidents of work-related violence had doubled between 1991 and 1995. This document was based on statistics gathered in England and Wales, and used a definition of violence that included verbal threats, as well as physical assaults. It was estimated that there were 1.2 million incidents of violence at work in England and Wales in 1997. This figure incorporated 523,000 physical assaults, and 703,000 verbal threats, leading to the finding that 2.8 percent of working adults had been victims of at least one violent incident whilst at work, during this year.

1.1.4 Rates of violence in healthcare settings

A series of government reports have focused on the problems of physical violence and assault for staff in healthcare settings. A survey carried out by the Health and Safety Commission (HSC) health services advisory committee (HSC, 1997) concluded that violence within

healthcare settings was becoming a significant problem, affecting a wide range of individuals in both hospital and community based occupations. The 1999 BCS report (Budd, 1999) found that nurses and healthcare professionals were at particularly high risk of encountering a violent incident at work. Overall, nurses comprised the second highest risk category of all occupational groups - next to police - of being physically assaulted, at four times the national average risk. Nurses were also found to be at twice the national average risk of being verbally intimidated or threatened.

Reports from the Royal College of Nursing (RCN) in 1994 and 1998 highlighted the nature and extent of the problem of violence faced by nurses, in both community and hospital settings and provided recommendations on recognising consequences and managing risk. A recent high profile government campaign entitled, 'We don't have to take this' (Department of Health, 1999) has recommended a policy of 'zero tolerance' for physical violence and verbal threats made against NHS employed staff. This campaign has highlighted the serious and potentially life-threatening nature of violence in the workplace at a national level, thereby bringing the nature of the problem firmly into the public conscience.

1.1.5 Costs of violence

A National Audit Office study (1996) discussed the expense of violent incidents to the NHS, including costs of staff absenteeism, benefits paid out for injuries, early retirement enforced on injured staff, compensation claims, fines and legal costs, and increased insurance premiums as a result of these factors. The report concluded that violent incidents incurred a severe financial cost to the NHS. Previously, Hunter & Carmel (1992) had carried out a study attempting to place a figure on the monetary cost of violence against staff in psychiatric facilities. Despite the difficulty of being precise in a study of this nature, an estimate of the total loss to a single hospital over a one year period amounted to \$766,290. Albeit an approximation, this figure is extraordinarily high and, although this study was based on information gathered from one hospital only, it is likely that, given similar rates of violence, high costs would also be found should such evaluations be undertaken in other areas, with obvious implications for an already cash-strapped NHS in the UK.

The 1999 BCS report (Budd, 1999) estimated the costs of violence at work, in terms of the costs of time off work, compensation claims, help and support for victims, and costs of police involvement, concluding that violence at work has far-reaching implications, in terms of both financial and human outlay. The physical and emotional consequences of violence at

work were also investigated. The physical consequences for individuals were described in terms of injuries sustained, with almost half of these assaults resulting in some type of physical injury being sustained by each victim, although for the most part minor. Almost three-quarters of victims of violence stated that they had been emotionally affected by the incident. Amongst the types of emotional reactions reported by victims were anger, shock, fear, as well as stress, depression, frustration and annoyance. However, reports of this nature are anecdotal, and fall short of in-depth analysis of the types of incidents experienced, the range of consequences, and the ways in which individuals cope with these experiences.

A possible effect of frequent incidents of assault in psychiatric settings may be that they are a contributing factor to the phenomenon of 'burnout' in mental health professionals, and further impact on psychological and physical health of individuals. Jones, Janman, Payne & Rick (1987) specified three types of demands made on nurses working in secure psychiatric hospitals, namely supervisory, administrative and aversive demands, concluding that aversive - which would incorporate violent and aggressive incidents - were most likely to determine the outcome of stress, in terms of psychological and physical well-being. Despite findings of this nature, there still seems to be a lack of research investigating the links between established rates of violence and aggression that nurses are experiencing, and mental health outcomes.

1.1.6 Violence in acute psychiatric settings

The risk of assault against staff employed in mental health nursing had been described as increasing yearly, to the stage where because such attacks were so common that they were described as an occupational hazard (Haller & Deluty, 1988). Indeed, Flannery, Hanson & Penk (1994) reported that patient assaults on staff members were the most frequent form of violence being experienced in the field of psychiatric care. The first systematic studies of violence by psychiatric patients were not implemented until as late as the mid nineteen-seventies, but it has to be assumed that, as an issue, violence against nursing staff in mental health settings has existed as a problem for as long as people have been employed in patient care.

Noble & Rodgers' (1989) study of violent incidents at a UK hospital highlighted the potential of violence in psychiatric work environments. They concluded that the patients most likely to be violent were those who had been admitted repeatedly, who had been diagnosed as

schizophrenic, or who were suffering from delusions and hallucinations - typically, the range of problems often observed in individuals receiving in-patient psychiatric care.

The 1994, 1996 and 1998 British Crime Surveys (Budd, 1999) highlighted the view that people employed in healthcare settings were at an increased risk of violence, in comparison to the general population. Possibilities raised as to why this might be so included the observation that work in healthcare settings involves contact with a wide range of people in a variety of contexts, which can often take place under stressful circumstances, added to which is the fact that many patients in healthcare settings may be predisposed towards violence. It was further highlighted that the circumstances, under which staff employed in acute psychiatric settings may have to work, are likely to exacerbate the potential for violent reactions in such situations. Such circumstances might include administering medication, having to provide or to withhold a service, or exercising authority. Furthermore, these circumstances are set within the context of individuals who are often mentally or emotionally unstable, who frequently can be under the influence of alcohol or drugs, and who also are under extreme stress, thereby increasing their potential for violence.

Owen *et al.* (1998a; 1998b) examined various violent incidents within in-patient psychiatric settings, among groups of repeatedly violent patients. Staff in three adult acute psychiatric units in a general hospital, and in two units in a psychiatric hospital were asked to record violent and aggressive incidents perpetrated against them by patients, over a seven month period. A total of 1,289 violent incidents were recorded during this period of time, perpetrated by 174 individuals, with 58 percent of these incidents reported as 'serious'. However, Davis (1991) reviewed studies examining the extent of in-patient violence, concluding that more serious incidents were rare, and that a minority of patients were responsible for the majority of assaults.

In a study of occupational violence amongst Swedish psychiatric nurses, Arnetz, Arnetz & Petterson (1996) detailed examples in which 30 percent of nurses had experienced violent incidents whilst at work. In a further study, Arnetz (1998) reported that a total of 684 violent incidents had been recorded in 47 healthcare work places over a period of 12 months. Noble & Rodger (1989) and Carmel & Hunter (1989) both reported a proliferation of violent incidents and assaults in psychiatric settings against nursing staff, but failed to take into account anything other than physical assault, thus missing valuable sources of information relating to the incidence of verbal aggression. Other studies have highlighted the prevalence

of verbal threats made against nursing staff (e.g. Owen *et al.*, 1998a; 1998b). Furthermore, it is likely that many studies, which rely largely on retrospective data from formal incident report forms, may underestimate the actual incidence of physical assaults (Haller & Deluty, 1988). Indeed, Lion, Snyder & Merrill (1981) estimated that the number of actual incidences could be up to five times that which was reported but, because of the high frequency of incidents, staff tended to become inured and, further, found repeatedly making official reports too troublesome a task. Lion *et al.* (1981) argued additionally that nurses might also fear being accused of performing inadequately in such situations. In combination, these factors could lead to under-estimations of actual incidence.

Incident report forms are routinely completed by staff employed in the in-patient wards of the psychiatric hospital in Dundee, which is the subject of the present study. These report forms were collected and collated over the course of a two year period, and were examined in the preliminary investigations leading up to this study. During this period of time, a relatively high number and a wide variety of incidents were reported, most of which included physical assault and actual bodily harm inflicted by patients. However, verbal accounts, from nurses employed in the wards on which these reports were based reflected the patterns reported in the studies indicated, namely that a significant number of incidents were not being recorded, including a high number of verbal threats, verbal abuse and verbal aggression.

Despite the increasing rates of violence and aggression in NHS settings, little research appears to have been undertaken to investigate these potential outcomes for nursing staff. Although these studies have highlighted incidence and patterns of violent and aggressive behaviour, they have been able to say little about consequences and outcomes for the staff involved in these situations. In order to set a context for examining the potential consequences of violence and aggression in healthcare settings, an examination of the study of stress and models of stress which have been influential in the study of the field of adverse working conditions, is required.

1.2 Occupational stress

1.2.1 General definition of stress

Modern definitions of stress have conceptualised a psychological state which is part of, and reflects a wider process of interaction between individuals and their environment (Cox, 1993). Emphasis is placed on an individual's idiosyncratic 'cognitive appraisal' of a given situation. The process of cognitive appraisal involves an individual's continual monitoring and evaluation of their transactions with the environment. The demands placed on that individual, the constraints under which they have to cope, the support given to them, and the personal characteristics and coping resources of the individual all have emerged as key concepts. The stress process can thus be considered as a dynamic relationship between demands of the environment, the individual's perception of the environment, experience of stress, and changes in cognitive, behavioural, emotional and physiological outcome. Stress may be experienced as a result of exposure to a wide range of demands and, in turn, can contribute to an equally wide range of health outcomes. Cox (1993) has described stress as 'a link between hazards and health'.

1.2.2 The concept of occupational stress

Over the past few decades, evidence has linked the experience of stress at work (or occupational stress), with a negative impact on the health of the individual and, thereby, a further impact on the organisations within which that individual is employed through financial costs and absenteeism. A vast body of research has arisen addressing this area, which has used the general concept of stress as a significant base upon which to gather together a broad literature detailing the many different problems and concepts related to work.

In the United Kingdom (UK), the Department of Health and Social Security collects data which estimates the likely extent and impact on work of stress related health problems, including work days lost due to sickness, injury and disability. It has been approximated that upwards of 40 million working days are lost each year in the UK, due to stress related disorders (HSE, 1990). Stress related illnesses have been estimated as being responsible for more absenteeism from work than any other cause (Rees & Cooper, 1992).

The concept of occupational stress is not a new phenomenon, but it is a relatively new concept and field of study (Holt, 1993). Occupational Health and Safety Acts, that passed through national governments in both Europe and the USA in the nineteen-seventies, helped

to crystallise the view of occupational stress as a phenomenon to be recognised, studied and understood. Much early research was characterised by disagreement over definitions, specifically with a lack of agreement over whether to conceptualise stress as a situational factor or as a reaction (physiological or psychological disturbance of a person's state). However, more recently, broad agreement has been reached through much of the literature base. Holt (1993) summed up the basic premise of the field of occupational stress research by stating that, 'some aspects of many kinds of work have bad effects on most people, under certain circumstances'.

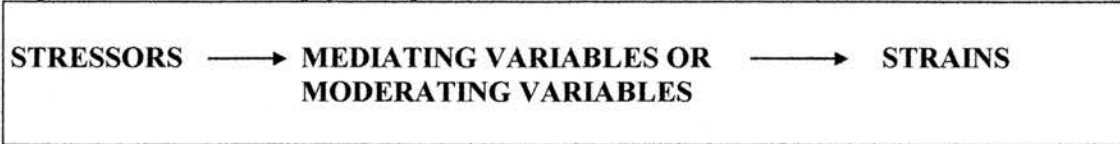
Research has linked occupational stress with health problems both of a physical and a psychological nature. Holt (1993) also summarised the research findings relating to the effects or products of occupational stress. Effects that have been measured include physiological (e.g. pulse rate, blood pressure, somatic complaints - Caplan, Cobb, French, Harrison & Pinneau, 1975), psychological (e.g. job dissatisfaction - Caplan *et al.*, 1975), and behavioural/social (e.g. burnout - Turnipseed, 1998, absenteeism - Akerstedt, 1976, increased use of drugs/alcohol, nicotine, caffeine - Caplan *et al.*, 1975; Mangione & Quinn, 1975). Furthermore, research has highlighted the effects of occupational stress in terms of illnesses and mortality of a psychosomatic (e.g. heart disease - Glass, 1977, hypertension - Cobb & Rose, 1973), psychological (e.g. depression - Ilfeld, 1977), and behavioural/social nature (e.g. suicide - Karcher, 1978). Cox & Griffiths (1990) reported on the undesirable consequences of occupational stress at employee, recipient of care, and organisational levels. This is underlined by the current general public and media interest in occupational stress, as concerns expressed in this area by national bodies, such as the HSE, and also international organisations including the International Labour Office (e.g. ILO, 1992) and the World Health Organisation (e.g. WHO, 1984), both of whom have been actively funding research in these areas.

1.2.3 Models of stress

Psychological approaches have dominated the contemporary research literature regarding the definition and study of occupational stress. Within such approaches, occupational stress is conceptualised in terms of a dynamic interaction between an individual and his work environment (Cox, 1978, 1990; Cox & Mackay, 1981; Fletcher, 1988). When studied from this perspective, stress can be inferred either from the existence of problematic interactions between the person and his environment, or measured in terms of the cognitive, emotional and behavioural reactions in the individual which underlie these interactions. Current

research suggests an overall increasing coherence in thinking regarding stress within this context. Variants of this approach dominate contemporary stress theory, and several distinct models within this approach can be identified (Cox, 1993). Psychological models of stress follow a similar basic structure to that outlined in Figure 1.

Figure 1 - Structure of a psychological model of stress



Within this structure, stressor variables (independent variables) are conceptualised as leading to outcome or strains (dependent variables) under certain conditions (mediator and moderator variables). In general, studies of stress utilising this model have incorporated types and ranges of independent variables that are either objectively defined, such as the physical properties of the working environment, or subjectively defined, which, for example, may be related to an individual's role within work. Dependent variables in occupational stress research have mostly been classified as 'strains' or illnesses, and defined in terms of the types of effects that have been measured i.e. physiological, psychological, behavioural or social effects.

Mediating variables and moderating variables have been described as interaction effects in the stressor-strain relationship. Throughout stress research literature, the terms 'mediator' and 'moderator' are often confused and taken to have the same meaning and, as such, are often used interchangeably. In order to clarify the distinction, a mediating variable should be thought of as a variable responsible for the transmission of an effect, but one which does not alter it. However, a moderating variable can be described as one which alters the strength and direction of a relationship between two other variables i.e. stressors and strains (Cox & Ferguson, 1991). Earlier models of occupational stress simply linked stressors with strain variables. Modern research adheres to the hypothesis that stressors have deleterious effects on health outcome only under specific conditions. Some of the mediating or moderating variables that have been investigated in occupational stress research have been characteristics of individuals (e.g. demographic variables, personality variables) or situational (e.g. coping resources, social support).

It is clear that employment takes place within a multidimensional and complex individual, social and cultural context, in which many variables can interact. Psychological models of

stress have the potential to account for wide variability in the potential outcome of occupational stress for an individual, by taking into account the many possible interactions between stressors, moderating/mediating variables and strains.

1.3 Occupational stress in healthcare services

1.3.1 Introduction

The study of occupational stress within healthcare services has become more prominent in recent years, in the UK. Healthcare is a growing service industry that employs vast numbers of people, many of whom have been reported as experiencing significant amounts of occupational stress (Payne & Firth-Cozens, 1987; Schaefer & Moos, 1993). Excessive amounts of occupational stress, coupled with an adverse work climate, can produce low morale, poor job performance and high staff turnover (Cox & Leiter, 1992). This is particularly salient in healthcare professions, given the potential impact of these issues on the overall quality and outcome of patient care (Motowidlo, Packard & Manning, 1986). The costs of occupational stress in nursing can be considerable (Hingley & Cooper, 1986) and can be measured in terms of the cost to the individual, to patient care and, on a wider scale, to the health service in general. It is believed that healthcare workers are particularly susceptible to developing stress related illness, because of the nature of their work (Payne & Firth-Cozens, 1987). In discussing reasons for this, Rees & Cooper (1992) suggested that healthcare professionals may face occupational stressors that are alien to other professions, which include dealing with people in situations which may have profound implications, often involving suffering, trauma, or death.

1.3.2 Occupational stress in the nursing profession

The nursing profession is one area of the NHS that employs a large number of people and, thus has attracted a significant amount of research focus which has specifically highlighted the potentially stressful nature of this field of work (i.e. Tyler & Cushway, 1992, 1995; Rees & Cooper, 1992; Duquette, Kerouac, Sandhu & Beaudet, 1994). Hospital nurses have been shown generally to sustain high levels of stress which has been demonstrated as originating from a number of different sources (Tyler & Cushway, 1992). There is also a substantial amount of evidence for higher rates of mortality amongst the nursing profession, which includes higher rates than the general population of deaths from suicide and stress-related disease, of 'burnout', of levels of absenteeism from work, of psychiatric admissions and of

physical illnesses (Firth & Britton, 1989; Tyler & Cushway, 1992). Specialist nurses, in particular, have been identified as being vulnerable to experiencing the negative consequences of occupational stress, such as physical and psychological ill health (Tyler, Carroll & Cunningham, 1991). Indeed, the findings from a study by Fagin, Carson, Leary, De Villiers, Bartlett *et al.* (1996) illustrated that 31 percent of a sample of ward based nurses employed in mental health settings demonstrated significant psychopathology, a figure higher than in other healthcare professions, or in the general population. Further studies (e.g. Whittington & Wykes, 1994; Caldwell, 1992) have investigated nursing groups, following assault by patients. Severe anxiety has been shown as a common outcome, in the absence of serious physical injury, with the development of post-traumatic stress type symptoms also commonly reported. Despite methodological difficulties - which have included small, unrepresentative sample sizes, insufficient measures, and measures of questionable reliability and validity - if such findings prove typical, it may mean, ironically, that one of the most hazardous work settings, in terms of poor employee mental health is mental health care facilities.

Sources of stress within the nursing profession have been described as numerous (Hingley & Cooper, 1986). It has been argued that a proportion of healthcare professionals view their work as a vocation or 'calling', rather than merely as a job (Cox & Leiter, 1992). This may be one contributing factor in the comparatively high experience of occupational stress within this section of the population, due to healthcare professionals having more of a personal emotional investment in their work. Cox & Leiter (1992) further discussed the culture and values of healthcare organisations, and their potential contribution to the experience of occupational stress within their workforce. They concluded that poor organisational support for the completion of tasks and the solution of problems can diminish the health of staff through increasing the potential for stress. Factors intrinsic to the occupation, such as stressful working conditions, increasing workload, and shift-work have been studied (e.g. Dewe, 1987; Tyler & Cushway, 1992). The professional role of the nurse within the organisation has been described as 'a potential source of ambiguity, conflict, a varying level of responsibility and other role stressors, all of which may contribute to the experience of occupational stress' (Tyler & Cushway, 1995). Furthermore, Tyler & Cushway describe relationships within work as operating in several different dimensions, such as relationships with work colleagues, patients, relatives of patients, or managers, thereby providing further potential for sources of stress. The opportunity for career development, as well as the organisational structure and climate, both of which have undergone changes with recent

government reforms, have also been described as salient. The interactions between such external characteristics and individual nurses are crucial to the overall experience of stress.

There is a relatively small body of research relating to nurses employed in mental health settings in comparison to that covering general nurses (Fagin *et al.*, 1996). As has been discussed already, the studies undertaken have often suffered from methodological difficulties. It has been established that the issues of violence and aggression against nurses employed in mental health settings, and the relationship of these to the experience of occupational stress, are major problems with potentially far-reaching implications. However, these issues and their consequences are areas that have not yet received sufficient research focus.

As psychological models have been successfully employed in the study of occupational stress, the current study employed this theoretical framework for the purpose of examining the extent, nature and consequences of violence and aggression directed towards nursing staff employed within the acute wards of a specific psychiatric hospital.

1.4 Stressor variables

1.4.1 Definition

In considering stress from the perspective of a response to a demanding environment, or to stressors within the environment, Elliot & Eisdorfer (1982) conceptualised four broad categories of stressor;

1. acute time-limited stressors,
2. stressor sequences (a series of events occurring over an extended period of time, as the result of an event),
3. chronic intermittent stressors (occurring daily, weekly or monthly),
4. chronic stressors (persisting continually).

The experience of violence, assault, trauma, and aggression within the workplace can be considered as stressor variables, within the framework of a psychological model of stress.

1.4.2 Types of stressors

An extensive body of research has investigated other independent variables that have the potential to contribute to the experience of stress. The work of Selye (1956), Holmes &

Rahe (1967), and Dohrenwend & Dohrenwend (1974), amongst others, has pointed towards a range of variables with the potential to act as stressors within this context, these authors having made attempts to identify and scale stressful life events. However, this work has less of an emphasis on chronic work stressors, and fails specifically to give work-related stressors the attention that they merit given some of the implications for health outcomes that have been established.

1.4.3 Stressors within the healthcare environment

There is an extensive literature on occupational stress, and a vast number of studies have investigated stressors or other independent variables with the potential to influence the overall experience of occupational stress within this context. Generally, stressors within an occupational context have been defined either objectively or subjectively. Objectively defined stressors that have been investigated have included the physical properties of the working environment, such as physical hazards, or noise (Glass & Singer, 1972), time variables, such as shift-work (Rentos & Shepard, 1976), or social and organisational properties of work and its setting, such as workload (Caplan, 1972). Subjectively defined stressors investigated have commonly included those related to role within the organisation - including role conflict (Kahn, 1973) and role strain (MacKinnon, 1978), or further variables such as role ambiguity, responsibility or degree of control over work processes (Caplan *et al.*, 1975; French, 1973).

In commenting on the literature relating to occupational stress, Rees & Cooper (1992) outlined that, alongside external stressor variables that may be intrinsic to any job - such as those mentioned, there is the potential influence of individual perceptions, frustrations and disappointments about career achievements, perceptions about the employing organisation, and the stress associated with being and working amongst other people. Furthermore, other tensions outwith work could be prominent, such as those at the interface between home and work.

Within the framework of a psychological model of occupational stress, violence and aggression experienced within the workplace can be considered as a stressor variable. Recently, workplace violence has been recognised as a serious issue within the nursing profession. However, studies of occupational stress specific to the nursing profession have generally given little recognition to these specific types of incidents as potential stressors. The frequency of incidents experienced is of particular interest. Reports such as those from

the British Crime Survey (Budd, 1999) and from the Health and Safety Commission (HSC, 1997) have indicated that nurses are experiencing a large range of incidents of violence and aggression within their places of employment, which includes verbally threatening and abusive behaviour, as well as physical assault and violence. Further incidents of a traumatic nature have been reported to be experienced by nurses within psychiatric settings. These have included incidences of suicide or attempted suicide, as well as self-harming behaviour. Research has established links between the experiences of violence and trauma, and negative health outcomes, with Owen *et al.* (1998a; 1998b) suggesting that the consequences of verbal aggression may even be as severe as from physical assaults. However, most studies have focused on specific stressful incidents. The present study aimed not to distinguish between different types of incident, but rather to look at the overall frequency of such incidents within a working context, and thereby to investigate the effects of higher frequencies of such incidents experienced within this context.

1.5 Mediating / moderating variables

1.5.1 Introduction

Within the framework of a psychological model of stress, there are a number of variables with the potential to influence the way in which stressors variables are appraised, leading to outcome or strain for the individual. Such variables may help to explain a broad range of potential outcomes from the experience of a more narrow range of stressors.

1.5.2 Personality variables as mediators/moderators in response to stressors

Individual differences as mediators of stress appraisal or moderators of the stressor-strain relationship can be mapped onto psychological models of stress (Cox & Ferguson, 1991). There has been an increasing interest among researchers in understanding individual differences and personality and the way in which they may be involved in the stress process focusing, in particular, on the role of personality as a moderator of stress perceptions (e.g. Cassar & Tattersall, 1998) and how this may relate to the development of psychological strain.

In reviewing the literature on personality variables and their potential influence on the stressor-strain process, Schaubroek & Ganster (1991) discuss a number of different personality variables that have been studied. Amongst these, 'type A' personality

characteristics and their potential influence on behaviour patterns were discussed, being further investigated by Houston & Snyder (1988). The 'internal versus external locus of control continuum', which was first postulated by Rotter (1966) as an individual personality variable proposed to affect the way in which stressors are appraised, is another variable that has attracted a considerable amount of research. Biographical and demographic factors such as age and sex have also been explored (e.g. Cooper & Baglioni, 1988; Jick & Mitz, 1985). Parkes (1990) reported that individual differences play a major role as determinants of the nature and magnitude of responses to occupational stressors, and of the several types of individual differences that have been found to be important, personality traits are one.

Positive affectivity (PA) and negative affectivity (NA) - as personality dimensions - are two variables that have been studied extensively in the stress literature and in studies of affective functioning. PA has been defined as a dimension which reflects the extent to which a person feels enthusiastic, active and alert. High PA is characterised by high energy, full consciousness and pleasurable engagement, whereas low PA is characterised by sadness and lethargy. NA has been defined as, 'a mood dispositional dimension whereby individuals tend to have a negative view of self' (Cassar & Tattersall, 1998). NA can be construed as a variable reflecting a predisposition to experience low self-esteem and negative emotions. NA has also been reported as having a tendency to moderate the relationship between occupational stressors and psychological symptomatology (Parkes, 1990) and, thus, can be considered as a personality variable that acts as a moderator of the stress response.

Factor analytical studies have shown PA and NA to be two highly distinctive dimensions. Research investigating the relationship of NA and PA to one another (Clark & Watson, 1988) show them to be only very weakly, if at all, correlated. Trait PA and NA have been found to correspond broadly to the dominant personality factors of extroversion and anxiety/neuroticism (Tellegen, 1985; Watson & Clark, 1984). Further research has suggested that a state of low PA and high NA is a major distinguishing factor in anxiety and depression (Tellegen, 1985).

PA has been associated consistently with emotional well-being in research studies. A state of high PA has been shown to be related to reports of higher levels of social activity and satisfaction and to reports of a higher frequency of pleasant events (Beiser, 1974; Bradburn, 1969; Clark & Watson, 1988; Watson, 1988).

High NA has been shown to be related to self-reported stress and poor coping skills, health complaints and reported frequency of unpleasant events. For example, a study by Thompson & Page (1992) reported on the role of NA in the development of occupational stress, in a nurses employed in an Australian psychiatric hospital. NA was shown to account for a significant proportion of the variance in the intensity of reported strain and, furthermore, was reported to have an effect on levels of reported job dissatisfaction. In the same study, the authors noted that PA made no significant contribution in outcome. It was concluded that the absence of NA, rather than the presence of PA, more clearly defined the effective self-regulation of stress.

Cassar & Tattersall (1998) examined the moderating influences of NA on occupational stress in a similar study of Maltese nurses. It was suggested that NA was a moderating factor between stressors and strains i.e. individuals exhibiting high NA qualities were more likely to react adversely to perceived stressors. This particular study aimed to test whether NA would exacerbate a stressor-strain relationship. The conclusions reached stated that individuals exhibiting high NA were the least likely to be satisfied at work and the most likely to report adverse stress related outcomes. Thus it was concluded that NA acts as a moderator for some (but not all) of the relationships between stressors and strain variables. Further research by Burke, Brief & George (1993) backed up the contention that NA was associated with self-reports of subjective stressors and strains, the conclusion being reached that individuals with high NA scores may be especially reactive to stressors.

NA and PA have been shown in studies to be related to the experience of burnout. Iverson, Olekalns & Erwin (1998) provided evidence for links between NA, PA, and occupational burnout; specifically an interaction was found between NA and the level of perceived social support, which influenced the experience of aspects of burnout in the workplace. Equally, Leiter & Harvie (1996) reported that high PA was protective against the experience of occupational burnout.

In summary, combinations of NA and PA interacting with stressors within psychological models of stress have been shown to be predictive of subjective well-being. Research has demonstrated typically that a state of high NA has the potential to increase susceptibility to events, resulting in negative experiences of emotions, and can affect the rate at which

stressors and strains are reported. Iverson *et al.* (1998) suggested two mechanisms underlying the relationship between high NA and self-reports of strain;

1. high NA creates a predisposition to interpret situations negatively, leading to an increased tendency to selectively process information that emphasises the negative aspects of any given situation,
2. high NA leads to a decreased tendency to control the environment actively.

In general, these mechanisms have been supported by findings from the research literature.

1.5.3 Coping strategies as mediators/moderators in response to stressors

A number of studies have investigated the moderating effects of coping strategies on the relationship between stressors and overall mental health outcome. Recent studies relating to occupational stress utilising psychological models have examined coping as a moderating variable in the stressor-strain relationship (Cox & Ferguson, 1991), and have consistently shown coping processes to have effects on adaptational response and outcomes, on measures of morale, social living or life satisfaction, on somatic health, and on functioning in work and occupational stress.

Lazarus & Folkman (1984) defined the process of coping as, 'constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person'. They proposed a categorisation of coping strategies into 'problem-focused' and 'emotion-focused' strategies. Coping was thus conceptualised as serving two broad functions, the first of which was to attempt to manage or alter the problem causing distress within the environment - 'problem-focused' coping; and the second of which involved the individual's regulation of his own emotional response to the problem - also known as 'emotion focused' coping. Coping was viewed, therefore, as cognitive and behavioural efforts enabling management of a stressful environment. Problem-focused coping strategies have been found to be more effective with stressors perceived as controllable, whereas emotion-focused coping was found to be most useful in situations that largely have to be accepted (Folkman & Lazarus, 1980). Perceived stressor controllability is thus an important situational variable. Research has shown that individuals use both of these forms of coping in virtually every type of stressful situation (Folkman & Lazarus, 1980, 1985). Several forms of problem and emotion focused coping have been identified in previous research (e.g. Folkman & Lazarus, 1985; Folkman, Lazarus, Gruen & DeLongis, 1986), which have included problem solving as a problem-focused strategy, with seeking social support and escape/avoidance as emotion-focused strategies.

Contemporary models of occupational stress emphasize the importance of cognitive appraisals of stressful situations in determining the choice and effectiveness of coping mechanisms. Cognitive appraisal has been described as including two component processes, primary and secondary appraisal (Folkman & Lazarus, 1980). Through primary appraisal, an individual judges whether a situation is stressful or not; in secondary appraisal, the individual evaluates coping resources and options available to them.

In reviewing the literature, Tyler & Cushway (1995) suggested that the strongest association between any form of coping strategy and outcome was a positive association between avoidance coping and psychological distress. Bowman & Stern (1995) studied coping strategies in hospital nurses, finding that greater use of avoidance coping strategies led to less favourable outcomes in terms of psychological health for nurses involved in stressful episodes. Furthermore, the view that coping effectiveness for occupational stress depends on the context in which specific coping strategies are used was supported. Leiter (1991), in a study of coping patterns as predictors of burnout, argued that avoidance coping strategies were ineffective in avoiding burnout, with control coping more effective in protecting against it. Parkes (1990) found support for the hypothesis that direct coping strategies moderated the relationship between occupational stress and mental health outcome, with emotion-focused coping strategies suggested as being less effective in reducing the risk of negative mental health outcomes.

Two studies by Whittington & Wykes (1994; 1996) studied coping strategies used by staff, following assault by patients. They argued that the coping strategy adopted by the individual is likely to influence the subsequent behaviour of that individual towards patients, thus having an influence on overall quality of care. Their studies reported on groups of assaulted staff, identifying two main coping strategies employed by assaulted staff members - escape/avoidance coping strategies, and confrontative coping strategies. Escape/avoidance coping strategies attempt to alleviate the effects of stressors, whereas confrontative coping strategies evaluate the problem and find solutions that reduce levels of stressors in the environment, mirroring Lazarus & Folkman's (1984) dichotomous distinction between problem and emotion-focused coping. Importantly, the use of coping strategies in general was shown to moderate the relationship between appraisal of the stressor and health outcome for the individual. Analysis of the effects of individual coping styles suggested differential effects on outcome. Confrontative coping strategies have a tendency to be more problematic

in terms of outcome for the individual, being associated with an increase in anxiety for the staff member post-assault.

Coping strategies have thus become increasingly recognised as potentially important factors in reducing the negative effects of occupational stress (Bowman & Stern, 1995). However, faced with a multitude of potential workplace stressors, situational diversity may mean that specific types of coping strategies may be differentially effective, depending on the type of stressors being faced.

Cooper, Sloan & Williams (1988) developed a scale for measurement of coping, based on a model of stress that indicates that, although there may be sources of stress and particular aspects of an individual's characteristics that may interact, the stress-related outcomes will be a function of the ability of that individual to cope. They based their scale on the measurement of a number of separate coping strategies:-

- i) Social support: measuring the degree to which individuals rely on others as a means of coping with stress. Support can take various forms, and may not necessarily be in the form of talking and, thus, there is recognition that the mere existence of supportive relationships can in itself be significant.
- ii) Task strategies: measuring the way the individual copes with stress by reorganisation of their work, from the 'micro' sense of tasks, through to organisational processes in the wider sense. The overall underlying theme of this coping strategy is coping with work organisation.
- iii) Logic: individuals can cope with stress by adopting an unemotional and rational approach to a situation. This may involve the suppression of any feelings that might be expressed, and involves actively trying to be objective.
- iv) Home and work relationship: recognising the dual role that the relationship between work and home lives can possess and examining its role as a coping strategy. This may take various forms, from the existence of certain qualities in home life to what the individual actually does when they are there.
- v) Time: recognising the importance of time management as a valuable skill, and its importance as a coping strategy.
- vi) Involvement: this characteristic involves the process of the individual submerging or committing themselves to the situation. In other words, coping by forcing themselves to come to terms with 'reality'.

The coping strategies used in this measure incorporate elements of Lazarus & Folkman's (1984) problem and emotion-focused coping. However, this measure achieves more specificity, and thus can give a broad appraisal of the specific coping strategies that are being employed by any given individual.

A coping strategy, that is probably cited by nurses and by other health professionals as the most effective, is talking to a friend or colleague at work (Tyler & Cushway, 1995). This strategy is well-known within the literature, and has been extensively studied as 'social support'.

1.5.4 Social support as a mediator/moderator in response to stressors

Social support is another variable that has been shown to be important in the stressor-strain relationship. In general, the role of social support in psychological health has received a great deal of attention in the research literature. Gotlib & Hammen (1992) reviewed the role of the social context in the development of depression. Studies have shown that perceptions of low social support can antedate the onset of depression, by increasing the individual's vulnerability to the debilitating effects of stressful life events. Brown & Harris (1978) and Costello (1982) reported in studies that a lack of a supportive intimate relationship is a critical risk factor for depression, especially when individuals experience major stressors. Research over the past fifty years has consistently demonstrated the significant relationship between psychiatric disorders and marital status (e.g. Bebbington, 1987; Lavik, 1982; Odegaard, 1946), with marriage or, more specifically, the presence of a confidante, generally being protective against negative mental health outcome. Given these findings, interest has grown in the role of social support, and perceived social support in the field of occupational stress.

Caplan (1974) defined social support as, 'the product of social activities, that enhance people's sense of mastery through sharing tasks, giving materials and cognitive assistance, and providing emotional comfort'. Social support is a variable that has widely been investigated in the literature on occupational stress. Tyler & Cushway (1995) commented on the potential 'buffering' effects that social support could have in determining the relationship between stressors and strains. Social support has been described as a complex phenomenon, which can interact with stressors and other variables in different ways to affect eventual health outcome for an individual (Hobfall & Vaux, 1993).

Models of the effects of social support have been prominent in the research literature over the past few decades, leading to a dynamic picture of social support as a constantly changing variable that can increase and decrease during periods of acute, chronic, or less frequent stressors. Vaux (1988) described social support as a higher order theoretical construct comprised of several legitimate and distinguishable theoretical components. Three social support constructs were distinguished - support network resources, supportive behaviour, and subjective appraisals of support. Individuals that belong to a strong social support network have access to support which tends to fulfil the needs both of everyday requirements, and those for more acute periods of stress. Schumaker & Brownell (1984) defined supportive behaviour as, 'an exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient'. Subjective appraisals of support have been defined as, 'subjective, evaluative assessments of a person's supportive relationships, and the supportive behaviour that occurs within them' (Vaux, 1988). Thus, an important distinction has been made, in that it is not necessarily the actual availability of support, but more the perception of availability that is the important variable in determining the effects on the stressor-strain relationship. Unfortunately, there are somewhat discrepant findings in the social support literature, due to different conceptualisations and measurements of social support. However, general agreement is reached, in that it is the measurement of perceived social support that is most appropriate.

Research has consistently shown that perceived social support can have an important effect on the final experience of stressful events and situations. The effects of social support on the experience of occupational stress in nurses has received attention in the research literature. Tyler & Cushway (1995), in a study of 245 nurses, hypothesised that social support would moderate the effects of stressors on the level of psychological distress experienced, such that those who were shown to have low levels of social support would be more reactive to stressor variables. They found that the buffering effects of social support were, in general, very small and non-significant. However, Munro, Rodwell & Harding (1998) assessed occupational stress in psychiatric nurses, and demonstrated that social support had a main effect on overall well-being and as a moderator for the experience of stress. Schmieder & Smith (1996) further examined the moderating effects of social support in nurses. They described that perceived social support was effective in moderating the relationship between levels of stress and levels of strain, but with the effects of social support becoming apparent only in high

stress environments. It was argued that increases in perceived stress are compensated by a mobilisation of resources to reduce, or to help to manage the perceived threat.

Leather, Lawrence, Beale, Cox & Dickson (1998) studied the moderating effects of intra-organisational support, discussing the consistent interaction reported between exposure to violence, and the availability of perceived support from colleagues within the organisation, in determining the size of negative effects upon individual well-being. They concluded that all forms of work related violence, including intimidation, verbal abuse and threat, should be seen as potential stressors in the work environment, the negative effects of which can be moderated by perceived support from within the organisation, but not from that perceived to be from other informal sources, i.e. family and friends.

A study by House & Wells (1978) investigated the effects of social support on work stress, health, and the relationship between stress and health, in a sample of approximately eighteen hundred manufacturing workers. House and Wells aimed to distinguish between two types of support - emotional and instrumental, from four different sources - work supervisors, co-workers, spouse/partners, and a combined category of friends and relatives. Emotional support was described as involving support for the individuals' emotional response to stressful situations. Instrumental support involved support from sources within the work environment, focusing more on the stress within the environment and less on the emotional reactions to it. Instrumental support, in particular, was found to moderate perceived work stress, which ties in with the findings from the Leather *et al.* (1998) study. Caplan *et al.* (1975) showed that these results generalised to other occupations. The conclusions reached were to the effect that social support can reduce perceived work stress, improve health, and buffer the impact of work stress on health.

Overall, social support can be viewed as a valuable commodity, with those individuals possessing high levels of social support being better off in terms of general health, in most instances, than those with low levels.

1.6 Strain variables

1.6.1 Introduction

Strains are postulated as being the outcome variables of the interaction between stressors and mediating/moderating variables (see figure 1, page 9). Outcome measures of general health, including physical and psychological well-being, form an important part of the general literature on stress.

1.6.2 General health outcome

A vast body of research over the past thirty years has linked the experience of stress inextricably with negative consequences for physical and psychological health. It has been established that stress is linked with physical and psychological health problems, including outcomes of a physiological, psychological and behavioural/social nature. However, the experience of stress does not necessarily lead to negative health outcomes (Cox, 1993). Often an individual's response to stress, both psychological and physiological, can be accommodated comfortably within the body's normal homeostatic limits and, while taxing the psychophysiological mechanisms involved, does not necessarily cause any lasting damage.

Research has indicated that while the experience of stress can affect individuals psychologically, it can also produce changes in their physiological function (Cincirpini, Hook, Mendes de Leon & Pritchard, 1984; Stainbrook & Green, 1983). However, many of these changes which simply represent mild dysfunction, possibly with some associated discomfort for the individual, are easily reversible and often spontaneously remit, although potentially damaging to the quality of life at the time. However, for some, and under some circumstances, such experiences can translate into poor work performance, into other psychological and social problems, and into poor physical health.

The experience of stress does not lead inevitably to the development of physical or psychological disorders. For some, however, stress does affect health. Further to this, a state of ill health can act both as a significant source of stress, and may also reduce an individual's ability to cope, thereby making them more sensitive to other stressors. The widely held assumption of a relationship between the experience of stress and poor health appears justified (Cox, 1988). In general, the strength of the relationship between the experience of stress, its antecedents and health, has been shown to be consistent, but moderate (Baker, 1985; Kasl, 1984).

1.6.3 Burnout

Burnout is an outcome variable which has been researched extensively amongst healthcare professionals and particularly in relation to the nursing profession. There is considerable research indicating that people employed in nursing are at a higher risk of burnout (e.g. Jones, 1982; Kilpatrick, 1989; Maslach, 1982; McConnel, 1982; Perlman & Hartman, 1982). The term was introduced in the nineteen-seventies by Freudenberger (1974) and has inspired a wealth of research activity in recent years. The syndrome describes an emotional and cognitive state that many mental health workers experience and observe among their colleagues, occurring frequently and to a wide range of highly motivated individuals. Burnout manifests itself in psychological, physical and behavioural reactions (Cherniss, 1980; Edelwich & Brodsky, 1980; Freudenberger, 1980; Jones, 1982; Maslach, 1982; Maslach & Jackson, 1981; Pines & Aronson, 1981). Definitions of burnout vary but, in general, all describe the end result of a process in which highly motivated and committed professionals lose their 'spirit' for their occupation. It has been defined as, 'a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment, that can occur amongst individuals that do people work of some kind' (Maslach, 1982). Burnout is considered an occupational hazard specific to the mental health services and has been found to affect mental health workers in all related fields. It has been described as resulting from the interaction between the individual and the environment and is a response to chronic occupational stress, with both job and individual characteristics being found important variables in determining the experience of burnout.

Typically, when someone is said to be suffering from burnout, they sustain emotional exhaustion and extreme tiredness. They lack energy, are irritable, anxious and angry, and experience feelings of hopelessness and helplessness. Frequently, individuals said to be suffering from burnout will complain of a variety of physical symptoms which include physical depletion, chronic fatigue, frequent and prolonged illness, headaches, sleep problems or ulcers. The emotional symptoms can comprise depression, fatigue, hopelessness and disillusionment, whilst attitudinal symptoms include negative and cynical attitudes towards work and service recipients. The external signs of burnout can include low morale and frequent absenteeism, leading to a general decrease in the quality of services delivered to people. It is an unpleasant experience for the individual and, invariably, costly for an organisation. However, burnout is not considered to be an illness, and is not equivalent to

depression (American Psychiatric Association, 1994; Jones, 1982). Burnout would appear to be a highly complicated phenomenon with many different dimensions.

Research has shown burnout to be related to generalised anxiety (Turnipseed, 1998), and to low self-esteem, with prolonged burnout being associated with significant health problems, which may also lead to absenteeism from work. Corrigan, Holmes, Luchins, Buican, Basit & Parks (1994), demonstrated that burnout is significantly correlated to anxiety and physical health, associated with negative job attitudes, and related to satisfaction with support from colleagues.

Pines (1993) argued that one of the underlying causes of burnout lies in people becoming overly emotionally involved in their work. It seems to have been a particular hazard in occupations in which professionals relate to their work as a 'calling' and, thus, the 'stakes' in their work are very high - people are trying to derive from work a sense of meaning for their whole lives, and thus when they think they have failed, burnout can be a consequence.

Turnipseed & Turnipseed (1991) argued that the primary causes of burnout are contained in the environment, but the intervening variables that influence when, or if burnout will occur, its duration, and its severity, are contained within the individual. Individuals vary greatly in their reactions to stressors, with responses ranging from slight physiological arousal and minimal performance deviation to substantial arousal and psychological distress.

In a review, Duquette *et al.* (1994) described the initiator variables of burnout to be numerous. They highlighted three groups of factors that appear to be related to burnout - organisational, personal, and buffering factors. They concluded, from a review of 36 studies, that burnout appeared to be the result not only of contextual factors, but also personal factors. Age has been found as the only socio-demographic factor that is an adequate correlate of burnout, with increasing age found to be negatively so correlated. Furthermore, certain personality constructs, levels of social support and coping strategies used in response to stressors have been found also to be correlated to burnout. Corrigan *et al.* (1994) found that age and work tenure were negatively correlated with burnout. Koniarek & Dudek (1996) found that, in general, social support appeared to be a weaker determinant of burnout than organisational and global stress. Turnipseed & Turnipseed (1991) concluded that burnout can be predicted significantly by available coping resources, but with other unexplored factors still potentially significant. Iverson *et al.* (1998), in establishing a causal model of

burnout and its consequences, considered the influence of positive and negative affectivity, finding that levels of negative affectivity and furthermore levels of social support interacted to increase levels of burnout.

Melchior, van den Berg, Halfens, Huyer Abu-Saad, Philipsen & Gassman (1997) linked several work related factors with burnout, including job characteristics and lack of support. Their study found that good support, job clarity and autonomy within work, low levels of work complexity and a social management style were linked to lower levels of this outcome. Furthermore, they reported that increased work experience, especially at a group level, was predictive of lower levels of burnout.

Fagin *et al.* (1996) reviewed three research studies on stress, coping, and burnout in mental health nurses. They suggested that there were three main moderators of burnout, namely, social support, hardiness (a personality construct) and coping style. However, these research studies drew their information from a heterogeneous group of nurses in seven different hospitals, which may have reduced variance due to the effects of the work environment and, therefore, weakened the findings.

In their review of burnout among mental health workers, Leiter & Harvie (1996) examined variables investigated for their effect on the experience of burnout. Gender, marital status, ethnicity, age or level of education seemed to have no significant bearing on whether burnout developed or not. Only years of experience in the profession have been shown to have a moderate effect. The antecedents of burnout seem to include certain individual characteristics, as well as both client characteristics and work characteristics. Social support and coping strategies also have an interactive effect. It was concluded that an integrative approach would be required for full understanding of this highly complex phenomenon.

Leiter (1991) examined coping patterns more closely as predictors of burnout, with the hypotheses that control coping strategies would be negatively correlated with burnout, whereas escape/avoidance coping strategies would be positively correlated with burnout. The findings of this study supported these hypotheses: escapist coping styles were found to be an ineffective means of avoiding burnout, with control coping being incompatible with burnout.

Corrigan *et al.* (1994), in a study of staff burnout within a psychiatric hospital found that, in general, a lack of collegial support was more predictive of burnout. Anderson (1991)

examined the wider function of social networks as support systems and their effectiveness in buffering the effects of occupational stress. This study utilised a social network approach to the exploration of the relationships between organisational stress, social support, burnout and absenteeism. The findings provided important insights into the ways in which individuals mobilise social support networks in coping with stress, thereby buffering against the potential experience of burnout.

Melchior *et al.* (1997) studied burnout in nurses employed in long stay psychiatric settings. Long term settings have been found to be particularly stressful places in which to be employed, particularly due to variables such as role confusion and high workload. Moore, Ball & Kuipers (1992) further looked at dimensions of burnout in staff working with patients who were mentally ill long-term. Staff working with this population generally have to deal with a wide variety of often difficult and challenging behaviour, and burnout can often be a consequence for nurses employed with this patient group. They found that relationships yielding a high level of emotional exhaustion can exist without poor general health or a lack of job satisfaction. Miller, Reesor, McCarrey & Leikin (1995) in further investigating burnout in nurses, raised the issues of physical assault and verbal abuse, and their likely stressful impacts and effects on the burnout model, concluding that workplace violence could decrease job satisfaction and be a salient factor in the development of burnout. Dietzel & Coursey (1998) examined emotional exhaustion in non-residential staff. One of their findings demonstrated that the frequency of difficult patient behaviour emerged as a potential predictor of emotional exhaustion. However, they also found no significant relationship between the amount of direct patient contact and the experience of burnout, conversely concluding that contact with patients was more a source of job satisfaction.

Bernier (1998) studied the successful recovery from severe burnout and other reactions to severe work related stress, concluding that, 'a multidimensional set of cognitions and behaviours are called upon to help the person to manage or tolerate the demands imposed by chronic or acute stressors'. There is general agreement on the manifestation of burnout, and the way in which it is an evolving phenomenon. There is, however, less discussion of the way in which recovery takes place.

1.7 Aims

This study proposes investigating, in some detail, the experiences of nursing staff working in the acute in-patient psychiatric wards of Royal Dundee Liff Hospital. Specifically, this study intends to use a psychological model of stress, as highlighted in figure 1 (page 9), to test the relationships between violent and aggressive incidents as stressor variables, selected mediating/moderating variables and strain variables in this sample.

Currently there is little literature studying specifically the experiences of violence in the workplace for in-patient psychiatric nursing staff, using a psychological model as examined above. Specifically this study aims to investigate the frequency of the specific stressor variables of violent, aggressive and traumatic incidents in the workplace in the context of mediating/moderating variables of premorbid personality dimensions (levels of NA and PA), coping strategies used in response to stressors and levels of social support. This study will also investigate the outcome, or strain variables for these individuals. Specifically, burnout and levels of psychological distress will be examined, in addition to the emotional and cognitive reactions of nurses to incidents of violence and aggression.

1.8 Hypotheses

The central hypotheses of this study are as follows:-

1.8.1 Hypothesis 1

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on Exposure to Aggression and Violence (EAV) scale*) will be related to higher levels of general psychological distress (*as evidenced by elevated scores on Clinical Outcomes in Routine Evaluation (CORE) - outcome measure (Mental Health Foundation & CORE System Group, 1999)*).

1.8.2 Hypothesis 2

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of 'burnout' (*as evidenced by scores corresponding to high burnout on Maslach Burnout Inventory (MBI - Maslach & Jackson, 1986)*).

1.8.3 Hypothesis 3

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of cognitive and emotional response (*as evidenced by elevated scores on Thoughts About Challenging Behaviour Scale (TACBS - Mitchell & Hastings, 1998) and Emotional Responses to Challenging Behaviour Scale (ERCBS - Mitchell & Hastings, 1998)*).

1.8.4 Hypothesis 4

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of absenteeism from work (*as evidenced by elevated scores on a self-report measure of absenteeism from work*).

1.8.5 Hypothesis 5

It is predicted that greater use of specific coping strategies to deal with stressors exhibited by nursing staff (*as evidenced by elevated scores on the Occupational Stress Indicator (OSI) 'How you cope with stress you experience' subscale - (Cooper et al., 1988)*), will be related

to lower levels of general psychological distress (*as evidenced by lowered scores on CORE outcome measure*).

1.8.6 Hypothesis 6

It is predicted that higher levels of social support amongst nursing staff (*as evidenced by elevated scores on a measure of social support - Social Support scale (House & Wells, 1978)*), will be related to lower levels of general psychological distress (*as evidenced by lowered scores on CORE outcome measure*).

1.8.7 Hypothesis 7

It is predicted that higher levels of the personality dimension of 'negative affectivity' (*as evidenced by elevated scores on this dimension on the Positive and Negative Affect Schedule (PANAS - Watson, Clark & Tellegen, 1988)*) will be related to higher levels of general psychological distress (*as evidenced by elevated scores on CORE outcome measure*).

1.8.8 Hypothesis 8

It is predicted that certain combinations of independent variables (*as evidenced by scores on EAV scale; Social Support scale; PANAS; OSI coping scale*) will predict significant amounts of variance in outcome (levels of general psychological distress; burnout; *as evidenced by scores on CORE outcome measure; MBI*).

CHAPTER 2. METHOD

2.1 Participants

This study concentrated on a cross-sectional sample of nurses employed in five acute psychiatric wards of Royal Dundee Liff Hospital (Appendix A contains further information relative to Royal Dundee Liff Hospital and each of these five acute psychiatric wards).

2.1.1 Participant identification

From January 2000, participants were identified for inclusion in the study. Nursing staff members employed in the five acute psychiatric wards of Royal Dundee Liff Hospital were considered. Inclusion criteria dictated that each participant required to be either Royal College of Nursing qualified or nursing assistant status, employed from NHS professional pay grade A to G. Student nurses were excluded, being supernumerary to the staff in the ward and, therefore, not on said pay scale. Application of these criteria yielded a total of ninety-one potential participants.

2.1.2 Participant consent

Each of the ninety-one potential participants identified was contacted by letter, offering an explanation of the study, giving assurances of anonymity and confidentiality, and outlining the study logistics (see participant information sheet, Appendix B). Subsequently, nurses were approached individually and asked if they wished to participate in the study, or not. Individual appointments were arranged with those who agreed, with consent forms signed during these appointments (see participant consent form, Appendix C). Fifty-nine nurses (65 percent of total nurses contacted by letter) agreed to participate. All participants fully completed qualitative and quantitative sections of the study (n=59).

Formal ethical approval from the Tayside Committee on Research Ethics was not required for the purpose of this study (for communication from Ethics Committee, see Appendix D). Permission was sought and obtained from the Clinical Nurse Manager with the responsibility for the management of all of the nursing staff employed within the Mental Health Directorate (for communication with Clinical Nurse Manager, see Appendix E).

2.2 Procedure

Each individual appointment was divided into two sections. The first involved carrying out a semi-structured interview with each participant, concerned with the collection of demographic and qualitative information. The second section of the study, running successively to the first, involved administering a series of questionnaires to each participant, thereby gathering the relevant quantitative information.

2.2.1 Administration of measures

Interviews were conducted with the participant and the interviewer present only. Privacy and confidentiality were observed at all times. Each interview took place in a private room, usually on the ward in which the participant was working, at a pre-arranged time, most often during the participants' work shifts (this arrangement having been approved by the Clinical Nurse Manager, prior to commencing data collection). Interviews generally took place at times when adequate staff cover was available on the ward, in order that patient care would not be compromised. It was emphasised that the participant was free to leave the interview in the event of an emergency on the ward, or at any time that they wished, during the proceedings.

In each interview, the order of presentation was:-

1. Semi-structured interview,
2. Exposure to Aggression and Violence scale,
3. Social Support Scale (House & Wells, 1978),
4. Occupational Stress Indicator 'How you cope with stress you experience' subscale - (Cooper *et al.*, 1988),
5. Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988),
6. Emotional Responses to Challenging Behaviour Scale (Mitchell & Hastings, 1998),
7. Thoughts About Challenging Behaviour Scale (Mitchell & Hastings, 1998),
8. Maslach Burnout Inventory (Maslach & Jackson, 1986),
9. Clinical Outcomes in Routine Evaluation - outcome measure (Mental Health Foundation & CORE System Group, 1999).

Each of the questionnaire measures was designed for self-completion, and were so effected during the appointment, by each participant. This helped to ensure full completion and to answer any questions regarding their completion. Each appointment lasted approximately

45-60 minutes in total (interview taking approximately 15-20 minutes; questionnaires taking approximately 25-35 minutes to complete).

2.3 Measures

2.3.1 Demographic information

A purpose designed semi-structured interview was developed specifically for use in this study, part of which was used to gather demographic information from each participant (see Appendix G for copy of semi-structured interview). The format of this section of the interview was adapted from the Occupational Stress Indicator 'Biographical Data Questionnaire' (Cooper *et al.*, 1988). This included information on age, gender, marital status, length of experience in nursing, and in acute psychiatric nursing.

2.3.2 Quantitative measures

The measures used for the purpose of collection of quantitative data are summarised below (see Appendix F for copy of each measure).

2.3.2.1 Exposure to Aggression and Violence (EAV) scale

This scale was purpose designed specifically for use in the present study, to assess the frequency and type of violent, aggressive and traumatic incidents (stressors) witnessed and experienced in the workplace. This scale was developed through the use of an iterative process. Following its initial development, the scale was piloted on a small number of NHS staff for comments and feedback, being further refined into its final form (see Appendix F for copy of EAV scale).

The scale yielded two frequency scores, for violent and aggressive incidents experienced and witnessed by the individual nurse in the workplace within the last 'few months' prior to the completion of the questionnaire. The present study was intended to pilot the utility of this scale, as no equivalent standardised measure was apparent from a review of the literature.

2.3.2.2 Social Support Scale (House and Wells, 1978)

The measure of social support used in this study was derived from questions employed to measure levels of social support in a study by House & Wells (1978) (see Appendix F). The scale consists of fourteen items, which distinguish between two types of support - emotional

and instrumental, from four different sources - work supervisors, co-workers, spouse/partners, and a combined category of friends and relatives. Single measures of emotional, instrumental and total social support are derived from each of these four sources, by totalling responses to appropriate items (score ranges 0-30, 0-9 & 0-39 respectively). Furthermore, individual scores for supervisors, co-workers, spouse/partners and friends/relatives (score ranges 0-18, 0-9, 0-6 & 0-6 respectively) are calculable and, thus, the effects of perceived social support can be examined. A large base of comparative data exists for the use of this measure. Reliability and validity data are not available for this measure.

2.3.2.3 *Positive and Negative Affect Schedule (Watson et al., 1988)*

The Positive and Negative Affect Schedule (PANAS) was developed by Watson *et al.* (1988) as a brief measure of 'positive affectivity' (PA) and 'negative affectivity' (NA) - see Appendix F. The schedule consists of twenty adjectives used to describe different feelings and emotions. Ten adjectives describe negative moods, while the other ten detail positive moods. Subjects rate their feelings and indicate the extent to which the relevant word describes their feelings, on a five-point scale, from 'very slightly or not at all' to 'extremely'. Scores are derived by adding item scores for the ten PA adjectives to obtain a PA score, and adding the remaining ten for the NA score. The schedule is self-administered and takes about five minutes to complete.

The PANAS can be used to assess either state or trait dimensions, by varying time instructions during administration. In doing this, the scale has been used to refer to six different time periods; from 'right now' to 'the past year', or a further general time instruction. For the purpose of the present study, the general time instruction was used i.e. 'indicate to what extent you generally feel this way, that is, how you feel on average', thus allowing trait PA and NA to be assessed.

In designing the PANAS, items were selected from an original set of sixty by using factor analytic techniques, leading to two subscales, each of ten items. Watson *et al.* (1988) demonstrated both subscales as having satisfactory validity, internal consistency and test-retest reliability on large clinical and non-clinical samples. Normative data from large clinical and non-clinical populations are available. The PANAS is favourable over other scales, due to its simplicity and ease of administration.

2.3.2.1 Occupational Stress Indicator - 'How you cope with stress you experience' subscale - (Cooper et al., 1988)

This coping scale is based on a model of stress that indicates that, although there may be sources of stress and particular aspects of an individual's characteristics which may interact, the stress-related outcomes will be a function of the ability of the individual to cope. The measure is a twenty-eight item questionnaire of potential coping strategies (see Appendix F). Subjects rate as to how extensively they use each of the potential coping strategies on a six point scale, from 'never used by me' to 'very extensively used by me'. This measure is divided into six subscales, each representing a separate coping strategy: 1) social support (score range 4-24), 2) task strategies (score range 7-42), 3) logic (score range 3-18), 4) home and work relationship (score range 4-24), 5) time (score range 4-24), and 6) involvement (score range 6-36). Accordingly, the scale yields scores on each of these individual subscales, which it is further possible to combine to obtain a total coping score (score range 28-168).

The Occupational Stress Indicator (OSI) was designed and developed, using a variety of statistical and interview-type data from a wide range of respondents in industry. The OSI is meaningful and practical, providing overall insight into a situation, rather than a precise measurement, examining stress at a group level, and examining variables and effects not easily measurable in other ways.

With the 'how you cope with the stress you experience' subscale, thirty items were content analysed in the construction of the scale, and subscales extracted. Each OSI subscale was found to have good content validity, in terms of both face validity and factorial validity. The subscales were found to have adequate construct and empirical validity and satisfactory reliability.

There are large normative databases available for the 'coping' subscale of the OSI. The OSI was developed and tested with large and varied normative samples across numerous studies. For most of the subscales, including the coping subscale, the normative values are satisfactory. Normative information is listed comprehensively in the data supplement published with the OSI.

2.3.2.5 *Clinical Outcomes in Routine Evaluation - outcome measure (Mental Health Foundation & CORE System Group, 1999)*

The Clinical Outcomes in Routine Evaluation (CORE) outcome measure was used in this study as a measure of general psychological distress (see Appendix F). This measure was designed to be suitable for use across a wide variety of service types, and taps into a theoretical 'core' of clients' distress, including subjective well-being, commonly experienced problems or symptoms and life-social functioning. In addition, items on risk to self, and to others, are included in the measure.

The thirty-four item CORE outcome measure addresses global distress and, therefore, is suitable for use as an initial screening tool and outcome measure. The mean item scores for the dimensions of well-being, problems/symptoms, life functioning, and risk can be used separately where that distinction may be helpful. The risk items are not regarded as a scale, but as clinical flags most useful in triggering clinical discussion. Thus, the mean of the remaining twenty-eight item scores can be considered as a global index of general psychological distress- the main design intention of the scale.

The measure has been extensively piloted, and resultant data (Mental Health Foundation & CORE System Group, 1999) suggests that it has considerable clinical face value, is valid and reliable, and distinguishes between clinical and non-clinical populations. The measure possesses advantages over the range of client-completed protocols utilised in existing measurement practices. It is brief and user friendly, comes equipped with thorough normative data for clinical and non-clinical populations (there is a quickly growing substantial data-set of comparative outcome data to complement research efficacy data), and has generic applicability across all levels of service delivery.

2.3.2.6 *Maslach Burnout Inventory (Maslach & Jackson, 1986)*

The 'Maslach Burnout Inventory' (MBI) was used as a measure of burnout for the purposes of this study (see Appendix F). The MBI was designed to measure the three aspects of the 'burnout syndrome', namely emotional exhaustion, depersonalisation, and lack of personal accomplishment, each aspect being measured by a separate subscale as detailed from the MBI. The emotional exhaustion (EE) subscale assesses feelings of being emotionally overextended and exhausted by one's work. The depersonalisation (DP) subscale measures an unfeeling and impersonal response towards recipients of one's service, care, treatment or instruction. The personal accomplishment (PAC) subscale assesses feelings of competence

and successful achievement in one's work with people. The frequency with which the respondent experiences feelings related to each subscale is assessed using a six-point, fully anchored response format. Burnout is conceptualised as a continuous variable, ranging from low to moderate to high degrees of experienced feeling, and not viewed as a dichotomous variable, which is either present or absent.

A high degree of burnout is reflected in high scores on the EE and DP subscales, and in low scores on the PA subscale. An average degree of burnout is reflected in average scores on the three subscales. A low degree of burnout is reflected in low scores on the EE and DP subscales and in high scores on the PA subscale. At present, scores are considered high if they are in the upper third of the normative distribution, average if they are in the middle third, and low if they are in the lower third. Furthermore, given the limited knowledge about the relationships between the three aspects of burnout, the scores for each subscale are considered separately, and are not combined into a single total score. Accordingly, three scores are computed for each respondent (score ranges: EE 0-54; DP 0-30; PAC 0-48).

The scale has been shown to provide good internal consistency and test-retest reliability. Substantial evidence for the convergent validity of the scale has also been demonstrated through the use of external validation. Furthermore, the MBI has been shown to have good discriminant validity from comparison with measures of other psychological constructs.

Large normative samples exist for the MBI. Means and standard deviations for each subscale can be computed for an entire group and can be compared to the available normative data, as well as to local norms.

2.3.2.7 Emotional Responses to Challenging Behaviour Scale (Mitchell & Hastings, 1998)

The Emotional Responses to Challenging Behaviour Scale (ERCBS) was developed as a measure of caregivers' emotional responses to challenging behaviour (see Appendix F). The scale was developed on the basis both of factor analysis and further item analysis related to the responses of a total of eighty-three care staff from residences for people with learning disabilities, when asked about their recent emotional reactions to aggressive challenging behaviour. The scale consists of two subscales:- feelings of fear/anxiety and feelings of depression/anger. Each item is scored according to the numbers on a four-point scale, yielding a subscale score on each of these dimensions.

Correlations between the subscales of the ERCBS and measures of care staffs' psychological well-being have provided support for the validity of the scale, the subscale scores being correlated both with General Health Questionnaire (Goldberger, 1978) and MBI scores, amongst others. Neither subscale appears to be adversely affected by socially desirable responding, although there may be a slight tendency for staff to underreport their emotional responses to challenging behaviour. The ERCBS is a self-report scale which is quick and simple to administer, taking approximately five minutes to complete.

2.3.2.8 Thoughts About Challenging Behaviour Scale (Mitchell & Hastings, 1998)

The Thoughts About Challenging Behaviour Scale (TACBS) was developed to complement the ERCBS (see Appendix F). In combination, they are designed to measure caregivers stress responses to challenging behaviour. The TACBS was developed in recognition of the realisation that stress responses may have cognitive as well as emotional components (in addition to observable behavioural effects). While the ERCBS addresses emotional responses, the TACBS addresses cognitions that may occur as a result of exposure to challenging behaviour. The TACBS measures 'intrusive thoughts' and 'avoidance' in the same way as measures of post traumatic stress, the items from the TACBS being adapted from the 'Impact of Events Scale' (Horowitz, Wilner & Alvarez, 1979).

At present, there is no psychometric data on this scale, which is scored by mirroring the structure of the Impact of Events Scale (Horowitz *et al.*, 1979), leading to two subscale scores:- 'intrusive thoughts' and 'avoidance'. As with the ERCBS, each item is scored according to the numbers on a four-point scale, yielding a subscale score on each of these two dimensions.

2.3.2.9 Levels of absenteeism - self report measure

Level of absenteeism from work was based on a self report measure during the semi-structured interview (see Appendix G). Scores were based on each participant's estimation of the number of days absent from work during the past year, within the following bands:- less than 5 days, from 1 to 2 weeks, from 3 to 4 weeks, from 1 to 2 months, and greater than 3 months. Self-reports of level of absenteeism from work have been found in research to correlate highly with objectively measured levels of absenteeism (Rees & Cooper, 1992).

2.3.3 Qualitative measures

A semi-structured interview was designed specifically for the qualitative section of the study (see Appendix G for copy of semi-structured interview). In addition to the demographic information, this interview was used to gather qualitative information in the following areas :-

- Characteristics of the sample group and general views on the nursing profession:- including lifestyle characteristics, views on nursing, job satisfaction, future prospects, and training.
- The acute psychiatric environment:- including views on patients, ward environment, and details of stressful incidents.
- Occupational stress:- including stress at work, violence and aggression, training for dealing with violence and aggressive patients, support for dealing with occupational stress, and personal coping.

2.4 Analysis of data

2.4.1 Protection of data / participant confidentiality

On completion of the interviews, the data collected was entered into a computer, under password protected files. The original interview measures were kept in a locked filing cabinet for reference purposes. However, the names of the participants were removed from any of the stored documentation. At no time was interview information containing participants names taken outwith the hospital premises.

2.4.2 Analysis

Data was analysed using SPSS version 9.0 for Microsoft Windows 98. Statistical analysis was guided by previous research.

CHAPTER 3. RESULTS

3.1 Introduction

This chapter is divided into five main sections. The first describes the demographic characteristics of the individuals that participated in the study. The second section summarises the descriptive information from the results of the quantitative measures. The third section provides statistical analyses of the relationships between stressors, moderating/mediating variables, and strain variables, as guided by a psychological model of stress. The fourth section provides analyses of the outcome variables used in the study, whilst the final section provides a summary of the qualitative findings.

3.2 Demographic results

Fifty-nine (n=59) subjects participated in the study, of which 37 (62.7 percent) were female, and 22 (37.2 percent) male - a ratio of approximately 2:1. The participants had a mean age of 36.32 years, a mean experience working in nursing of 10.44 years, and a mean experience of working in acute psychiatric nursing of 5.24 years (see Table 1). Marital status is shown in Table 2, married participants outnumbering single participants by a ratio of approximately 2:1. The samples were abstracted from staff grades classified from A to G (see Table 3), and approximately the same number of nursing staff from each of wards one to five participated in the study.

Table 1 - Age and Experience of Participants

	<i>N</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>SD</i>
age of participant	59	21	54	36.32	7.15
years of experience in nursing	59	.17	32.00	10.44	7.45
years of experience in acute psychiatric nursing	59	.17	17.00	5.24	3.60

Table 2 - Marital Status of Participants

<i>Marital Status</i>	<i>Frequency</i>	<i>Percent</i>
Married	28	47.5
Single	16	27.1
Divorced	7	11.9
Cohabiting	5	8.5
Separated	1	1.7
Total	59	100.0

Table 3 - Staff Grades of Participants

<i>Staff Grade</i>	<i>Frequency</i>	<i>Percent</i>
grade A	5	8.5
grade B	2	3.4
grade D	21	35.6
grade E	23	39.0
grade F	3	5.1
grade G	5	8.5
Total	59	100.0

3.3 Descriptive statistics and comparisons with normative data

For the present study, the descriptive statistics were calculated and recorded for each of the quantitative measures and the subscales therein and are reported in full in the following section. Where it has been possible, comparisons have been made between the patterns of results in the present study and patterns of results found in normative and comparative samples of data.

3.3.1 Stressors

3.3.1.1 Exposure to Aggression and Violence scale

The results from this scale are shown in Table 4. Nurses in this sample reported a mean score of incidents experienced of 8.71, with a mean score of incidents witnessed of 15.00. Thus, the mean score of total frequency of incidents (witnessed and experienced) was 23.71. The frequencies of stressors experienced and witnessed were coded on a scale of zero to five depending on actual frequency (i.e. score 0 = experienced on zero occasions; 1 = experienced on less than five occasions; 2 = experienced on five to ten occasions; 3 = experienced on ten to fifteen occasions; 4 = experienced on fifteen to twenty occasions; 5 = experienced on more than twenty occasions). The mean scores therefore equate to nurses experiencing an mean number of approximately 45 violent or aggressive incidents, witnessing approximately 75 violent or aggressive incidents, with an estimated total of 120 incidents experienced by each member of the sample, in the few months prior to the completion of the questionnaire.

Table 4 - Exposure to Aggression & Violence Scale - descriptive statistics

	<i>N</i>	<i>Min. score</i>	<i>Max. score</i>	<i>Mean score</i>	<i>SD</i>
frequency of incidents experienced score	59	0	29	8.71	6.16
frequency of incidents witnessed score	59	3	37	15.00	8.72
total frequency of incidents score	59	3	61	23.71	13.39

3.3.2 Mediators/moderators

3.3.2.1 Social Support Scale (House & Wells, 1978)

The descriptive results from this scale are shown in Table 5. For comparison, these results are shown alongside social support subscale scores from the results of a large scale study of occupational stress in NHS employees (Kilfedder; personal communication), which utilised the same social support measure.

Table 5 - Social Support Scale - descriptive statistics and normative data

<i>Subscale</i>	<i>N</i>	<i>Present Study</i>		<i>Comparison Study</i>		
		<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>
total social support (SS)	59	31.03	5.07	504	27.20	6.93
emotional SS	59	23.51	4.03	504	20.92	5.41
instrumental SS	59	7.67	1.38	505	6.29	2.04
supervisor SS	59	14.86	3.95	505	11.96	4.83
co-workers SS	59	8.14	1.17	507	6.70	2.02
spouse/partner SS	59	4.46	2.08	506	4.18	2.25
friends/relatives SS	59	3.88	1.81	506	4.37	1.75

A number of t-tests were carried out in order to check for significant differences between comparison study and present study means. Significant differences were found between means on total social support ($t(561) = 5.26$; $p < .001$), emotional support ($t(561) = 4.49$; $p < .001$), instrumental support ($t(561) = 6.9$; $p < .001$), supervisor support ($t(562) = 5.20$; $p < .001$), and co-worker support ($t(564) = 8.15$; $p < .001$). In each of these comparisons, scores in the present study were higher than in the normative data subject set.

3.3.2.2 Positive and Negative Affect Schedule (Watson et al., 1988)

Descriptive statistics are reported in Table 6 in comparison to those reported from normative samples. T-tests were carried out to compare means. Significant differences were found only in comparing mean NA in the present sample to that reported in a normative clinical sample ($t(720) = 3.46$; $p < .001$), and also to that reported in a non-clinical sample ($t(118) = 8.07$; $p < .001$), with both means in the present study significantly lower.

Table 6 - PANAS - Descriptive statistics and normative data

PANAS	N	PA		NA	
		Mean	SD	Mean	SD
Clinical sample	663	35.0	6.4	18.1	5.9
Non-clinical sample	61	32.5	7.5	26.6	9.2
Present sample	59	34.76	5.06	15.59	5.28

PANAS (Positive And Negative Affect Schedule),
subscales:- PA(positive affectivity); NA(negative affectivity)

3.3.2.3 Occupational Stress Indicator 'How you cope with stress you experience' subscale - (Cooper et al., 1988)

In Table 7, selected OSI descriptive data from relevant normative studies (Cooper et al., 1988) is listed for comparison alongside descriptive OSI data reported in the present study. T-tests were carried out to compare means between the present sample and the sample of nurses employed in wards where patients with learning disabilities were cared for. The only significant difference between means found was between 'home and work relationships' subscale ($t(102) = 2.639$; $p < .05$), with the score in the present study significantly higher.

3.3.3 Strains

3.3.3.1 Clinical Outcomes in Routine Evaluation - outcome measure (Mental Health Foundation & CORE System Group, 1999)

Descriptive statistics from a normative sample (Mental Health Foundation & CORE System Group, 1999) are reported in Table 8, for comparison alongside descriptive statistics from the present study. T-tests were carried out to check for significant differences between the means in the present study, clinical and non-clinical samples. The means for the present study were each found to be significantly lower than those in the non-clinical sample ($p < .01$), and in the clinical sample ($p < .001$).

Table 7 - OSI coping scale - Descriptive statistics and normative data (Cooper *et al.*, 1988)

OSI - coping subscales	N	SS		TS		L		H & W		T		I	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Community	803	16.44	3.03	26.22	3.82	12.26	2.23	16.52	3.28	14.39	2.25	23.77	3.28
Ambulance workers	465	14.70	3.71	24.70	4.83	12.64	2.77	16.07	3.97	13.72	2.95	23.33	4.32
GP's	917	14.69	3.11	25.10	3.29	12.20	2.01	15.78	3.38	14.73	1.85	22.55	3.11
Psychiatric out patients	102	14.49	3.64	23.96	4.68	10.84	2.58	14.69	3.58	13.95	2.49	20.54	3.96
Learning Disability Nurses	45	16.87	3.24	27.27	4.26	12.04	2.63	15.64	3.74	14.44	2.90	24.44	3.99
Present study	59	17.51	2.95	26.92	4.22	12.19	2.45	17.54	3.56	15.34	2.64	25.03	3.60

OSI(Occupational Stress Indicator).

Subscales:- SS(social support); TS(task strategies); L(legie);

H&W(home and work relationships); T(time); I(invovement)

Table 8 - CORE Outcome Measure - Descriptive statistics and normative data (Mental Health Foundation & CORE System Group, 1999)

CORE scales	Sub-scales :-	N	W		S		F		R		All non risk		All items	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
		863	2.37	0.96	2.31	0.88	1.86	0.84	0.63	0.75	2.12	0.81	1.86	0.75
		1084	0.91	0.83	0.90	0.72	0.85	0.65	0.20	0.45	0.88	0.66	0.76	0.59
		59	0.70	0.59	0.67	0.50	0.64	0.43	0.01	0.24	0.66	0.43	0.57	0.37

CORE(Clinical Outcomes in Routine Evaluation).

Subscales:- W(well-being); S(problems/symptoms); F(functioning); R(risk);

All non-risk(total of all items minus risk score); All items(total of all items)

3.3.3.2 Maslach Burnout Inventory (Maslach & Jackson, 1986)

In Table 9, subscale descriptive statistics for an overall normative sample (Maslach & Jackson, 1981) and for selected occupational groups within this normative sample are displayed, in comparison with MBI descriptive statistics reported in the present study.

Table 9 - MBI - Descriptive statistics and normative data (Maslach & Jackson, 1981)

<i>MBI</i>	<i>Sub-scales:-</i>	<i>EE</i>		<i>DP</i>		<i>PAC</i>		
		<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Overall sample		11067	20.99	10.75	8.73	5.89	34.58	7.11
Teaching sample		4163	21.25	11.01	11.00	6.19	33.54	6.89
Medical sample		1104	22.19	9.53	7.12	5.22	36.53	7.34
Mental health sample		730	16.89	8.90	5.72	4.62	30.87	6.37
Present sample		59	17.08	8.82	6.66	4.57	34.12	6.95

MBI(Maslach Burnout Inventory)

Subscales:- EE(emotional exhaustion); DP(depersonalisation); PAC(personal accomplishment)

T-tests were carried out between the means reported in the present study, and those reported in samples of mental health workers. The only significant difference was found between the mean scores on the PAC subscale ($t(787) = 3.476$; $p < .001$). Of the present sample, those reaching criteria for low, average and high levels of emotional exhaustion, depersonalisation and personal accomplishment, in comparison to the lower, middle and upper thirds of the 'mental health employee' normative sample, are reported in Table 10.

Table 10 - MBI - subscales comparative to normative data

<i>MBI</i>	<i>EE</i>		<i>DP</i>		<i>PAC</i>	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
<i>high</i>	19	32.2	21	35.6	12	20.3
<i>average</i>	15	25.4	19	32.2	16	28.8
<i>low</i>	25	42.4	19	32.2	30	50.8
<i>Total</i>	59	100.0	59	100.0	59	100.0

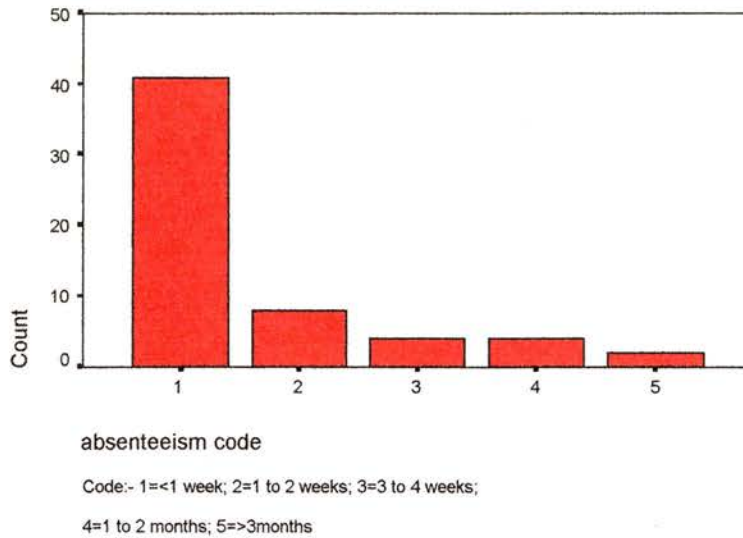
MBI(Maslach Burnout Inventory)

Subscales:- EE(emotional exhaustion); DP(depersonalisation); PAC(personal accomplishment)

3.3.3.3 Levels of absenteeism from work

Self-reported levels of absenteeism were coded (i.e. 1= absent for less than one week in the last year; 2= absent for between one and two weeks etc.). The frequencies are shown graphically in Figure 2.

Fig.2 - Self-reported levels of absenteeism



3.3.3.4 Emotional Responses to Challenging Behaviour Scale (Mitchell & Hastings, 1998)

The descriptive statistics from the sample used in the development of the ERCBS (Mitchell & Hastings, 1998) are shown in Table 11, in comparison to ERCBS descriptive statistics reported in the present study. T-tests carried out showed no significant differences in these sample means.

Table 11 - ERCB Scale - Descriptive statistics and normative data (Mitchell & Hastings, 1998)

<i>ERCB SCALE</i>	<i>N</i>	<i>d/a</i>		<i>f/a</i>	
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Care staff	83	6.87	4.79	3.33	2.54
Present study	59	8.14	5.01	3.97	2.17

ERCBS(emotional reaction to challenging behaviour scale).
Subscales:- d/a(depression/anger); f/a(fear/anxiety)

3.3.3.5 Thoughts About Challenging Behaviour Scale (Mitchell & Hastings, 1998)

Psychometric or normative data has not yet been made available for the TACBS. The descriptive statistics for the subscales reported in the present study are displayed in Table 12.

Table 12 - TACB Scale - Descriptive statistics

<i>TACB SCALE</i>	<i>N</i>	<i>it</i>		<i>av</i>	
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Present study	59	3.81	2.97	2.88	2.91

TACBS(thoughts about challenging behaviour scale).
Subscales:- it(intrusive thoughts); av(avoidance)

Table 13 - EAV-CORE/MBI/ERCBS/TACBS/absenteeism correlations

	Hyp.1	Hyp.2			Hyp.3		TACBS		Hyp.4
		MBI			ERCBS		it		ab
Pearson r (correlation coefficient)	CORE	EE	DP	PAC	f/a	d/a		av	
EAV(total frequency of incidents)	.04	.25	*.27	.09	*.24	** .35	.12	-.15	.22

** p < .01 (2-tailed).

* p < .05 (2-tailed).

EAV(Exposure to Aggression and Violence Scale; total frequency of incidents)

CORE score(Clinical Outcomes in Routine Evaluation; total of all items minus risk score)

MBI(Maslach Burnout Inventory). Subscales:- EE(emotional exhaustion); DP(depersonalisation);

PAC(personal accomplishment)

ERCBS(emotional reaction to challenging behaviour scale). Subscales:- d/a(depression/anger); f/a(fear/anxiety)

TACBS(thoughts about challenging behaviour scale). Subscales:- it(intrusive thoughts); av(avoidance)

ab (level of absenteeism)

3.4 Statistical analysis

For the purpose of the statistical analysis of the present study the significance, or alpha (α) level, was set at .05 acknowledging that, whilst this may have increased the likelihood of type I errors being made (Howell, 1992), it was justified by the exploratory nature of the study. A small number of missing values were replaced throughout the data set, by the use of the SPSS 'replace missing values' procedure.

The correlation coefficients from Hypotheses 1 to 4 - between EAV scale and outcome measures - are summarised in Table 13.

3.4.1 Hypothesis 1 - It is predicted that high frequency of violent and traumatic incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of general psychological distress (*as evidenced by elevated scores on CORE outcome measure*).

A Pearson correlation carried out between EAV and general psychological distress (CORE Score; total of all items minus risk score) provided a correlation coefficient of $r = .04$ (see Table 13). This was a non-significant finding.

3.4.2 Hypothesis 2 - It is predicted that high frequency of violent and traumatic incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of 'burnout' (*as evidenced by scores corresponding to high burnout on MBI measure*).

Pearson correlations were carried out between EAV and the three dimensions of burnout - emotional exhaustion (EE); depersonalisation (DP); personal accomplishment (PAC). The results of this are shown in Table 13. A significant positive relationship was found between EAV and DP ($r = .27, p < .05$). There were no other significant findings.

3.4.3 Hypothesis 3 - It is predicted that high frequency of violent and traumatic incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of cognitive and emotional response (*as evidenced by elevated scores on TACBS and ERCBS*).

Pearson correlations were carried out between EAV, the two subscales of the ERCBS - fear/anxiety (f/a) and depression/anger (d/a), and the two subscales of the TACBS - intrusive thoughts (it) and avoidance(av). The results are shown in Table 13. Significant positive correlations were found between EAV and f/a ($r = .24, p < .05$); and d/a ($r = .35, p < .01$). There were no other significant findings.

3.4.4 Hypothesis 4 - It is predicted that high frequency of violent and traumatic incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of absenteeism from work (*as evidenced by elevated scores on a self-report measure of absenteeism from work*)

A Pearson correlation was carried out between EAV and absenteeism; the results of this are shown in Table 13. No significant relationship was found.

3.4.5 Hypothesis 5 - It is predicted that greater use of specific coping strategies to deal with stressors exhibited by nursing staff (*as evidenced by elevated scores on the OSI coping scale*) will be related to lower levels of general psychological distress (*as evidenced by lowered scores on CORE outcome measure*).

Pearson correlations were carried out between total OSI scores, individual subscale OSI scores - social support, task strategies, logic, home and work relationships, time, and involvement, and CORE score (see Table 14). None of the correlations approached statistical significance.

Table 14 - CORE/OSI correlations

<i>Pearson r (correlation coefficients)</i>	<i>OSI - subscales:-</i>	<i>SS</i>	<i>TS</i>	<i>L</i>	<i>H&W</i>	<i>T</i>	<i>I</i>	<i>OSI - total score</i>
CORE Score		-.10	.00	-.09	-.08	.14	-.14	-.07

CORE score(Clinical Outcomes in Routine Evaluation; total of all items minus risk score)

OSI(Occupational Stress Indicator). Subscales:- SS(social support); TS(task strategies); L(logic);

H&W(home and work relationships); T(time); I(involvement)

3.4.6 Hypothesis 6 - It is predicted that higher levels of social support amongst nursing staff (*as evidenced by elevated scores on a measure of social support*), will be related to lower levels of general psychological distress (*as evidenced by lowered scores on CORE outcome measure*).

A Pearson correlation was carried out between total social support, social support subscales (emotional, instrumental, supervisor, co-worker, relative/friends, spouse/partner social support) and CORE score - the results are shown in Table 15. A significant relationship was observed between supervisor social support subscale and CORE score ($r = -.30$; $p < .05$). There were no other significant findings.

Table 15 - CORE/Social Support Scale correlations

<i>Pearson r (correlation coefficients)</i>	<i>em SS</i>	<i>inst SS</i>	<i>sup SS</i>	<i>co SS</i>	<i>r/f SS</i>	<i>s/p SS</i>	<i>total SS</i>
CORE Score	-.19	-.24	*-.30	-.12	.06	-.01	-.22

* $p < .05$ (2-tailed).

CORE score(Clinical Outcomes in Routine Evaluation; total of all items minus risk score)

SS(social support). Subscales:- em SS(emotional); inst SS(instrumental); sup SS(supervisor);

r/f SS(relative/friends); s/p SS(spouse/partner)

3.4.7 Hypothesis 7 - It is predicted that high levels of the personality dimension of 'negative affectivity' (as evidenced by elevated scores on this dimension on the PANAS) will be related to higher levels of general psychological distress (as evidenced by elevated scores on CORE outcome measure)

A Pearson correlation was carried out between negative affectivity (NA) dimension on the PANAS and CORE score. This yielded a correlation coefficient of $r = .54$, a significant positive correlation ($p < .001$) - see table 16.

Table 16 - CORE/PANAS correlations

<i>Pearson r (correlation coefficients)</i>	<i>NA</i>	<i>PA</i>
CORE Score	***.54	*-.32

*** $p < .001$ (2-tailed).

* $p < .05$ (2-tailed).

CORE score(Clinical Outcomes in Routine Evaluation; total of all items minus risk score)

PANAS(Positive And Negative Affect Schedule). Subscales:-

NA(negative affectivity); PA(positive affectivity)

Furthermore, the correlation coefficient between positive affectivity (PA) and CORE score was observed to have a value of $r = -.32$, yielding a significant negative correlation ($p < .05$). Thus, PA was found to have a significant negative correlation CORE score (see Table 16).

3.4.8 Hypothesis 8 - It is predicted that certain combinations of independent variables (as evidenced by scores on EAV scale; social support scale; PANAS; OSI coping scale) will

predict significant amounts of variance in outcome (levels of general psychological distress; burnout; *as evidenced by scores on CORE outcome measure; MBI*).

Inter-correlations of each variable in this section of the analysis were calculated and are displayed in Table 17. These inter-correlations were conducted in order to highlight patterns of relationships amongst variables and, so, guide the regression analyses. Hierarchical multiple regression analyses were then conducted to determine the extent to which predictor variables explained variance in each of two dependent variables - general psychological distress and burnout (emotional exhaustion; depersonalisation; personal accomplishment). Predictor variables, which showed significant inter-correlations, were entered into the regression analysis in predetermined stages, concordant with a psychological model of stress; demographic variables were always entered at the first stage of analysis, followed by stressor and mediating/moderating variables. These analyses assessed for significance of the contributions of predictor variables, at each stage of the prediction equation. A priori power analysis had indicated that in order to achieve a medium effect size with $\alpha = .05$, multiple regression with two independent variables would require a sample size of approximately 67, slightly greater than that which was achieved.



Table 17 - Pearson Correlation matrix of variables in regression analysis;
dependent variables - 1.EE, 2.DP, 3.PAC, 4.CORE SCORE

	1	2	3	4	5	6	7	8	9	10	11	12
1.EE												
2.DP	***.49											
3.PAC	-.10	-.17										
4.CORE score	***.61	*.30	*.29									
5.age	-.17	-.05	.15	*.25								
6.years of experience	-.10	-.07	.15	-.14	***.66							
7.years of experience in acute	.00	.13	.03	-.07	** .37	***.50						
8.EAV (total freq. of incidents)	*.25	*.27	.09	-.03	.07	-.11	-.07					
9.OSI total	.14	.12	.18	-.07	.11	-.06	.11	.17				
10.em SS	-.14	.02	.05	-.19	-.14	-.08	.02	-.16	*.24			
11.inst SS	-.13	.10	.04	*.24	.02	.02	.22	*.25	.09	***.54		
12.NA	***.44	*.24	-.15	***.54	.18	-.06	-.01	.01	.17	-.08	.07	
13.PA	-.21	-.15	***.46	**-.32	*.23	.06	.08	-.03	*.29	.16	*.28	.11

*** p < .001 (1-tailed).

** p < .001 (1-tailed).

* p < .001 (1-tailed).

EE(Emotional Exhaustion); DP(Depersonalisation);
PAC(Personal Accomplishment)

CORE score(Clinical Outcomes in Routine Evaluation: total of all items minus risk score)

NA(Negative Affectivity); PA(Positive Affectivity)

OSI total(Occupational Stress Indicator-total score)

em SS(emotional social support); inst SS(instrumental social support)

EAV(Exposure to Aggression and Violence: total frequency of incidents).

Predicting psychological outcome

3.4.8.1 Dependent variable 1:- CORE Score

The predictor variables of age, instrumental support and NA/PA were entered into a three-stage hierarchical regression analysis, in predicting the dependent variable of general psychological distress (CORE score). Summary of the hierarchical regression analysis is displayed in Table 18, including standardised beta coefficients (β), cumulative multiple correlation coefficients squared (R^2), adjusted or shrunken R squared (ΔR^2), F-values (F), degrees of freedom (df), and associated significance levels (p-value).

Stage	Predictor Variable	β	Cumulative		F (df)
			R^2	ΔR^2	
1	age	-.25	.06	.05	F (1,57) = 3.73
2	inst SS	-.23	.12	.08	F(2,56) = 3.64*
3	NA	.64***	.55	.52	F(4,54) = 16.46***
	PA	-.27**			

*** p < .001
 ** p < .01
 * p < .05

inst SS(instrumental social support)
 NA(Negative Affectivity); PA(Positive Affectivity)
 CORE score(Clinical Outcomes in Routine Evaluation; total of all items minus risk score)

The multiple regression analysis shows that the demographic variable of age did not account for a significant amount of the variance in general psychological distress. With the addition of instrumental support at the second stage of the analysis, a significant amount of this latter variance was accounted for; $\Delta R^2 = .08$, $F(2,56) = 3.64$ ($p < .05$). With the addition of the premorbid personality dimensions of NA and PA at the third stage of analysis, cumulatively, the regression model accounted for 52 percent of that variance; $\Delta R^2 = .52$, $F(4,54) = 16.46$ ($p < .001$). Inspection of the standardised beta coefficients (β), revealed that those both for negative and positive affectivity were significantly different from zero ($p < .05$).

Predicting burnout

3.4.8.2 Dependent variable 2:- emotional exhaustion

The predictor variables of EAV and NA were entered into a two-stage hierarchical regression analysis, in predicting the dependent variable of emotional exhaustion. Summary of the hierarchical regression analysis is displayed in Table 19.

Table 19 - Hierarchical regression analysis predicting EE score from (1)EAV (total frequency of incidents); (2)premorbid personality dimension - NA.

Stage	Predictor Variable	β	Cumulative		F (df)
			R ²	ΔR^2	
1	EAV	.25	.06	.05	F(1,57) = 3.77
2	NA	.44***	.25	.22	F(2,56) = 9.38***

*** p < .001

EE(emotional exhaustion). EAV(Exposure to Aggression and Violence: total frequency of incidents). NA(Negative Affectivity).

The multiple regression analysis shows that, only with the addition of the premorbid personality dimension of NA was there a significant amount of the variance accounted for in EE. Cumulatively, the regression model accounted for 22 percent of the variance in emotional exhaustion; $\Delta R^2 = .22$, $F(2,56) = 9.38$ ($p < .001$). From inspecting the standardised beta coefficients (β), it was found only that for negative affectivity was significantly different from zero ($p < .001$).

3.4.8.3 Dependent variable 3:- depersonalisation

The predictor variables of EAV and NA were entered into a two-stage hierarchical regression analysis in predicting the dependent variable of depersonalisation. Summary of the hierarchical regression analysis is displayed in Table 20.

Table 20 - Hierarchical regression analysis predicting DP score from (1)EAV (total frequency of incidents); (2)premorbid personality dimension - NA.

Stage	Predictor Variable	β	Cumulative		F (df)
			R ²	ΔR^2	
1	EAV	.27*	.07	.05	F(1,57) = 4.33*
2	NA	.24	.13	.10	F(2,56) = 4.09*

* p < .05

DP(depersonalisation). EAV(Exposure to Aggression and Violence: total frequency of incidents). NA(Negative Affectivity).

The multiple regression analysis shows that EAV accounted for a modest amount of the variance in the dependent variable of depersonalisation; $\Delta R^2 = .05$; $F(1,57) = 4.33$, $p < .05$. Cumulatively, with the addition of the premorbid personality dimension of NA, the

regression model accounted for 10 percent of the variance in the dependent variable depersonalisation - a modestly significant amount; $\Delta R^2 = .10$; $F(2,56) = 4.09$, $p < .05$).

3.4.8.4 Dependent variable 4:- personal accomplishment

Only the predictor variable of positive affectivity showed a significant correlation with the dependent variable of personal accomplishment and so a multiple regression analysis was not carried out.

3.5 Analyses of outcome variables

Pearson correlations were carried out to test the relationships between each of the outcome variables used in the present study. The results of these analyses are displayed in Table 21.

Table 21 - Pearson correlations between all outcome variables

	1	2	3	4	5	6	7	8
1.CORE Score								
2.MBI-EE	***.61							
3.MBI-DP	*.30	***.49						
4.MBI-PAC	*-.29	-.10	-.17					
5.TACBS-it	** .41	** .41	** .37	-.17				
6.TACBS-av	*.29	.20	.21	-.12	***.46			
7.ERCBS-f/a	** .34	** .40	*.31	-.11	***.46	.21		
8.ERCBS-d/a	** .44	***.53	***.52	-.02	***.52	*.30	***.66	
9.Absenteeism	.00	.12	.15	-.14	.19	.08	.00	.18

*** $p < .001$ (2-tailed).

** $p < .01$ (2-tailed).

* $p < .05$ (2-tailed).

CORE score(Clinical Outcomes in Routine Evaluation; all items minus risk score)

MBI(Maslach Burnout Inventory)

Subscales:- EE(Emotional Exhaustion); DP(Depersonalisation); PAC(Personal Accomplishment)

TACBS(thoughts about challenging behaviour scale). Subscales:- it(intrusive thoughts); av(avoidance)

ERCBS(emotional reaction to challenging behaviour scale). Subscales:- d/a(depression/anger); f/a(fear/anxiety)

Several of the outcome measures used in the present study displayed a significant amount of inter-correlation. However, it has been noted that self-reported measures of absenteeism from work did not have statistically significant relationships with the other outcome variables.

3.6 Summary of qualitative findings

The responses of each of the participants to the questions in the semi-structured interview were noted and are summarised in the following section. This analysis is presented in sections covering the general topic areas within the interview. Quotes have been provided, where appropriate, to illustrate some of the major points. The figures given beside each quote represent a randomly allocated number given to each participant and also their gender - male (*M*) or female (*F*).

3.6.1 Characteristics of the sample group and general views on the nursing profession

3.6.1.1 Lifestyle characteristics

A third of the sample were smokers, and of these, the majority smoked from sixteen to twenty cigarettes per day. Most reported not having changed their smoking habits in the past few months, but a few reported smoking less, or having given up altogether.

Although most of the nurses interviewed drank alcohol, the majority reported consuming small amounts - between one and ten units of alcohol per week. Very few reporting drinking over twenty units per week, and most reported no changes in their levels of alcohol consumption in the past few months; small numbers reported drinking more, drinking less, or having given up alcohol.

Approximately half of the sample described maintaining a desired body weight, with more than half taking regular planned exercise, but the majority had interests outwith work, and also found time to relax and wind down. Generally, the majority of the group mixed socially with their colleagues at planned nights out, with fewer socialising with work colleagues on a more regular basis.

3.6.1.2 The nursing profession

Nurses expressed a variety of different reasons for having joined the nursing profession. Over a quarter of the sample had family in nursing, which had nurtured their interest in entering the profession. Some explained that they had wanted to join the profession from a very young age, whilst others had learned about the profession through friends, or other external sources. A small proportion had entered the nursing profession only because it happened to be an option available to them.

[21,M] *"A few of my family are in nursing and so I suppose it was something that I decided to do from a young age"*

[13,F] *"I felt as if I had something to offer a helping profession and so I chose nursing"*

[7,M] *"I took a job here because I was unemployed, and I saw them advertising in the Courier"*

Almost a third of those interviewed had ended up employed in acute psychiatric nursing because of a decision that was not their own. However, many had developed an interest in mental health nursing and had thus chosen to come and work in the specific area.

[2,M] *"Management made the decision to put me into the acute psychiatric wards"*

[14,M] *"My skills are suited to this area [acute psychiatry] - I'm a people person"*

[18,F] *"In general nursing you don't tend to get as much time with the patients. I prefer what acute psychiatry has to offer."*

[39,F] *"I felt a need for some input here with people with mental health problems"*

3.6.1.3 Job satisfaction

Approximately half of the nurses interviewed described a feeling of satisfaction with their jobs. However, a fifth felt more dissatisfied with work, with the remainder undecided. Areas of work that were frequently mentioned as the most fulfilling, included the satisfaction gained from seeing acutely ill in-patients improving, leaving hospital and going back into the community. Aiding this process, by the building of relationships with patients, was highlighted by a third of the sample as a gratifying aspect of their work. Other factors, including having responsibility and working within a good peer group, and a pleasant ward atmosphere, were also discussed as rewarding.

A wide range of dissatisfying aspects of work were highlighted. Factors relating to patients were common, such as frustration at dealing with patients more resistant to treatment; dealing with hostile and aggressive patients; or frustration with referrals perceived to be inappropriate. Poor management support within work, excessive paperwork, a lack of staff, time and resources, an unhelpful ward skill mix and uncertainty over the future were raised as organisational and environmental aspects of work with which some nurses were dissatisfied.

[36,F] *"There's an element of people in hospital who shouldn't be here, and we're not really doing anything for them. They aren't genuinely ill."*

[32,F] *"The violence that we have to put up with is totally appalling"*

[19,F] *"The system is poorly equipped to deal with revolving door patients"*

[15,F] *"An old and archaic ward environment doesn't help; it isn't really conducive to patient care"*

3.6.1.4 Future prospects

Whilst many referred to themselves as ambitious and wished to achieve promotion, most considered the opportunities for promotion to be limited, and found this to be a source of frustration. Two-thirds of the sample had long term plans to stay within their current area of employment. However, about a third were considering alternatives, such as community based nursing. Uncertainty concerning employment prospects, given a pending change in ward location, was an issue for many.

[24,F] *"The higher up the pay scale you go, the further away from patient contact you go"*

[50,M] *"I'd like to get promotion, but there really isn't anything available for us"*

[1,F] *"With the new unit opening later this year, none of us even know if we've still got jobs or not"*

3.6.1.5 Training

Only a fifth of those interviewed believed that their experience of training had prepared them for their current job. Many considered that training gave too much of an emphasis on theory, without enough focus on practical work. Over a third considered that the greater proportion of their learning had been achieved whilst in the wards, post qualification. Of those that talked about training for working in acute psychiatric wards, the greater proportion considered that that they had not been given enough, with little emphasis on issues such as personality disorder, sexual abuse and dealing with aggression and violence. Many nurses felt that training deficits needed to be addressed, both at college level and post-qualification specifically with more acute psychiatric training.

[18,F] *"Training is superficially OK"*

[51,F] *"Training doesn't prepare you in the least. You are really sheltered from reality"*

[17,M] *"Training doesn't prepare you for the responsibility that you face when you are in this job"*

[48,F] *"It's only the tip of the iceberg. The textbook teaches you the ideal, but actual job experience teaches you the rest"*

[33,F] *"I've been here for over twenty years, and I don't yet have the full range of experience. You sometimes have to rely on the fact that the people that you work with will do"*

[22,F] *"Nothing can prepare you for the violence that you experience in here on a day to day basis"*

3.6.2 The acute psychiatric environment

3.6.2.1 Patients

Two-thirds of the cross section defined their work with acute psychiatric patients as rewarding, with a sixth being dissatisfied. Approximately half of the sample described the satisfaction of seeing acutely ill people improve and leave hospital as the most positive aspect of this area of work, together with the opportunity of building relationships with these patients and help them to improve being, at least, as important. Others enjoyed the variety that this population offered, or relished the challenge offered by working with a difficult client group.

Several negative factors were discussed in relation to this client group. A quarter of those interviewed highlighted patient admissions perceived to be unsuitable for acute wards, because they were not genuinely acutely ill. 'Revolving door' syndrome was referred to as a negative factor by a third of nurses questioned, whereby discharged patients fail to cope, and are frequently readmitted. The threat of violence was raised as an additional negative issue by a sixth of the sample. Frustration concerning the high prevalence of substance abuse was discussed, as well as treatment resistance.

[34,F] *"Loads of the patients in this ward just come in here to avoid having to pay rent, or so they'll qualify for benefits. They aren't actually ill"*

[24,F] *"Some patients don't want to accept help"*

[29,M] *"It's not so much revolving door, as swinging door!"*

[53,F] *"Its frustrating for staff when people come in, and leave the next day without having had any help"*

3.6.2.2 Ward environment

The majority of nurses reported variation in how busy they found their work environment - most preferred a balance. Over half of the sample mentioned that stressful incidents occurred

approximately weekly. A few nurses reported such incidents occurring daily, which most considered to provide a cumulative effect.

[52,M] "It's either feast or famine in here!"

[4,F] "Patients can become more dependent on you if the ward isn't busy"

[9,M] "If things are quiet in here, then it shows that we are reaching our goals"

[31,M] "Anticipation, and waiting for these incidents to happen is often most stressful"

[55,M] "It's a very unpredictable environment. Sometimes you don't know where your boundaries lie, and this can be difficult"

3.6.2.3 Stressful incidents

The range of incidents reported as being most stressful varied. Verbal or physical abuse, or the threat of violence were common, with physical restraint, patients absconding, or official complaints made by patients or relatives were also frequently reported as stressful. Patient suicide, attempted suicide, or incidents of self-harm were also discussed.

[7,M] "I witnessed a patient who had hung himself in the grounds of the hospital"

[9,M] "I was having to restrain this acutely psychotic patient while I was on night duty - there was only two staff on the ward, and I had to rely on another patient pressing the buzzer"

[32,F] "I saw a patient setting her clothing on fire"

[19,F] "I had my hair pulled by a patient, and my face was quite badly scratched"

[52,M] "A patient was shouting and swearing at me, and threatening my family"

3.6.3 Views on occupational stress

3.6.3.1 Stress at work

Virtually all of the nurses interviewed considered that it was accepted within the profession that nursing could be stressful, with most people believing this factor to be important. There was a belief that this acknowledgement was leading to the provision of backup support. Acceptance of the stressful aspects of the job, increasing awareness of stress, and identifying stress-related problems were identified as important factors, leading to the most effective means of dealing with stress.

[3,F]“If you don't recognise and discuss these issues, and if you let it carry on, you could develop anxiety and depression problems. You have to be able to recognise the initial stressors”

[17,M]“The male attitude is to deny that stress exists as a problem. This can take its toll on individuals”

[13,F]“Nurses are inclined to think that this is something that isn't going to happen to them, and that they won't be the ones that will get stressed. But I've seen a lot of my colleagues go down with stress”

[18,F]“Stress leads to sickness, and this leads to stress on other nurses. It has to be addressed as a problem - it's a vicious cycle”

[31,M]“Acknowledging that stress exists de-mystifies the job and makes it real”

[40,F]“There is a belief that stress is part of the job, and that it is a personal failing if you aren't coping”

3.6.3.2 Violence and Aggression

Almost half of the sample observed that the best way of dealing with a potentially violent situation was to attempt initially to de-escalate the situation verbally, and to use physical restraint procedures only as a last resort. Using common sense, staying level headed and using experience to anticipate potentially aggressive situations, to ensure the safety both of staff and patients, were raised as common means of dealing with aggressive patients in the ward environment.

[55,M]“You try to be proactive rather than reactive”

[17,M]“Sometimes de-escalation is a waste of time - the patient will attack you whatever you try to do, so just keep safe and avoid the situation”

[26,F]“Whatever you do, you don't try to play them at their own game”

[56,M]“Its sometimes difficult to stick to procedures in the environment that we work in - you have to adapt”

[15,F]“Judge it depending on the individual that you are dealing with”

[34,F]“A show of force just aggravates the situation”

[48,F]“You have to establish the limits and be quite rigid”

[24,F]“Inconsistency is bad”

3.6.3.3 Training for dealing with violent and aggression patients

A third of those interviewed provided positive responses in relation to training for dealing with violence and aggression, with a proportion considering that the current level of training had improved significantly. However, a number of problem areas were highlighted. Some raised the issue of insufficient levels of training. Difficulties concerning the gaining of access to training courses were discussed, where frequent over-subscriptions or cancellations tended to occur. Statutory training itself was criticised by some as being unrealistic, with too much emphasis being placed on the physical side of training and not enough focus on teamwork. Uniform issues were raised by several nurses, together with the impracticalities of having to deal with aggressive patients whilst in uniform causing frustration (whilst in training nurses were not required to wear uniforms).

[11,F] "There should be more training and education on violence - this population has changed considerably"

[50,F] "Training is useful, but not practical"

[19,F] "You tend to get a lot more verbal abuse than physical, so you tend not to use the control and restraint techniques very often"

[19,M] "The de-escalation training is too basic. Other techniques are available and are safer for staff and patients - we've gone too far down the line with control and restraint from prisons"

[59,M] "Protecting people who aren't trained becomes stressful in itself"

[50,F] "Uniforms don't make any sense - in a crisis, you become more worried about your skirt riding up your arse!"

3.6.3.4 Support for dealing with stress

Two thirds of the nurses interviewed believed that, generally, they did not receive enough support in their work. More than half of the sample thought that the level of support from management was insufficient, and too distant from staff at the ward level. A number of individuals explained that management were good in more serious situations, but tended not to offer much else in the way of support. Lack of clinical supervision - a more ward-based form of support - was raised as an issue. Concerns were expressed about the available external support, with some questioning confidentiality, in addition to a perceived weakness in admitting to a senior member of staff that they were not coping, being factors that inclined them not to accept that support when offered. In general, the predominating view was

expressed that there should be more assistance from a higher level, with support at a ward level having more structure.

[8,F] "Management should be providing more non-judgemental support - they are often too quick to point the finger of blame"

[36,F] "You need to feel that management are backing you up in a crisis - it doesn't feel like this for me just now"

[3,F] "You don't really get constructive criticism from management"

[11,F] "Management don't really know what is going on at the shop floor"

[5,F] "Managers are aware of the stress that goes on, but generally they don't convey this to the staff"

[43,F] "More continuous support should be available, and not just situation specific support. Small incidents are just as important."

[25,M] "Sometimes I feel like I'm just a number, regardless of whether I'm doing a good job"

[5,F] "I wouldn't feel confident going to management to talk about being stressed"

[26,F] "Clinical supervision should be more structured, and not just a fag and a chat out the back door!"

[36,F] "Formal, as well as informal supervision should be widely available. But this isn't always possible, due to time constraints"

Just over half of those interviewed discussed the use of formal debriefing sessions in response to stressful incidents which, as a result of the use of specially trained debriefing teams, appeared to be offered only for more 'serious' incidents. Three-quarters of the sample routinely used informal peer support as a means of dealing with the impact of violence, with most feeling that this was an adequate means of dealing with stress. External counselling was discussed as a further option only by a small portion of the sample. In general, nurses felt that avoidance, or doing nothing, were poor ways of dealing with stress.

[7,M] "Peer support works well when it is called for"

[25,M] "Outside help is OK, but it is better to get support form within the ward if possible. Your colleagues have a better understanding of what is going on"

[36,F] "I don't know of anything other than peer support"

[9,M] "Peer support is a good way of post incident analysis - it cuts out a lot of the crap, we all bounce ideas off one another"

[31,M] *“Reflective practice works. You go on your instincts at the time, and then you reflect afterwards with your colleagues and try to rationalise things”*

[58,M] *“Going to occupational health should be reinforced as a form of help. It's almost seen as a weakness to go to them”*

[24,F] *“The worst thing you can do is nothing and think that you are coping”*

Of the total sample, over a third had attended formal debriefing before, with just over half describing the experience as having been worthwhile. Some described these sessions as very helpful and supportive, whilst others found the experience less rewarding, with common criticisms regarding confidentiality within these sessions, and the timing - being too long after the initial incident.

[22,F] *“Debriefing is sometimes good for the large scale incidents, but not for the smaller ones. Its a very individual thing what you do in these situations”*

[37,M] *“Debrief isn't my style, but it obviously works for others”*

In considering what could be done to improve the situation, addressing staffing deficits and training needs were commonly discussed. Other issues discussed included balancing ward skill mix, creating more time and resources for training and increasing levels of structured peer support - such as clinical supervision, or increased contact with more positive reinforcement from management. Less than a sixth felt that everything possible was already being done.

3.6.3.5 *Personal coping*

Two thirds of the interviewees described having changed in the way that they coped with the more stressful aspects of their work. Many stated they had become more experienced, and had acquired more confidence to cope with stress and stressful situations more effectively. Others reported themselves as more cynical and hardened in their general outlook, and less tolerant of aggressive behaviour. Several nurses stated that they were more likely to relax more both within, and outwith work. A small number of nurses observed that they had developed better self-awareness and more effective communication skills.

[52,M] *“Experience has changed me. I don't push it anymore, and I don't feel guilty about this.”*

[53,F] *"These kinds of situations are now water off a duck's back!"*

[1,F] *"I've become more blasé, and more immune to difficult behaviour"*

[6,F] *"I've learned to slow down and share my experiences. I don't bottle things up. I'm not out to impress anyone anymore"*

In general, the majority of nurses felt that they coped well with the most stressful incidents, and tried to deal with stress actively, rather than trying to avoid it, whilst getting on with the job and trying to remain positive whenever possible. Almost all of the nurses interviewed referred to the use of jokes or black humour to help in coping with stress.

[55,M] *"It becomes robotic - you just do what you have to do."*

[29,M] *"Being realistic, not optimistic helps"*

[38,F] *"Be cynical!"*

[25,M] *"A sense of humour is encouraged. It is essential. It creates a sense of proportion and a sense of irony. We have to remind ourselves that we cannot cure people"*

[17,M] *"Camaraderie on this ward is important"*

CHAPTER 4. DISCUSSION

4.1 Introduction

The growing problem of aggression and violence in healthcare settings has been highlighted - specifically for staff employed in acute psychiatric nursing. The issues of potential costs and negative consequences of this problem for individual nurses and for healthcare organisations has also been discussed. These issues relate to the experience of occupational stress and, therefore, this phenomena and its study through the use of psychological models, has also been highlighted. The present study sought to apply such theory to the experience of aggressive and violent incidents within a specific healthcare work setting - thus, violent and aggressive incidents and their consequences were examined in relation to nurses employed in the acute wards of a psychiatric hospital in Dundee. Within psychological models of stress, mediating/moderating variables, which can influence the stressor-strain relationship, are important. A number of such variables were examined in the present study:- coping strategies; levels of social support; premorbid personality dimensions (levels of negative and positive affectivity). Outcome variables, otherwise known as strains, were further investigated with regard to this group. Specifically, burnout, and levels of psychological distress were examined, as well as the emotional and cognitive reactions of nurses to incidents of violence and aggression.

A number of central research questions - hypotheses - were proposed. The first section of this chapter analyses each of these hypotheses successively, placing the findings in the context of the previous research in this area and providing overall commentary on psychological models of stress. The second section discusses the descriptive findings of the individual quantitative measures. Qualitative findings are incorporated into these sections, where appropriate, with specific reference made as to their relevance to the experimental hypotheses. The final sections discuss conclusions and implications of the study findings, as well as making suggestions for future areas of research; methodological issues are also discussed.

4.2 Discussion of results of central research hypotheses

4.2.1 Hypothesis 1

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of general psychological distress (*as evidenced by elevated scores on CORE outcome measure*).

No significant relationship was found between levels of violent and aggressive incidents experienced in the workplace, and those of psychological distress. Thus, individuals experiencing higher levels such incidents are not reporting higher levels of psychopathology. However, violent and aggressive incidents are only one specific environmental variable. Early models of occupational stress did link stressors directly with outcome (e.g. Seyle, 1956). However, other variables were clearly important in determining outcome, in relation to the experience of stressors in the present study. This view is supported from the perspective of psychological models of stress, which postulate that mediating or moderating variables interact in the stressor-strain relationship (Cox & Ferguson, 1991).

4.2.2 Hypothesis 2

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of 'burnout' (*as evidenced by scores corresponding to high burnout on MBI measure*).

The second central hypothesis of this study postulated that a high frequency of violent and aggressive incidents, experienced within the workplace, would be related to high levels of burnout, indicated by a combination of MBI subscale scores - namely high levels of emotional exhaustion and depersonalisation, and low levels of personal accomplishment (Maslach, 1982).

Frequency of incidents showed a significant positive correlation only with levels of depersonalisation which, in the context of the present study, has been described as an unfeeling and impersonal response towards patients. Thus, while it has not been possible to reject the null hypothesis outright, it is suggested that, although a singularly greater frequency of aggressive behaviour and violent incidents experienced by the individual in the workplace may not lead to burnout, it can be seen as a contributing factor. It was also noted that the

relationship between frequency of incidents and emotional exhaustion, whilst non-significant, was in the expected direction. Accordingly, there have been tentative findings to the extent that the frequent experience of violence and aggression in the workplace combined with other factors, may be influential in the development of burnout. This supports Jones *et al.* (1987), who grouped aversive demands (such as those here highlighted) alongside supervisory and administrative demands in contributing to the psychological or physical well-being of nurses employed in acute psychiatric settings.

4.2.3 Hypothesis 3

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of cognitive and emotional response (*as evidenced by elevated scores on TACBS and ERCBS*).

This hypothesis tested the relationship between the frequency of violent and aggressive incidents experienced in the workplace, and the experience of adverse emotional and cognitive reactions. The findings suggested that frequency of incidents were related only to more severe emotional responses, measured in terms of fear/anxiety and depression/anger. It seems likely that the experience of a greater frequency of adverse stressful events in the workplace can lead to heightened emotional arousal, a prolonged state of which can, but does not necessarily lead to more damaging effects in terms of psychological consequences. Research has established that staff assault by patients can result in severe anxiety reactions, and post traumatic stress (Wykes & Whittington, 1996; Caldwell, 1992). However, not all experiences of stressful situations result in negative outcome for individuals and, while distressing the individual and affecting quality of life at the time of acute stress, recovery can be effective without long-term consequences (Cox, 1993).

4.2.4 Hypothesis 4

It is predicted that high frequency of violent and aggressive incidents (stressors) experienced by nursing staff within the work environment (*as evidenced by elevated scores on EAV scale*) will be related to higher levels of absenteeism from work (*as evidenced by elevated scores on a self-report measure of absenteeism from work*).

No significant correlations were found between frequency of incidents and self-reported levels of absenteeism from work, although it was observed that the relationships between

these variables were in the expected direction. So, in the context of the nursing group and the hospital environment investigated in the present study, the experiencing of stressful and unpleasant incidents within the workplace was not related significantly to whether these individuals had been absent from work.

There are a number of possible reasons for this. Coping and, in particular, social support may have been important. Levels of reported social support in the present sample were high, particularly at ward level, in relation to collegial and supervisory support in the working environment. Qualitative findings suggested that nurses were well supported within the ward environment, with effective systems in place to deal with the common occurrences of violence and aggression, as well as other stressors. Nurses in the sample recognised that supporting each other, and relying on teamwork, were important factors in dealing with an often stressful environment. Excessive absenteeism from work can put pressure on already stretched resources and, given the strong sense of teamwork apparent within the present sample, individuals may have felt less inclined to take time off work, to deal with stress as quickly as possible, and to 'get on with the job', as best as they could. Further pressures could have come from a general reluctance to admit to difficulties, so as not to 'lose face' in front of colleagues, nor to admit difficulties to management for perceived fear of damaging promotion prospects. These factors may all have been influential. It is apparent that acute psychiatric nursing, like all employment, takes place in a multidimensional and complex individual, social and cultural context, in which many variables can interact.

4.2.5 Hypothesis 5

It is predicted that greater use of specific coping strategies to deal with stressors exhibited by nursing staff (*as evidenced by elevated scores on the OSI coping scale*) will be related to lower levels of general psychological distress (*as evidenced by lowered scores on CORE outcome measure*).

It was expected that there would be a relationship between the increased use of coping strategies and lower levels of general psychological distress, with overall increased use of all coping strategies protective against the experience of negative outcome, similar to the findings of Whittington & Wykes (1994;1996), who observed that the general increased use of coping strategies moderated the relationship between stressor appraisal and health outcome. However, no significant correlation was found between the total coping score and general psychological distress. Analysis of separate coping strategies showed that none were

significantly related to general psychological distress. In attempting to explain this finding, it is possible that the particular coping strategies assessed by the OSI were of less relevance for nurses in the present sample. As already discussed, social support appeared to be important for the nurses interviewed, and so the use of this strategy ahead of others may have affected the findings from this measure. The OSI does include a social support subscale, however, but this did not emerge as having a significant relationship with psychological outcome.

The use of social support can be classified as an emotion-focused coping strategy under Lazarus & Folkman's (1984) distinction. Emotion-focused coping strategies such as social support have been described as more useful in situations where stressors are perceived to be uncontrollable and have to be accepted (Folkman & Lazarus, 1980). This applies to violent and aggressive incidents - the stressors investigated in this study.

4.2.6 Hypothesis 6

It is predicted that higher levels of social support amongst nursing staff (*as evidenced by elevated scores on a measure of social support*), will be related to lower levels of general psychological distress (*as evidenced by lowered scores on CORE outcome measure*).

The measure of social support incorporated in the OSI coping subscale (see Hypothesis 5) was not found to possess a significant relationship with general psychological distress. However, social support was examined more thoroughly, through the use of a single measure. An extensive body of literature exists illustrating the 'buffering' effects of perceived social support on the experience of negative outcome of occupational stress. This hypothesis aimed to test for a significant negative relationship between levels of perceived social support and levels of general psychological distress, and thereby add to the existing research literature. However, no significant relationship was found between total levels of social support and levels of general psychological distress.

The measure of social support used distinguished between perceived instrumental support and emotional support, and also provided further subscale scores for perceived support specifically from supervisor, co-workers, relatives/friends and spouse/partners. No significant relationships were found in analysis of correlations between emotional or instrumental social support and general psychological distress. However, it was noted that, despite being non-significant, the relationships were in the expected direction. From analysis of the more specific subscales of the social support measure and having looked at their

relationships with general psychological distress, it was apparent that the only significant association was a negative correlation between levels of supervisor support and general psychological distress, the other subscales producing non-significant correlations. Thus, those individuals reporting higher levels of support from their workplace supervisors were experiencing lower levels of general psychological distress. This is consistent with the findings of Leather *et al.* (1998), who reported that perceived support from within the work organisation, but not outwith, was sufficiently protective against negative outcomes on individual well-being, and underlines the importance of support within the workplace in an environment of the category investigated.

4.2.7 Hypothesis 7

It is predicted that higher levels of the personality dimension of 'negative affectivity' (*as evidenced by elevated scores on this dimension on the PANAS*) will be related to higher levels of general psychological distress (*as evidenced by elevated scores on CORE outcome measure*)

Considerable research has explored the influence of personality factors on the stressor-strain relationship, with negative affectivity and positive affectivity having emerged as important dimensions in this regard. This hypothesis aimed to test the association between high premorbid measures of negative affectivity and levels of general psychological distress. The findings indicated a significant positive relationship between negative affectivity and general psychological distress, whereas conversely positive affectivity was found to have a significant negative relationship. Personality has been shown to be an important factor, therefore, in relating to psychological outcomes in the present sample, consistent with other findings in the research literature. Tellegen (1985) found that a state of low PA and high NA were related to anxiety and depression; Parkes (1990) further reported on the tendency of NA to moderate the relationship between stressors and psychological outcome, with this finding further backed up in other studies (Thompson & Page, 1992; Cassar & Tattersall, 1998; Burke *et al.*, 1993). The finding that PA had a negative relationship with psychological outcome also reflects findings within the literature (e.g. Beiser, 1974; Bradburn, 1969; Clark & Watson, 1988; Watson, 1988).

4.2.8 Hypothesis 8

It is predicted that certain combinations of independent variables (*as evidenced by scores on EAV scale; social support scale; PANAS; OSI coping scale*) will predict significant amounts

of variance in outcome (levels of general psychological distress; burnout; *as evidenced by scores on CORE outcome measure; MBI*).

Predicting psychological outcome

4.2.8.1 Dependent variable one - CORE score

Of those independent variables considered, age, instrumental support and both negative and positive affectivity showed significant correlations with the dependent variable of general psychological distress and were thus entered into a hierarchical regression equation. The results indicated that age alone did not account for a significant amount of variance. The addition of instrumental support at the second stage of analysis produced a modestly significant effect size, and at the third stage of the analysis, with positive and negative affectivity added, 52 percent of the variance in general psychological distress was accounted for - a significant amount at the .001 alpha level.

Personality was found to be an important factor in influencing the stressor-strain relationship for the nurses interviewed; specifically higher negative affectivity and lower positive affectivity were associated with higher levels of psychological distress. High pre-morbid levels of negative affectivity may lead to different interpretations of stressors within the environment, thereby increasing the likelihood of negative outcomes for such individuals. Of the other variables in the model, only younger age and lower levels of instrumental social support together were found to be associated with higher levels of general psychological distress. However, the standardised beta coefficients indicated that, alone, neither of these variables were significantly associated with the dependent variable.

These results are consistent with bodies of research which have investigated the role of personality dimensions, specifically, positive/negative affectivity, in occupational stress, and also tentatively support the role of social support as a moderator of the stressor-strain relationship. Younger age also appeared to have a role in determining outcome. However, the broad consensus within the research literature (e.g. Holt, 1993) is that age is generally not associated with outcome and, as a result, this finding has not been considered significant. It is possible that a sampling bias might have accounted for this finding, with the sample slightly skewed towards younger nurses.

Predicting burnout

4.2.8.2 Dependent variable two - emotional exhaustion

Of the independent variables, frequency of incidents and negative affectivity showed significant correlations with the dependent variable of emotional exhaustion, these variables consequently being entered into a hierarchical regression equation. Frequency of violent and aggressive incidents alone did not account for a significant amount of the variance in emotional exhaustion. However, with the addition of negative affectivity to the model, a significant amount of variance (22 percent) in the dependent variable was accounted for.

The personality dimension of negative affectivity was shown to be important in predicting emotional exhaustion. Demographic variables did not account for significant amounts of variance in emotional exhaustion. This was the case also for frequency of incidents experienced in the workplace, levels of coping and social support - again accounting only for non-significant amounts of variance in emotional exhaustion.

4.2.8.3 Dependent variable three - depersonalisation

As with emotional exhaustion, the independent variables frequency of incidents and negative affectivity showed significant correlations with the dependent variable of depersonalisation and were thus entered into a hierarchical regression analysis. At the first stage of analysis, frequency of violent and aggressive incidents was found to possess a modestly significant association with the dependent variable of depersonalisation, accounting for 5 percent of the variance. With the addition of negative affectivity into the regression model, 10 percent of the variance in depersonalisation was accounted for - again a modestly significant amount.

Depersonalisation has already been described in the context of the nurses interviewed as an unfeeling and impersonal response towards patients. Experiencing a more frequent amount of violent and aggressive incidents in the place of work has a general tendency to cause the individual nurse to feel more depersonalised towards patients in their care. The analysis has shown that negative affectivity alone does not have a significant relationship with levels of depersonalisation. Cumulatively, however, these variables have highlighted a significant, but modest, effect.

4.2.8.4 Dependent variable four - personal accomplishment

Only the independent variable of positive affectivity showed a significant correlation with personal accomplishment and, therefore, a regression analysis was not carried out for this particular outcome variable. Positive affectivity has been described as a dimension which reflects the extent to which a person feels enthusiastic, active and alert, with high positive affectivity characterised as a state of high energy, full consciousness and, in particular, pleasurable engagement. Personal accomplishment has been described as assessing individuals feelings of competence and successful achievement in their work with people. Higher levels of positive affectivity in nurses in the present sample were related to elevated levels of personal accomplishment within the workplace. It has been noted that premorbid levels of positive affectivity predispose individuals to reflect more positively on their environment and on their work in general (e.g. Beiser, 1974; Bradburn, 1969; Clark & Watson, 1988; Watson, 1988), which may explain this finding. Research has described the manner in which greater degrees of positive affectivity protect against burnout (Leiter & Harvie, 1996), being predictive of high levels of personal accomplishment, to which the findings of the present study have given further support.

4.2.8.5 Summary of the prediction of psychological outcome and burnout

In summary, the results have suggested that a number of the independent variables examined in the present study were important in predicting outcome - burnout (emotional exhaustion, depersonalisation and personal accomplishment) and general psychological distress. Personality has emerged as an important factor, specifically with the premorbid personality dimensions of negative and positive affectivity investigated. Trait negative affectivity was found to be predictive of general psychological distress, emotional exhaustion and depersonalisation, whereas trait positive affectivity was predictive only of higher levels of personal accomplishment.

Frequency of violent and aggressive incidents experienced by staff in the workplace were found to have modestly significant association only with depersonalisation and not with the other components of burnout or psychological distress. The other independent variables investigated in the study - social support, and coping - showed no significant associations with burnout. Greater degrees of instrumental social support were predictive of lower levels of psychological distress. Of the demographic variables investigated, individually none showed significant associations with the outcome variables.

The experience of burnout has been shown in previous research to be influenced by a complex set of interactions between the environment and the person. Personality factors were found to be the dominant influence in outcome of burnout. However, this accounted for a percentage only of the variance in outcome. With only one environmental factor investigated in the present study - frequency of violent and aggressive incidents - other factors not measured are likely to have accounted for portions of the variance in burnout. Many of those interviewed reported low morale and job dissatisfaction. Reasons for this were discussed, amongst which it was found that a proportion were not working in acute psychiatry wards through choice. Further frustrations concerned organisational and environmental aspects of work, including poor management support, excessive paperwork, lack of staff, time and resources, an unhelpful ward skill mix, general dissatisfaction over job and career prospects and job security, and training deficits. Further dissatisfaction with patients was common, such as frustration at dealing with those more resistant to treatment; dealing with hostile and aggressive patients; or frustration with referrals perceived to be inappropriate. The high prevalence of substance abuse and resistance to treatment were raised also as frustrating issues. Additionally, factors unrelated to the work environment may have influenced reported outcome.

Length of experience in nursing or acute psychiatric nursing were not found to be important factors in explaining variance in outcome. Melchior *et al.* (1997) argued for an aggregate effect of experience in healthcare settings, whereby a mix of experienced and inexperienced individuals encourages a general feeling of support, thereby buffering against the negative effects of stress, which might help to explain this finding. Indeed, as discussed, the qualitative analysis indicated that nurses generally reported experiencing strong collegial support.

4.3 Discussion of descriptive statistics, qualitative and outcome analyses

4.3.1 Violent and aggressive incidents

Each nurse interviewed reported as having experienced a mean number of approximately 115 to 120 aggressive or violent incidents in the workplace. This amount included incidents both of verbal and physical aggression and other incidents which staff may have considered to be stressful or traumatic e.g. suicide, attempted suicide, or self-harming behaviour. Thus,

nursing staff employed within the acute wards of Royal Dundee Liff Hospital were experiencing high levels of violence and aggression in their place of work, reflecting general research literature reporting on workplace violence in such settings. The qualitative findings of this study further supported this.

Nurses stated that they had encountered a wide range of incidents within the acute psychiatric wards. Many nurses related experiences of verbal aggression and verbal abuse, which generally took the form of patients shouting and swearing at them. However, on some occasions patients had made threats of harm against nurses or against their families. Verbal aggression was reported as a frequent occurrence within these wards. Despite this, many nurses were unconcerned by these occurrences, appearing to accept them as a part of their job. Indeed incidents of verbal aggression were very rarely reported formally to management through the use of 'NHS Trust' incident report forms.

Physical aggression on the wards was also a common occurrence. Most of the nurses interviewed had recently either been assaulted themselves, or witnessed a colleague being assaulted, through being slapped, punched or kicked. Many of these instances of assault had occurred whilst in the act of trying to physically restrain a patient.

A number of nurses reported having witnessed traumatic incidents within the ward environment. These included patients self harming, attempting suicide, or actually having committed suicide. Some examples included seeing patients cutting their arms or wrists, or indeed cutting their throats. Patients were witnessed having tied ligatures around their necks, or caught in the act of hanging themselves. Several nurses has witnessed patients setting their clothes or hair on fire. Some had witnessed a patient after they had killed themselves - one example was of several nurses involved in the removal the body of a patient that had hanged himself in the grounds of the hospital.

Sections of the semi-structured interview focused specifically on the acute psychiatric work environment. Factors relating to patients emerged as important influences of job satisfaction. The majority of nurses described their work with patients as satisfying and rewarding, for a variety of different reasons. However, of the dissatisfying aspects of work discussed, a smaller proportion of the interviewees mentioned the threat of violence and aggression in the workplace, despite quantitative findings suggesting that, on average, nurses had experienced many such incidents. Nurses in the sample did not appear overly concerned therefore with

the high levels of reported workplace violence. It is possible that nurses working in this area accepted and tolerated a degree of violence and aggression in their work. Indeed, several individual reports corroborated this view, describing a pressure on nurses to accept workplace violence, whilst admitting to having problems with this was perceived as a weakness. It was apparent, however, from other reports that a proportion of nurses did find it difficult to cope with facing high levels of violence and aggression in the workplace.

4.3.2 Coping and Social support

The use of coping strategies and social support were investigated amongst nurses interviewed. In comparison to large cross sections of NHS employees, these nurses utilised significantly higher levels of all forms of social support, except that from relatives and friends, which was found to be lower than the comparative sample. It emerged forcefully from the qualitative section of the study that both peer and supervisory support gained from colleagues and management were highly valued. Nurses were particularly good at accessing support within their working environment, indeed, with this encouraged within the ward system, both informally, and formally through the use of clinical supervision. Despite this, the nurses questioned still felt that, in general, they were not receiving enough support, particularly from a management level.

Within the acute psychiatric wards and general hospital within which the present study was carried out, a debrief procedure exists for dealing with serious incidents. This debrief procedure has been designed - in liaison with clinical psychologists - to be led from within the peer group. This may well therefore be a further intervening variable, with the effect of 'buffering' against potentially negative outcome caused by the effects of high numbers of violent or aggressive incidents.

4.3.3 Analyses of outcome variables

In general, those interviewed were not experiencing high levels of psychological distress in comparison to normative groups. In relation to burnout the sample group was experiencing similar levels of emotional exhaustion and depersonalisation, and slightly higher levels of personal accomplishment than samples of individuals employed in mental health settings. Absenteeism rates were similar to that reported across the NHS (e.g. HSE, 1990). The present cross section displayed more severe emotional reactions to adverse behaviour than a comparative sample of nurses employed in learning disability settings.

The outcome variables in this study showed a high degree of inter-correlation. Burnout has been argued as being something distinct from general psychological health, although other studies have also reported a high degree of inter-correlation between these variables. Mitchell and Hastings (1998) reported that cognitive and emotional response to challenging behaviour were significantly correlated with the dimensions of burnout and also to measures of general psychological health. These particular findings have been replicated in the present study. The CORE outcome measure assesses emotional and cognitive distress as part of overall psychological health, so the finding that this and cognitive/emotional responses are related is as would be expected. Given the high degree of inter-correlation, measures of emotional and cognitive response to challenging behaviour were not examined as outcome variables.

Positive affectivity was found to have a modestly significant positive correlation with the use of coping strategies. As this dimension has been described as reflecting the extent to which a person feels enthusiastic, active and alert, it may follow logically that an individual with higher levels of trait PA would be more inclined to use coping strategies actively in response to stress. PA was also found to have a modestly significant positive correlation with levels of instrumental support. A similar argument may follow for this finding, in that high PA may be a factor making it more likely that an individual may access levels of social support as a coping strategy. This is reflected in a review by Steptoe (1991), who concluded that individual differences and personality were important determinants in the use of coping and social support.

4.4 Methodological issues

A number of methodological issues in relation to this study are worthy of discussion.

4.4.1 Design

The cross-sectional design of this study opens the possibility that other environmental or individual factors not accounted for here may have influenced the results of the quantitative measures. The use of longitudinal study designs generally counter such factors, but time constraints did not permit such an approach.

4.4.2 Participants

Pre-existing psychopathology was not controlled for in the selection of participants for the study e.g. depression or anxiety, which potentially may have effected certain findings. Possible sampling or response biases in the participants for this study also may have effected the findings. It should be noted that a number of nurses could not, or would not participate in this study. Those already suffering from burnout or psychological distress may not have done so because of absenteeism or reluctance to volunteer, despite confidentiality being emphasised for reassurance. The use of a single centre sample may have affected the findings also, with common stressors outwith those measured having the potential to affect the findings.

4.4.3 Measures

The EAV scale was not comprehensively tested for reliability and validity. The time frame used on this scale may have led also to unreliable reporting of frequency of incidents. Specifically, participants were asked how frequently 'in the last few months' that they had experienced a range of violent, aggressive and traumatic incidents (see Appendix F for copy of EAV scale). The time frame was designed to avoid the possible exclusion of stressful incidents by the use of a more rigid measure of time e.g. 'in the last 3 months' etc.

The variables in this study were assessed by the use of self-report. Reliance on self-report measures raises the issue of common method variance as a possible source of inflated correlations between self reported work environment perceptions and affective responses. More objective independent measures of work environment or outcome, such as observer ratings, would have counteracted this effect.

4.4.4 Analysis

Multiple comparisons were made in the data analysis section of the present study. In addition to this, as previously discussed, the alpha (α) level was set at .05 for the purpose of the statistical analysis. In combination these factors may have increased the likelihood of type I errors being made (Howell, 1992). However, this approach was justified by the exploratory nature of the study.

4.5 Conclusions, implications and future directions

4.5.1 Overall conclusions

Despite methodological difficulties, the aims of the investigation have been met and this study achieved a number of interesting and important findings. Specifically, the experiences of nurses working in the acute psychiatric wards of a Dundee hospital were investigated, using a psychological model of stress as a guide. The impact of mediators/moderators was examined, with personality found to have a strong moderating influence on outcome, and social support as another important moderating variable in the stressor-strain relationship. Outcome variables were investigated also in this group of nurses.

It has been shown that there are frequent violent, aggressive and traumatic incidents occurring in the acute psychiatric wards of Royal Dundee Liff Hospital. Despite this, nurses appear to cope relatively well. However, there remains a percentage of nurses in the present sample who are suffering from levels of burnout and psychological distress. It would appear that frequency of violent and aggressive incidents plays only a minor role in determining outcome, with other factors emerging as more important. Personality type is one such factor; levels of negative affectivity predicted a significant amount of psychological symptomatology, and of components of burnout. Social support remains an important variable in the stressor-strain relationship. In particular, levels of instrumental support and supervisory support within the work environment have been found to be more important than emotional social support, or assistance from sources external to the work environment.

4.5.2 Commentary on psychological models of stress

The findings of this study have added further credence to psychological models of stress. It has been clear that a number of variables are of importance in accounting for outcome, from variables in the environment to characteristics of individuals. It has been shown also that stressors, such as those measured in this study, impact on the individual only under certain circumstances - intervening, or moderating variables. The recognition of psychological models of stress is important in undertaking work of this nature; it provides a framework for considering factors likely to play a role in the way that individuals and the environment interact.

4.5.3 Implications

There are a number of implications contained in these findings. Firstly, attention has been drawn to the issues of violence and aggression in the workplace. As discussed, political, media and organisational interest in such issues has increased in recent years. The present study has been able to focus on a particular environment and to investigate the impact of these incidents on individual nurses. Often, levels of reported rates of violence are underestimated and, thus, work of this nature can help to give a more accurate reflection of the extent and nature of these problems

The personality of individual nurses has emerged as an important variable in predicting psychological well-being and aspects of burnout. Recognition of this could be important in identifying means of helping nurses who are having difficulty in coping with the acute psychiatric work environment. Social support has emerged as another important variable. In general, the levels of support within the wards were adequate, particularly at a peer group level. However, increased structure in this regard, with the addition of increased support from management level may help to further protect this group against negative outcome.

4.5.4 Future directions

Violent, aggressive or traumatic incidents within healthcare settings certainly would warrant further in-depth analysis. Studies of occupational stress in relation to nursing should be aware of potential influences of these variables, given that effects on outcome, specifically burnout, has been demonstrated. Perhaps larger and more representative samples, including more objective and accurate measures would be desirable for future research.

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APPENDIX A

GENERAL DESCRIPTION OF THE ACUTE PSYCHIATRIC WARDS (ONE TO FIVE) OF ROYAL DUNDEE LIFF HOSPITAL, DUNDEE.

ROYAL DUNDEE LIFF HOSPITAL

Royal Dundee Liff Hospital, situated on a large site on the outskirts of the city of Dundee is the main psychiatric hospital catering for Dundee and its surrounding area.

There are five acute psychiatric wards within the hospital - wards one to five. Wards one to four are 18 bedded units situated on different levels of the same building. Ward five is situated within a separate part of the hospital and has 15 beds. Of these wards, only ward five is a secure locked ward.

Four community mental health teams (CMHTs) cover the city of Dundee and its immediate surroundings, these being split by GP localities. Each of the CMHTs cover a population of approximately 45,000 people. The acute psychiatric wards accept referrals from each of these CMHTs. Ward one accepts male referrals from teams two and four; ward two accepts male referrals from teams one and three. Similarly, ward three accepts female referrals from teams one and three; ward four accepts female referrals from teams two and four. Ward five accepts male referrals from any of the CMHTs.

Reasons for admission to any of these wards are wide ranging, including acute psychotic episodes, severe depression, self-harm, personality disorders or substance abuse problems. Ward five - being a secure ward - caters for admissions who are judged to pose more of a risk to either themselves or to others.

The staffing of these wards is based on shift rotations. Generally, three qualified members of staff are required to be on duty on each of the wards during day shift; on night shift, there are two members of staff on duty.

APPENDIX B

PARTICIPANT INFORMATION SHEET

VIOLENCE, AGGRESSION AND TRAUMA IN THE WORKPLACE: A STUDY OF THE EXPERIENCES OF NURSING STAFF EMPLOYED IN ACUTE IN-PATIENT PSYCHIATRIC CARE AT ROYAL DUNDEE LIFF HOSPITAL

INFORMATION SHEET FOR PARTICIPANTS

I am inviting you to participate in a research project, which I hope will be of potential importance to you. However, before you decide whether or not to participate, I need to be sure that you understand firstly why I am doing it, and secondly what would be involved if you agreed. I am therefore providing you with the following information. Please read it carefully and be sure to contact me with any questions you may have, and, if you wish, to discuss it further with others. I will do my best to explain and to provide any further information you may ask for now or at a later stage. You do not have to make an immediate decision.

1. The aim of the project is to find out about nursing staffs' experience of working in acute in-patient psychiatric wards and of their exposure to acts of violence, aggression and other experiences by the patients that they work with. Specifically, I am interested in finding out the range of experiences, how different people cope with these experiences, and the factors that may affect this. It is hoped that the findings of the study will highlight the extent, nature, sources and potential impact of such experiences for nursing staff. Furthermore, by identifying factors which assist coping, it may be possible to suggest future interventions that could help to minimise the potentially negative impact of such experiences.
2. If you agree to take part, you will be asked to attend a short interview at a pre-arranged, convenient time during a shift on your ward with Simon Petrie, Clinical Psychologist. This interview will take place in a private room with only yourself and Simon Petrie in attendance. You will be asked questions about the nature of your work, and to complete a few questionnaires. This will take approximately 45 minutes.
3. Responses to questionnaires and information from the interviews will be treated with the strictest confidence, with only the researcher having access to the information provided.
4. Responses to questionnaires and information from the interviews will be stored anonymously in password protected files, with the original forms being destroyed. The information collected will in no way affect your employment or your relationship with your employers.
5. When the findings are drawn together I will ensure that your identity remains unknown. The results of the study will be available on request from Simon Petrie.

Participation in this study is entirely voluntary and you are free to refuse to take part or to withdraw from the study at any time without having to give a reason, and without this affecting your employment or your relationship with your employers.

Over the next few weeks I will be contacting everybody individually, in order to find out if you wish to participate or not.

If you have any questions more information can be obtained from Simon Petrie, Department of Clinical Psychology, Royal Dundee Liff Hospital (01382 423000 ext 24752).

APPENDIX C

PARTICIPANT CONSENT FORM

VIOLENCE, AGGRESSION AND TRAUMA IN THE WORKPLACE: A STUDY OF THE EXPERIENCES OF NURSING STAFF EMPLOYED IN ACUTE IN-PATIENT PSYCHIATRIC CARE AT ROYAL DUNDEE LIFF HOSPITAL

CONSENT FORM

(This form should be completed by the participant himself/ herself)

PLEASE CROSS OUT
AS NECESSARY

Have you read the information sheet? **YES / NO**

Have you had the opportunity to ask any questions and discuss this study? **YES / NO**

Have you received satisfactory answers to all of your questions? **YES / NO**

Have you received enough information about the study? **YES / NO**

Do you understand that participation is entirely voluntary? **YES / NO**

Do you understand that you are free to withdraw from the study :-

- at any time?
- without having to give a reason for withdrawing?
- without this affecting your employment or your relationship with your employers?

YES / NO

Do you agree to take part in this study? **YES / NO**

Signature..... Date.....

Name in block letters.....

Researcher's signature..... Date.....

APPENDIX D

COMMUNICATION FROM ETHICS COMMITTEE

Tayside Committee on Medical Research Ethics

Mr Simon K Petrie
Trainee Clinical Psychologist
Tayside Area Psychology Department
Royal Dundee Liff Hospital

Level 9
Ninewells Hospital & Medical School
DUNDEE
DD1 9SY

Enquiries to: Mr N Brown
Telephone 01382 632701
Fax 01382 660445

9 December 1999

Dear Mr Petrie

Further to our telephone conversation of this morning, I confirm that your proposal does not require ethical approval from the Tayside Committee on Medical Research Ethics as there is no patient contact.

I enclose your proposal form as requested.

Yours sincerely



Fiona Bain
Secretary to N F Brown

Enc

APPENDIX E

COMMUNICATION WITH CLINICAL NURSE MANAGER

Your Ref:

Our Ref: GMK/PMS

Enquiries to: Mrs G M Kinnear, Ext 24173

Tel: (01382) 423000

Fax: (01382) 423055

26 November 1999

Mr Simon Petrie
Trainee Psychologist
Clinical Psychology Department
Royal Dundee Liff Hospital

Dear Simon

**RE PROPOSED RESEARCH PROJECT – STAFF STRES WITHIN THE ACUTE
PSYCHIATRIC ADMISSION WARDS**

Thank you for meeting with me to appraise me of you proposed project.

In view of the changes in the behaviour of current patient population in conjunction with their psychiatric problems and the effect on Nursing Staff, I would fully support your research study. Obviously, as I stated, there are identifiable variables which should be taken into account in order not to skew your results.

I would also agree that you discuss this with representative from the local staff organisations.

Should you require any further assistance please do not hesitate to contact me.

Good luck.

Yours sincerely



Mrs Gillian M Kinnear
Clinical Nurse Manager
Mental Health Directorate

Copy to:
Linda Graham, Clinical Psychologist

APPENDIX F

QUANTITATIVE MEASURES

EXPOSURE TO AGGRESSION AND VIOLENCE SCALE

The following questionnaire asks about the types of incidents that you may have experienced whilst at work. Please answer each individual item, by placing a tick ✓ in the appropriate space, or circling the appropriate number.

INCIDENTS

Please consider the following incidents.

In your period of employment as a nurse working in the acute psychiatric setting in Royal Dundee Liff Hospital, within the past few months have you been :-

(* other being partner, friend or relative of a patient)

	YES	NO	On approximately how many occasions in the past few months? - Please circle				
			<5	5-10	10-15	15-20	>20
1. Shouted at by a patient/ other*	_____	_____	<5	5-10	10-15	15-20	>20
2. Sworn at by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
3. Verbally threatened by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
4. Physically threatened by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
5. Spat at by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
6. Pushed by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
7. Slapped by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
8. Kicked by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
9. Punched by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
10. Others (please state)	_____	_____	<5	5-10	10-15	15-20	>20

SUPPORT

Now consider the **most distressing incident** you have experienced during your current period of employment. Could you provide a brief description of the incident, and answer the questions below by circling the number that corresponds to the statement most closely reflecting your experience of this type of support.

Description of incident

.....

.....

At the time of the incident,
how supportive did you find :-

	Very unsupportive	Quite unsupportive	Neither supportive nor unsupportive	Quite supportive	Very supportive
1. nursing colleagues	1	2	3	4	5
2. management	1	2	3	4	5

In the period after the incident
how supportive did you find :-

	Very unsupportive	Quite unsupportive	Neither supportive nor unsupportive	Quite supportive	Very supportive
1. nursing colleagues	1	2	3	4	5
2. management	1	2	3	4	5

WITNESSING INCIDENTS

Now consider the following incidents.

In your period of employment as a nurse working in the acute psychiatric setting in Royal Dundee Liff Hospital, have you within the past few months witnessed these incidents happening to another person (e.g. staff/patient)? :-

(* other being partner, friend or relative of a patient)	YES	NO	On approximately how many occasions in the past few months? - please circle				
1. being shouted at by a patient/ other*	_____	_____	<5	5-10	10-15	15-20	>20
2. being sworn at by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
3. being verbally threatened by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
4. being physically threatened by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
5. being spat at by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
6. being pushed by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
7. being slapped by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
8. being kicked by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
9. being punched by a patient/ other	_____	_____	<5	5-10	10-15	15-20	>20
10. patient harming self	_____	_____	<5	5-10	10-15	15-20	>20
11. patient attempting suicide	_____	_____	<5	5-10	10-15	15-20	>20
12. patient committing suicide	_____	_____	<5	5-10	10-15	15-20	>20
13. Other (please state)	_____	_____	<5	5-10	10-15	15-20	>20

INJURIES

Have you, as a direct result of any of these incidents, suffered from :-

	YES	NO	Please enter the approximate number of occasions in the past few months
1. minor physical injuries that did not require any medical attention (e.g. bruise, scratch)	_____	_____	_____
2. physical injuries that did require minor medical attention (e.g. cut, minor muscular/joint injury)	_____	_____	_____
3. physical injuries that required full medical attention, but not hospitalisation (e.g. large cut requiring stitching, broken bone, major muscular/joint injury)	_____	_____	_____
4. physical injuries that required hospitalisation (e.g. surgery, long term physiotherapy etc.)	_____	_____	_____
5. minor emotional upset/ distress that did not require any treatment	_____	_____	_____
6. emotional upset/distress that did require treatment (e.g. medication/ counselling/ psychotherapy)	_____	_____	_____

SOCIAL SUPPORT SCALE

This questionnaire concerns aspects of support in your present job. Please respond by entering the number of your answer from the scale shown below

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Not at all</i>	<i>A little</i>	<i>Somewhat</i>	<i>Very much</i>

A) How much can each of these people be relied on when things get tough at work?

- | | |
|--|-------|
| 1. your immediate supervisor (boss) | _____ |
| 2. other people at work | _____ |
| 3. your spouse/partner (if applicable) | _____ |
| 4. your friends and relatives | _____ |

B) How much is each of the following people willing to listen to your work-related problems?

- | | |
|--|-------|
| 5. your immediate supervisor (boss) | _____ |
| 6. other people at work | _____ |
| 7. your spouse/partner (if applicable) | _____ |
| 8. your friends and relatives | _____ |

C) How much is each of the following people helpful to you in getting your job done?

- | | |
|-------------------------------------|-------|
| 9. your immediate supervisor (boss) | _____ |
| 10. other people at work | _____ |

D) Please indicate, using the scale below, how true each of the following statements is of your immediate supervisor (boss).

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Not at all true</i>	<i>Not too true</i>	<i>Somewhat true</i>	<i>Very true</i>

- | | |
|---|-------|
| 11. my supervisor (boss) is competent in doing his/her job | _____ |
| 12. my supervisor (boss) is very concerned about the welfare of those under him/her | _____ |
| 13. my supervisor (boss) goes out of his/her way to praise good work | _____ |
| 14. I am made to feel of value in this organisation | _____ |

POSITIVE AND NEGATIVE AFFECT SCHEDULE

F3



Name:

Date: Record Number:

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent* ~~YOU GENERALLY FEEL THIS WAY, THAT IS, HOW YOU FEEL ON AVERAGE.~~

Use the following scale to record your answers.

1	2	3	4	5
<i>very slightly</i>	<i>a little</i>	<i>moderately</i>	<i>quite a bit</i>	<i>extremely</i>
<i>or not at all</i>				

-interested
-distressed
-excited
-upset
-strong
-guilty
-scared
-hostile
-enthusiastic
-proud
-irritable
-alert
-ashamed
-inspired
-nervous
-determined
-attentive
-jittery
-active
-afraid

*Insert appropriate time instructions above from page 27

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OSI - HOW YOU COPE WITH THE STRESS YOU EXPERIENCE

Whilst there are variations in the ways individuals react to sources of pressure and the effects of stress, generally speaking we all make some attempt at coping with these difficulties - consciously or subconsciously.

This questionnaire lists a number of potential coping strategies which you are required to rate in terms of the extent to which you actually use them as ways of coping with stress.

- Please answer by circling the number of your answer on the scale shown

Very extensively used by me	6
Extensively used by me	5
On balance used by me	4
On balance not used by me	3
Seldom used by me	2
Never used by me	1

1. Deal with the problems immediately as they occur	6	5	4	3	2	1
2. Try to recognise my own limitations	6	5	4	3	2	1
3. 'Buy time' and stall the issue	6	5	4	3	2	1
4. Look for ways to make the work more interesting	6	5	4	3	2	1
5. Reorganise my work	6	5	4	3	2	1
6. Seek support and advice from my superiors	6	5	4	3	2	1
7. Resort to hobbies and pastimes	6	5	4	3	2	1
8. Try to deal with the situation objectively in an unemotional way	6	5	4	3	2	1
9. Effective time management	6	5	4	3	2	1
10. Suppress emotions and try not to let the stress show	6	5	4	3	2	1
11. Having a home that is a 'refuge'	6	5	4	3	2	1
12. Talk to understanding friends	6	5	4	3	2	1
13. Deliberately separate 'home' and 'work'	6	5	4	3	2	1
14. 'Stay busy'	6	5	4	3	2	1
15. Plan ahead	6	5	4	3	2	1
16. Not 'bottling things up' and being able to release energy	6	5	4	3	2	1
17. Expand interests and activities outside work	6	5	4	3	2	1
18. Have stable relationships	6	5	4	3	2	1
19. Use selective attention (concentrating on specific problems)	6	5	4	3	2	1
20. Use distractions (to take your mind off things)	6	5	4	3	2	1
21. Set priorities and deal with problems accordingly	6	5	4	3	2	1
22. Try to 'stand aside' and think through the situation	6	5	4	3	2	1
23. Resort to rules and regulations	6	5	4	3	2	1
24. Delegation	6	5	4	3	2	1
25. Force one's behaviour and lifestyle to slow down	6	5	4	3	2	1
26. Accept the situation and learn to live with it	6	5	4	3	2	1
27. Try to avoid the situation	6	5	4	3	2	1
28. Seek as much social support as possible	6	5	4	3	2	1

CLINICAL
OUTCOMES in
ROUTINE
EVALUATION

**OUTCOME
MEASURE**

Site ID	<input type="text"/>	Age	<input type="text"/>	Male	<input type="checkbox"/>
letters only	<input type="text"/>	numbers only	<input type="text"/>	Female	<input type="checkbox"/>
Client ID	<input type="text"/>	Therapist ID	<input type="text"/>	Stage Completed	
	<input type="text"/>	numbers only	<input type="text"/>	S Screening	Stage
	<input type="text"/>	numbers only	<input type="text"/>	R Referral	<input type="checkbox"/>
Sub codes	<input type="text"/>			A Assessment	
D D / M M / Y Y Y Y	<input type="text"/>			F First Therapy Session	
Date form given	<input type="text"/>			P Pre therapy (unspecified)	
				D During Therapy	
				L Last therapy session	Episode
				X Follow up 1	<input type="checkbox"/>
				Y Follow up 2	

IMPORTANT - PLEASE READ THIS FIRST

This form has 34 statements about how you have been **OVER THE LAST WEEK**.
Please read each statement and think how often you felt that way last week.
Then tick the box which is closest to this.
Please use a dark pen (not pencil) and tick clearly within the boxes.

Over the last week

Not at all Only Occasionally Sometimes Often Most or all the time OFFICE USE ONLY

1	I have felt terribly alone and isolated	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> F
2	I have felt tense, anxious or nervous	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> P
3	I have felt I have someone to turn to for support when needed	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/> F
4	I have felt O.K. about myself	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/> W
5	I have felt totally lacking in energy and enthusiasm	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> P
6	I have been physically violent to others	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> R
7	I have felt able to cope when things go wrong	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/> F
8	I have been troubled by aches, pains or other physical problems	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> P
9	I have thought of hurting myself	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> R
10	Talking to people has felt too much for me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> F
11	Tension and anxiety have prevented me doing important things	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> P
12	I have been happy with the things I have done.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/> F
13	I have been disturbed by unwanted thoughts and feelings	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> P
14	I have felt like crying	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> W

Please turn over



Over the last week

Not at all Only Occasionally Sometimes Often Most of all the time OFFICE USE ONLY

15	I have felt panic or terror	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	P
16	I made plans to end my life	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	R
17	I have felt overwhelmed by my problems	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	W
18	I have had difficulty getting to sleep or staying asleep	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	P
19	I have felt warmth or affection for someone	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>	F
20	My problems have been impossible to put to one side	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	P
21	I have been able to do most things I needed to	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>	F
22	I have threatened or intimidated another person	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	R
23	I have felt despairing or hopeless	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	P
24	I have thought it would be better if I were dead	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	R
25	I have felt criticised by other people	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	F
26	I have thought I have no friends	<input type="checkbox"/>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
27	I have felt unhappy	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	P
28	Unwanted images or memories have been distressing me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	P
29	I have been irritable when with other people	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	F
30	I have thought I am to blame for my problems and difficulties	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	P
31	I have felt optimistic about my future	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>	W
32	I have achieved the things I wanted to	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>	F
33	I have felt humiliated or shamed by other people	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	F
34	I have hurt myself physically or taken dangerous risks with my health	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>	R

THANK YOU FOR YOUR TIME IN COMPLETING THIS QUESTIONNAIRE

Total Scores

 → →

Mean Scores

(Total score for each dimension divided by number of items completed in that dimension)

(W) (P) (F) (R) All items All minus R



Human Services Survey

HOW OFTEN:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

HOW OFTEN
0 - 6

Statements:-

1. _____ I feel emotionally drained from my work.
2. _____ I feel used up at the end of the workday.
3. _____ I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____ I can easily understand how my recipients feel about things.
5. _____ I feel I treat some recipients as if they were impersonal objects.
6. _____ Working with people all day is really a strain for me.
7. _____ I deal very effectively with the problems of my recipients.
8. _____ I feel burned out from my work.
9. _____ I feel I'm positively influencing other people's lives through my work.
10. _____ I've become more callous toward people since I took this job.
11. _____ I worry that this job is hardening me emotionally.
12. _____ I feel very energetic.
13. _____ I feel frustrated by my job.
14. _____ I feel I'm working too hard on my job.
15. _____ I don't really care what happens to some recipients.
16. _____ Working with people directly puts too much stress on me.
17. _____ I can easily create a relaxed atmosphere with my recipients.
18. _____ I feel exhilarated after working closely with my recipients.
19. _____ I have accomplished many worthwhile things in this job.
20. _____ I feel like I'm at the end of my rope.
21. _____ In my work, I deal with emotional problems very calmly.
22. _____ I feel recipients blame me for some of their problems.

(Administrative use only)

cat.

cat.

cat.

EE: _____ DP: _____ PA: _____

Human Services Survey

The purpose of this survey is to discover how various persons in the human services or helping professions view their jobs and the people with whom they work closely. Because persons in a wide variety of occupations will answer this survey, it uses the term *recipients* to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way *about your job*. If you have *never* had this feeling, write a "0" (zero) before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

HOW OFTEN:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

HOW OFTEN

0 - 6

Statement:

_____ I feel depressed at work.

If you *never* feel depressed at work, you would write the number "0" (zero) under the heading "HOW OFTEN." If you *rarely* feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week, but not daily) you would write a "5."



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Emotional Responses to Challenging Behaviour scale

Below is a list of emotions that caregivers have said that they experience when they have to work with adults who display challenging behaviours. We want to know how *you* typically feel in this situation. Think about your own recent experience of challenging behaviours displayed by the adults that you work with. Consider each of the emotional reactions, and select the response next to each item that best describes how you feel when working with adults who display challenging behaviours.

	No, never	Yes, but infrequently	Yes, frequently	Yes, very frequently
SHOCKED	0	1	2	3
BETRAYED	0	1	2	3
GUILTY	0	1	2	3
HOPELESS	0	1	2	3
AFRAID	0	1	2	3
ANGRY	0	1	2	3
INCOMPETENT	0	1	2	3
SAD	0	1	2	3
FRUSTRATED	0	1	2	3
HELPLESS	0	1	2	3
DISGUSTED	0	1	2	3
NERVOUS	0	1	2	3
RESIGNED	0	1	2	3
FRIGHTENED	0	1	2	3
HUMILIATED	0	1	2	3

Thoughts About Challenging Behaviour Scale

Below is a list of things that caregivers have said about their thoughts relating to incidents of challenging behaviours displayed by adults in their care. Please consider each statement in turn and indicate how frequently these have been true for you over the past few weeks. If a statement has not been true of you, please place a circle around the "0" ("Not at all") next to the statement. If the statement has been true of you, please place a circle around one of the numbers 1-3 ("Rarely", "Sometimes", or "Often") depending on how frequently you have had this kind of experience or thought over the past few weeks.

	Not at all	Rarely	Sometimes	Often
1. Incidents of challenging behaviour have featured in my dreams	0	1	2	3
2. I have tried not to talk about incidents of challenging behaviour	0	1	2	3
3. Other things keep making me think about incidents of challenging behaviour	0	1	2	3
4. I have tried to remove any thoughts about incidents of challenging behaviour from my memory	0	1	2	3
5. Images/pictures of incidents of challenging behaviour have popped into my mind	0	1	2	3
6. I have stayed away from things or people that remind me about incidents of challenging behaviour	0	1	2	3
7. I have found myself thinking about incidents of challenging behaviour when I didn't mean to	0	1	2	3
8. Pictures or thoughts about incidents of challenging behaviour have stopped me falling asleep or kept me awake in the night	0	1	2	3
9. I have tried not to think about incidents of challenging behaviour	0	1	2	3

APPENDIX G

SEMI STRUCTURED INTERVIEW

INTERVIEW SCHEDULE

The following interview covers three broad areas. The first section covers general information about yourself and your lifestyle; the second covers information and your personal views on the profession in which you work; the third section covers information and your personal views about the population with which you work. Please note that this interview is completely confidential. However, you do not have to answer any of the questions that you do not wish to

SECTION ONE

1. General information

Age Gender Marital Status Children Y/N
M/F (*single/ married/ cohabiting* (no. under 18) (no. over 18)
divorced/ separated/ widowed)

Job Title and Grade Does you partner work? Planning further family?
Y/N *Y/N/ expecting*

Number of years as a qualified nurse Which ward and shift do you work on/
have you worked on previously?

For how long have you worked on your current ward?

For how long have you been working with a psychiatric population / acute in-patients?

Did you have an occupation before you became a nurse?
Y/N description

2. Recent life history

Have you encountered any major stressful events outwith work over the last few months or so, which have had an important effect on you, either of a positive or negative nature?
Y/N Description (only if offered)

At the moment, how healthy would you say that you felt?
Very healthy quite healthy neither/nor quite unhealthy very unhealthy

Have you had any significant illness over the past few months? Approx. how many days off sick have
Y/N you had in the past year?
*<5 days / 1-2 weeks / 3-4 weeks /
1-2 months / >3 months*

3. Your habits

Do you smoke? If so, how many a day?

Y/N

Have you ever smoked?

Y/N

If so, have you ever felt the need to cut down on your smoking?

Y/N

Have you noticed changes in the past few months in how much you smoke?

Smoking more / smoking less / given up

Do you drink? Approx. how many units per week?

Y/N

Have you ever felt the need to cut down on your drinking?

Y/N

Have you noticed changes in your drinking habits in the past few months?

Drinking more / drinking less / given up

Do you maintain a desired body weight?

Y/N

Do you take any planned exercise?

Y/N

4. Your interests

Do you find time to relax and wind down?

Y/N

Do you have an interest or hobby?

Y/N *description*

Is it in any way related to work?

Y/N

Do you mix socially with your work colleagues?

Y/N

SECTION TWO

5. Job satisfaction

Reasons for becoming a nurse - what attracted you to the profession? What attracted you to working with this particular population?

How satisfying do you find your job? -

very dissatisfying dissatisfying neither/nor satisfying very satisfying

What aspects of your job do you find the most satisfying

What aspects of your job do you find the least satisfying

Do you expect promotion?

Within 1 year/ 5 years/ over 5 years/ never

Is promotion something that you are striving to achieve? *Y/N*

Would you describe yourself as ambitious? *Y/N*

Where do you see your future ultimately?

within the profession / outwith the profession describe

Do you plan to stay working with this population in the short-term or long-term? *ST / LT / not sure*

What factors have affected your decision on this?

Are there any other positive/negative aspects of your work as a nurse that haven't already been mentioned?

6. How well do you feel that the profession prepares you for the personal impact/stressful aspects of the job?

Do you feel that your training has prepared you for all aspects of the job? *Y/N/not sure*

(Probe for further training needs)

7. How well does the profession support people as far as the personal impact of the job is concerned?

Would you say that it is generally accepted within the profession that nursing can have an strong emotional/ personal impact? *Y/N/not sure*

Do you think that this acceptance is important? *Y/N/not sure* Why/why not?

Do you feel that nurses receive sufficient support for the work that they do? *Y/N/not sure*

What support do you think should be available?

Would you use such support personally? *Y/N*

Are you aware of a standard procedure for dealing with violent or traumatic incidents in the workplace?
(probe for protocol)

What are your beliefs on the best / worst ways of dealing with violence and aggression in the workplace?

Are you aware of a standard procedure for dealing with the impact of violent or traumatic incidents in the workplace?
(probe for protocol)

What are your beliefs on the best / worst ways of coping with the impact of violence and aggression in the workplace?

Have you ever attended a debrief? *Y/N*

If so, who took the debrief? (*e.g. colleague / C/N / manager / peer etc..*)

If so, did you find it worthwhile? *Y/N/not sure*

Why/why not?

What things do you think that the profession could do to make things easier?

Training?

Counselling?

Other?

SECTION THREE

8. The nature of the population that you work with

How satisfying do you find it working with this particular population?

very dissatisfying dissatisfying neither / nor satisfying very satisfying

What are the most positive aspects?

What are the negative aspects?

How stressful do you find working with this population?

very stressful slightly stressful neither/nor not really stressful not at all stressful

What were your expectations before coming to work with this population?

9. Cumulative Stress

Has anything changed you the way in which you cope with stressful aspects of the job during your time working with this population? (e.g. experience etc.)

Y/N description

How busy is the ward?

Very busy slightly busy not really busy not at all busy

Is it better to be busier or quieter?

Prefer to be busier prefer to be quieter not sure

On average how often do you think you are involved in stressful incidents?

Daily weekly monthly yearly

Do you feel that there is a cumulative effect of stress?

Y/N/not sure

10. Incidents

Can you describe an incident that occurred recently that you found somewhat stressful, but typical of the type of incident that you may be exposed to?

11. Coping

How well did you feel that you coped with this incident personally?

Very well quite well quite badly very badly

What sort of things did you do to try and cope with it?

Do you try not to think about it? *Y/N/not sure*

Do you try to just get on with the job? *Y/N/not sure*

Do you try to think about it in a positive way? *Y/N/not sure*

Do you do things like make jokes to let your feelings out? *Y/N/not sure*

What do you feel is the best way to cope with job related stress? :-

1. in general
2. in relation to violence / aggression

SECTION FOUR

12. What would you like to see happen as a result of this project?

Let interviewee answer spontaneously, then probe for feelings and attitudes about counselling, training, etc.

13. Is there anything not covered in this interview that you would like to add?

Is there anything particular you wanted to say? Or ask? Or fed back to management?